ST. MARY'S UNIVERSITY

SCHOOL OF GRADUATE STUDIES

Factors influencing the effectiveness and prospects for the uses of Accounting Information Systems in Ethiopia's construction industry

BY

DEREJE YILMA

JUNE 2024

ADDIS ABABA, ETHIOPIA

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Advisor: MISRAKU MOLLA (PhD)

A thesis submitted to ST. MARY'S university school of graduate's studies department of accounting and finance in partial fulfilment for the requirement of MBA in Accounting and finance

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DECLARATION

I hereby declare that the work which is being presented in this thesis entitled: **"***Factors influencing the usefulness and prospects for the uses of accounting information systems in Ethiopia's construction industry***"** is original work of my endeavor and has not been presented for a degree of any other university and colleges and all the resources of materials used for the thesis have been duly acknowledged.

(Name)	Signature	Date

ENDORSEMENT

This thesis has been submitted to St. Mary's University, School of Business studies for examination with my approval as a university advisor.

Misraku Molla (Ph.D.)		June 13, 2024
Name of advisor	Signature	Date

ST. MARY'S UNIVERSITY

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FACTORS INFLUENCING THE EFFECTIVENESS AND PROSPECTS FOR THE USES OF ACCOUNTING INFORMATION SYSTEMS IN ETHIOPIA'S CONSTRUCTION INDUSTRY

APPROVED BY BOARD OF EXAMINERS

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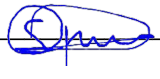
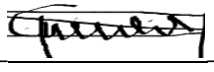
Internal Examiner	Simon Tarekegn (Asst.Prof.)_____		_____
External Examiner	Gidy G/Hiwot (PhD)		_____

Acknowledgement

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Acronym

AIS	Accounting Information System
IBEX	International Boat builders' Exhibition & Conference
IFMIS	Integrated financial management information system

Abstract

The Objective of the study was to identify factors influencing the effectiveness of AIS at Ethiopian's construction industries in Addis Ababa. This study employed a descriptive and explanatory research design and mainly quantitative research approach. A convenience sample of the population was taken as part of the study. A total of 100 questionnaires were handled by the respondents, and 94 of them completed and returned. The data was analyzed using descriptive and inferential statistical tools. Pearson correlation and multiple linear regressions were used to analyze the relationship and difference between independent and dependent variables. Statistical Package for Social Science (SPSS) version 27 was used. The result of the multiple linear regression output indicates that the independent variables (personal capability, interpretably, organizational culture, and internal control) dimensions have a statistically significant effect on the effectiveness of AIS. The study suggested that Ethiopian's construction industries should provide training and development programs to enhance employees' knowledge and skills to use AIS effectively.

Key Words: - Effectiveness of AIS, Personal capability, Interpretably, Organizational culture, and Internal control

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

The development of the economy, especially in the current era of globalization, has resulted in increasingly tight competition between businesses. In facing this competition, companies are required to improve and increase the effectiveness of their performance management, so that companies can be superior and able to compete in current and future competitive conditions. (Anastasia Chandra et al., 2024). Construction industry may be a major roll of player within the economy of nations because it creates business and riches to the countries. For occurrence, that is playing a noteworthy part in terms of work creation and it'll contribute in supply of building to the public. Concurring to the 2023 report Ethiopia has an evaluated populace of 126 million, which are the foremost crowded landlocked nation within the continent of Africa and the second-most crowded nation of Africa after Nigeria. Ethiopia encompasses a populace thickness of 127 individuals per square mile, which positions 11^{th} within the world. The biggest city and capital of Ethiopia is Addis Ababa, which has an evaluated populace of 5.228 million within the city legitimate and a metro populace of more than 5.228 million. Additionally, Ethiopia is as of now one of the speediest populace developing nations within the world, with a development rate of 6.4% per year.

AIS refers to the use of computer-based systems to record, store and process accounting data, and its potential benefits in the construction industry have been acknowledged by scholars. However, despite these potentials, the challenges and barriers to the adoption and implementation of AIS in Ethiopia's construction industry remain significant. This thesis aims to explore these factors and provide recommendations for overcoming obstacles and improving the utilization of AIS in the industry. Accounting Information Systems (AIS) are crucial for organizations as they provide reliable financial information used for decision-making purposes. AIS combines the fields of accounting and information systems, covering activities such as recording, classifying, and summarizing financial data. It also incorporates elements of technology to facilitate the management of financial information. According to (SSAU, 2016), AIS plays a vital role in enhancing the efficiency and effectiveness of financial management in various industries, including the construction industry in Ethiopia.

Accounting Information Systems (AIS) play a crucial role in the construction industry due to its ability to enhance financial management and control. AIS provides accurate and timely financial information essential for decision-making processes in construction projects. How much do these factors affect the quality of AIS in these businesses? How does the quality of AIS improve operational efficiency and increase market competitiveness? These are also very important questions for managers in civil engineering construction enterprises. Stemming from the aforementioned issues, the purpose of the study is to identify and measure the factors that affect the quality of AIS and the quality of AIS affecting the performance of construction enterprises of Ethiopia(Ta & Nguyen, 2020). This helps stakeholders monitor project costs, evaluate financial performance, and make informed strategic decisions. Moreover, AIS assists in monitoring cash flow and managing project budgets effectively. These benefits highlight the importance of AIS in improving financial management practices in the construction industry.

The purpose of this research is to examine and evaluate the factors that influence the effectiveness and prospects for the uses of Accounting Information Systems (AIS) within the context of Ethiopia's construction industry. The construction industry in Ethiopia is one of the key sectors that contribute to the country's economic growth and development. However, there is a lack of comprehensive research on the effectiveness and use of AIS in this industry. Therefore, this research aims to provide insights into the potential benefits and challenges of implementing AIS in the construction industry, with a focus on Ethiopia. By analyzing factors such as technological infrastructure, regulatory framework, organizational culture, and user perceptions, this research seeks to contribute to the understanding of the current state and future prospects of AIS in Ethiopia's construction industry. According to (Practice, 2013), the implementation of Accounting Information Systems (AIS) in the construction industry in Ethiopia has faced significant challenges. One of the main factors affecting the effectiveness and prospects of AIS is the lack of skilled personnel who can manage and operate such systems effectively. Consequently, this hinders the timely generation of accurate and reliable financial information (Practice, 2013). Another crucial factor is the inadequacy of infrastructure, including the absence of reliable internet connections and power supply, which further impede the proper functioning of AIS. Additionally, the limited awareness and understanding of the benefits of AIS among construction industry stakeholders hinder its widespread adoption and utilization(Diaz, 2017). Ultimately, these factors influence the overall effectiveness and success of AIS implementation in the Ethiopian construction industry. The construction industry in Ethiopia has experienced significant growth over the past decade, supported by government initiatives to invest

in infrastructure development. The sector is characterized by the presence of both large, international firms and smaller, local companies. Additionally, the industry faces challenges such as a lack of skilled labor and limited access to financing. Despite these challenges, the construction sector in Ethiopia continues to expand, driven by ongoing projects in areas such as housing and transportation.

1.2 Statement of problems

Factors influencing the effectiveness and prospects for the use of Accounting Information Systems (AIS) in Ethiopia's construction industry are influenced by various factors. Research in the context of Ethiopia has highlighted several key factors that impact the implementation and adoption of AIS, including: Weak AIS and Accounting Practices: Many developing countries, including Ethiopia, have weak accounting information systems, which can hamper investment decisions, policy issues, and overall system efficiency. Financial Capacity and Organizational Structure: The financial capacity and organizational structure of construction companies play a significant role in the implementation of AIS Environmental Factors: External environmental factors can influence the adoption and effectiveness of AIS in the construction industry. Computerized AIS Adoption: The adoption of computerized AIS among medium and large company in Addis Ababa, Ethiopia, is influenced by factors such as firm size and financial readiness.

The Influence of Internal Control and Implementation of Accounting Information Systems on The Quality of Regional Government Financial Reports (Study Of Bandung City Government Regional Work Unitsa (Nasution et al., 2024), Factors That Influence the Use of Accounting Information Systems(Putu et al., 2023) Factors that Influence the Effectiveness of Accounting Information Systems: A Case Study of Government Agency in North Nias Regency, Indonesia, (Zalukhu et al., 2023). After thorough review of existing literature, we identify the following gaps in the existing empirical literature. First, there is a lack of studies specifically focusing on the construction industry in Ethiopia, which is the focus of this question. Second, the integration of artificial intelligence (AI) in accounting information systems and its impact on knowledge management and data gaps needs further exploration. Third, the user-is gap and the integration of information systems in the construction industry require more research to better understand the factors that influence the adoption and effectiveness of AIS. Fourth, the efficacy of action at a distance as a control mechanism in the construction industry needs further investigation. In conclusion, while there is evidence that AIS can positively impact construction industry performance, there is a knowledge gap in terms of research specifically focused on Ethiopia and the integration of AIS? Further research is needed to

explore these areas and provide more comprehensive insights into the factors that influence the adoption and effectiveness of AIS in the construction industry.

These study aims to provide insights into the challenges and opportunities associated with the implementation and adoption of AIS in the construction industry in Ethiopia, and to contribute the existing literature on this topic. This thesis further tries to looks at and assesses the variables that affect the potential applications and use of Accounting Information Systems (AIS) in the context of Ethiopia's building sector. One of the main industries in Ethiopia that supports the development and expansion of the national economy is the construction sector. Comprehensive study on the efficacy and use of AIS in this business is, nonetheless, lacking. With an emphasis on Ethiopia, this thesis seeks to shed light on the possible advantages and difficulties of applying AIS in the building sector. By examining elements including corporate culture, legal framework, technology infrastructure, and user perspectives, this research aims to further knowledge of the situation as it is now and what lies ahead. The research objective will guide the development of the study and help to focus on specific features or processes of AIS in the construction industry.

1.3. Objectives of the Study

1.3.1 General Objective

The general objective of the study was to identify the factors that influence the usefulness and prospects for the use of AIS in this sector in construction industry.

1.4.2 Specific Objective

The study addressed the following specific objective:

- To evaluate the companies' overall AIS practice.
- To investigate the effect of personal capacity on the effectiveness of AIS
- To examine the interpretability on effect of personal capacity on the effectiveness of AIS.
- To investigate the effect of organizational culture on the effectiveness of AIS
- To examine the impact of internal control on effect of personal capacity on the effectiveness of AIS.

1.5 Research Hypothesis

The study empirically tested the following hypotheses,

- H1: Personal capacity has a positive and significant effect on the effectiveness of AIS.
- H2: Interpretability has a positive and significant effect on the effectiveness of AIS.
- H3: Organizational culture has a positive and significant effect on the effectiveness of AIS.
- H4: Internal control has a positive and significant effect on the effectiveness of AIS.

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1.6 Significance of the study

The significance of the study on the use of Accounting Information Systems (AIS) in Ethiopia's construction industry lies in its potential to provide insight into the challenges and opportunities associated with the implementation and adoption of AIS in this sector. The study's findings can inform policymakers, construction companies, and other stakeholders about the factors that influence the effectiveness and prospects of AIS in the Ethiopian context. The study can also contribute to the existing literature on AIS implementation in developing countries, particularly in the construction industry. The significance of the study is to provide a better understanding of the role of AIS in enhancing financial management and decision-making processes in the Ethiopian construction industry and to provide recommendations for improving the effectiveness of AIS in this sector.

1.7 Scope of the study

The scope of the study is essential to ensure that the research project remains focused and is able to produce meaningful and relevant results. It also helps in setting clear boundaries and identifying the specific areas that will be covered in the study. The scope of the study refers to the boundaries within which the research project will be conducted. It defines the specific aspects that will be considered and the parameters within which the study will operate. The scope of the study limited to identify the factors that affect the effective use of AIS in the construction industry. The study is limited to identify the effect of Personal capacity, interpretability, organizational culture, internal control and employee performance on the use of AIS.

1.8. Limitations of the study

Limitations of a study are the practical or theoretical shortcomings that may influence the outcomes and conclusions of the research. In the context of a study on the use of Accounting Information Systems (AIS) in Ethiopia's construction industry, some potential limitations could include:

- Sample Size and Representativeness: The study's findings may be limited by the size and representativeness of the sample of construction companies surveyed or interviewed.
- Data Collection Constraints: Limitations related to the availability of data, access to specific information within companies, or constraints in data collection methods could impact the comprehensiveness of the study.
- The research design may restrict the findings' generalizability.
- External Validity: The extent to which the findings can be generalized to the entire construction industry in Ethiopia may be limited.

It is important to acknowledge these limitations to provide a transparent and honest assessment of the study's scope and potential impact. By doing so, the study can also highlight opportunities for future research and improve the credibility and transferability of its findings

The study was envisaged from the participant of the sector perspective towards Factors influencing the effectiveness and prospects for the uses of Accounting Information Systems in Ethiopia's construction industry considered in the study. If the view of consultants and clients had been considered in the study there might be a better perspective and results. Since the study takes in to account the influence of resource management, procurement management, stakeholder management and quality management related factors to the project performance, the influence of other factors such as organizational capability, leadership, etc. which may have significant influence in the project management process and thus was not considered in the study.

1.9 Organization of the Study

The organization of the study on Accounting Information Systems (AIS) in Ethiopia's construction industry was typically follow a standard structure, including: Introduction: This section was provide an overview of the study's background, research questions, objectives, and significance. Literature Review: This section was review the existing literature on AIS implementation in the construction

industry, highlighting the key concepts, theories, and empirical evidence. Methodology: This section was describe the research design, data collection methods, sample selection, and data analysis techniques used in the study. Data analysis and interpretation: This section will present the findings of the study, including the challenges and opportunities related to the implementation of AIS in the construction sector in Ethiopia, the impact of AIS on the financial management and decision-making processes within Ethiopian construction companies, and the readiness and capacity of construction firms in Ethiopia to adopt and effectively utilize AIS. This section was interpret the results of the study, compare them with the existing literature, and draw conclusions about the effectiveness and prospects of AIS in the Ethiopian construction industry.

Recommendations: This section was provide recommendations for enhancing the effectiveness and prospects of AIS in the context of Ethiopia's construction industry. Limitations: This section was acknowledge the limitations of the study, including any practical or theoretical shortcoming that may influence the outcomes and conclusions of the research. Conclusion: This section was summarize the study's main findings, contributions, and implications for future research. The organization of the study will follow this structure to ensure that the research is well-structured, focused, and comprehensive.

CHAPTER TWO

LITERATURE REVIEWS

2.1 Review of Conceptual Literature

The advent of information technologies (IT) which have covered a wider range of business transaction in the world. The importance of information technologies in the business world and production sector cannot be over-emphasized. For the sake of this research work which is anchored on the 'the impact of accounting information system on credit management'. The research is being narrowed down to an aspect of information technology known as the (AIS). Accounting information system has proven to be a wonderful tool used by managers, scholars, business analyst, investors and entrepreneurs. As a powerful tool, it helps in controlling the economic and financial transaction of organizations through computerized accounting packages or accounting techniques (Grande, 2011). Accounting information system are computerized accounting software technologies used in analyzing and evaluations of business transactions all over the world. These accounting software are combinations of several sophisticated IT technologies by experts to analyses, track, control and re Grande et al, (2010) opined that in managing any organization and implementing an internal control system of the firm, the role of accounting information system (AIS) is crucial and paramount. An important question in the field of accounting and management decision making concerns the fit of accounting information system with organization. The benefits of accounting information system in every organization can be evaluated, its impacts on improvement of decision making of firms are enormous. Kashif (2018) opined that AIS is combination of people, equipment, software, policies and procedures that work together to collect data, transforms it to information for the use of the organization. He viewed AIS as an entity composed of several interdependent subsystems working harmoniously in accordance with the led down policies of the organization to ensure timely, accurate and reliable information for decision making. Port the financial and economic activities to the external and internal users of the information.

Accounting Information Systems (AIS) refers to the set of concepts, principles, and theories that underpin the design, development, and implementation of AIS. The theoretical framework provides a basis for understanding the role of AIS in organizations, the factors that influence its effectiveness, and the potential benefits and drawbacks of its use. Some of the key theoretical perspectives that inform the study of AIS include information processing theory, contingency theory, agency theory,

and institutional theory. These theories provide insights into the factors that influence the design and use of AIS, such as the organizational context, the role of technology, and the impact of external factors. The theoretical framework of AIS is essential for guiding research on the use of AIS in Ethiopia's construction industry, as it provides a basis for understanding the factors that influence its effectiveness and prospects in this sector.

Gerdin's study (2005) identified the factors that influenced the organization of the management accounting system in the enterprise, including internal and external factors. In order to analyze the internal factors affecting the selection of the management accounting model, 126 firms were surveyed in different business lines in the world and confirmed the two internal factors affecting the design of management accounting are, namely, (i) organizational structure (coordination and close control); and (ii) Interdependencies between departments within an organization (linked inflows of specialized information that create mutual control) through the level of detail and frequency of reports. Based on the development of theoretical models combined with the results of the enterprise survey, Gerdin proposed that each management accounting systems should be combined with a different organizational structure to meet the needs of business managers. Hopwood (2009) pointed out that management accounting research needed to increase the level of information flow between the business owner and parts of the business, including financial and nonfinancial information. Therefore, the need for information in management accounting for cost control and decision making has been of greater interest to business owners during this period. According to Stede (2011), management accounting information served internal business management, where management accounting reports were seen as sources of information for managers to build systematically and make decisions. Therefore, management accounting information must be developed on the basis of information needs of the manager in the enterprise. Thus, in the past there have been quite a number of studies related to the need for cost accounting information. These studies show that the more complex the business environment, the higher the need for cost information.

2.1.1 Contingency theory

This theory argues that the most effective structure for an organization is contingent (i.e., dependent) on the structure fitting the organization's level of contingency factors. Where the structure fits the contingencies, then high performance results, whereas, the structure misfits the contingencies, then low performance results, the main contingency factors are size, task uncertainty, and diversification. Each organization varies on its levels on these contingency factors and on corresponding structural

variables. As size increases, so the fitting structure is more bureaucratic (i.e., has many departments, many hierarchical levels, high specialization, high formalization, and low centralization).

2.1.2 Agency theory

To understand the relationships between agents and principals, the agent represents the principal in a particular business transaction and is expected to represent the best interests of the principal without regard for self-interest. The different interests of principals and agents may become a source of conflict, as some agents may not perfectly act in the principal's best interests. The resulting miscommunication and disagreement may result in various problems and discord within companies. Incompatible desires may drive a wedge between each stakeholder and cause inefficiencies and financial losses. This leads to the principal-agent problem

2.1.3 Institutional theory

Institutional theory seeks to explain why nations are committed to scientific institutions as well as what forms these take. The central theme is that organizational structures developed in industrialized countries are viewed by policy makers, donors, and other states as signals of progress towards modern institutional development and hence worthy of financial support. Regardless of the positive or negative consequences of their activities, the introduction and maintenance of certain forms in tertiary education and government serves to communicate this commitment. Institutional theory provides an account of the growth and structure of the academic and state research sectors, as successful organizations in industrialized nations operate as models far from their original contexts.

Academic departments consist of researchers grouped by subject, each of whom is relatively free to select research projects. They bear the closest resemblance to the root concept of science introduced at the beginning of this article. But research requires time and resources. In areas such as sub-Saharan Africa, laboratories and fieldwork are poorly funded, if at all, since many institutions can barely afford to pay salaries. Professors teach, consult, and often maintain other jobs. Research is conducted as a secondary activity and professional contacts with other scientists in Europe and the US are few.

Equally important to the scientific establishment are state research institutes. These organizations are agencies of the state, they are charged with performing research with relevance to development, with health and agriculture the two most important content areas. They are linked to ministries,

councils, and international agencies as well as systems (such as Extension Services in agriculture) that deliver technology to users—again based on a model from the developed world.

2.3 Review of Empirical literature (related journal)

According A wosejo et al (2013) opined information and communication technology has improved professional service quality in accounting organization. The study observed technology acceptance model of behaviors, intent, attitude usage, perceived usefulness and ease of use enabled the attainment of accounting information systems usage. The technology acceptance model factors depicted a significant effect on accounting information systems from the South-African content. The research recommended formal education and training of users on AIS for adequate improvement. Olaoye, Olaofe- Obasesin and Akanni (2019) examined the impact of information technology on corporate organizations performance in Nigeria. The empirical research findings revealed information technology has a significant impact on corporate organizations performance in Nigeria with recommendations on prioritizing personnel training and massive investment in information technology for efficiency in operations.

According to(Soa & Dung, 2017), investigate the impact of AIS on the performance of Vietnamese construction enterprises. Other studies have focused on the reliability of factors affecting AIS quality in civil engineering construction enterprises in Vietnam and have proposed solutions to enhance the quality of AIS in this context. The study finds that AIS positively affects the performance of construction enterprises in Vietnam. The impact of Accounting Information Systems (AIS) on the performance of Vietnamese construction enterprises is a topic of interest. Research suggests that AIS System Quality has a positive impact on the performance of these enterprises (Soa & Dung, 2017)

Investigates the impact of computerized AIS on the performance of construction companies in Slovenia (Informa- & Efficiency, 2023). The study finds that the context of AIS implementation has a significant impact on construction companies' performance. The study investigates that the impact of computerized Accounting Information Systems (AIS) on the performance of construction companies in Slovenia. The research finds that the context of AIS implementation has a significant impact on construction companies' performance. The study aims to provide a state-of-the-art overview in research on Accounting Information Systems, analyzing scientific production and trends in research. The study identifies and measures the factors that affect the quality of AIS in civil

engineering construction enterprises in Slovenia. The study contributes to the understanding of the impact of computerized AIS on the performance of construction companies in Slovenia and provides valuable insights for managers and policymakers in the construction industry.

Examines the factors affecting the performance of construction projects in Ethiopia, including factors causing construction cost overrun, the importance of Total Quality Management (TQM), and the significance of Key Performance Indicators (KPIs) (gebremedhin sebsibe, 2019). The performance of construction projects in Ethiopia is influenced by various factors. Several studies have identified key challenges and determinants affecting the performance of construction projects in the country. Some of the significant findings include. Challenges in Project Area: The study identified various challenges in construction project areas, such as delay in progress payment by the owner, poor site management, weak follow-up by consultants, and difficulties in financing projects by contractors

The factors affecting the adoption of AIS in small and medium enterprises in Somalia. (Mohamed, 2022), the study emphasizes the importance of quality information systems in efficiently managing business organizations. The adoption of Accounting Information Systems (AIS) in small and medium enterprises (SMEs) in Somalia is influenced by several factors. Research indicates that employee competency, perceived ease of use, and perceived usefulness are significant determinants of AIS adoption in SMEs in Somalia. The study emphasizes the importance of quality information systems in efficiently managing business organizations. Additionally, top management support has been found to have a favorable and substantial influence on the adoption of AIS in SMEs in Somalia. The results of these studies provide valuable insights for SME owners and managers, highlighting the crucial characteristics that influence AIS adoption and the need for evidence-based interventions to improve AIS adoption in SMEs in Somalia

Examines the effect of AIS on organizational effectiveness in selected construction firms in Nigeria (Onaolapo & Odetayo, 2012). The study finds that AIS has a positive effect on organizational effectiveness. The study examines the effect of Accounting Information Systems (AIS) on organizational effectiveness in selected construction firms in Nigeria. The research finds that AIS has a positive effect on organizational effectiveness. The study emphasizes the importance of quality information systems in efficiently managing business organizations. The findings of this study contribute to the understanding of the impact of AIS on organizational effectiveness in the construction industry and provide valuable insights for managers and policymakers in the sector.

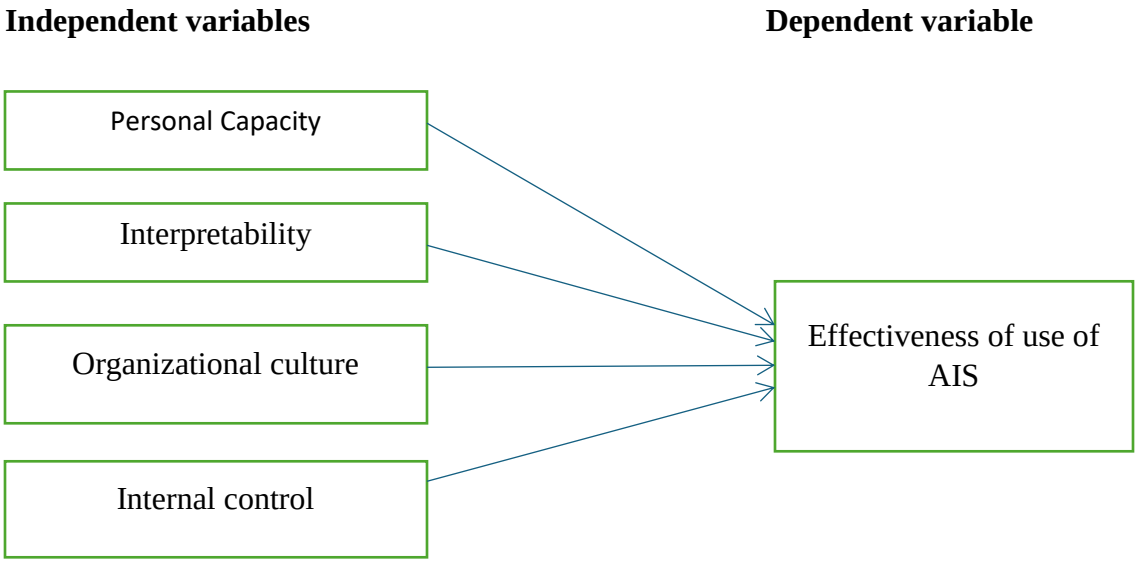
Overall, the empirical literature suggests that AIS can have a positive impact on the performance of construction enterprises, but the context of implementation and other factors such as cost, technical support, computer literacy, and competition can also influence the effectiveness of AIS.

2.4 Summary and knowledge Gap

In this chapter, relevant theoretical and empirical literature are reviewed. Accordingly, the researcher fined the following gaps that seeks further empirical investigation. Firstly, there is a lack of studies specifically focusing on the construction industry in Ethiopia, which is the focus of this question. Secondly, the integration of artificial intelligence (AI) in accounting information systems and its impact on knowledge management and data gaps needs further exploration. Thirdly, the user-is gap and the integration of information systems in the construction industry require more research to better understand the factors that influence the adoption and effectiveness of AIS. Fourth, the efficacy of action at a distance as a control mechanism in the construction industry needs further investigation. In conclusion, while there is evidence that AIS can positively impact construction industry performance, there is a knowledge gap in terms of research specifically focused on Ethiopia and the integration of AIS? Further research is needed to explore these areas and provide more comprehensive insights into the factors that influence the adoption and effectiveness of AIS in the construction industry.

2.5 Conceptual framework

Overall, the results suggest that conceptual frameworks can be useful in understanding the components of AIS, the contexts of implementation, and the impact of AIS on organizational performance. However, there is a need for further research to develop and validate conceptual frameworks in the context of specific industries and organizations



Source: Researcher own development

Figure 2-1 conceptual farm work

2.6 Hypotheses Development

- H1: Personal capacity has a positive and significant effect on the effectiveness of AIS.
- H2: Interpretability has a positive and significant effect on the effectiveness of AIS.
- H3: Organizational culture has a positive and significant effect on the effectiveness of AIS.
- H4: Internal control has a positive and significant effect on the effectiveness of AIS.

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CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Research Design

This study employed both descriptive and explanatory research design to examine the factors influencing the effectiveness and prospects for the use of Accounting Information Systems (AIS) in Ethiopia's construction industry. For this study, cross sectional survey design was found to be appropriate to gather information about the extent of AIS adoption and its determinant variables among Construction Company in Ethiopia. According to survey research method allows the collection of quantitative data from large population which in turn can be used to suggest the possible reasons about a specific relationship between variables of interest.

3.2 Research Approach

According to (Creswell & Ssp, 2007) scientific research approaches has been classified into three: quantitative, qualitative, and mixed research. Quantitative research is an approach for testing objective theories by examining the relationship among variables, which can be measured and analyzed using statistical procedures. The main data collection for this research method are surveys, questionnaires and online research. Qualitative research is an approach for exploring and understanding the idea reason, and one's motivation in relation to specific variables. Interview, focus group and observation are the data collection for this research method. Whereas, mixed research approach involves in quantitative and qualitative forms of primary data in a single study. Hence, for the sake of attaining objectives of the research and answering research questions quantitative research approach was used.

3.3 Data source and Type

Data processing and analysis is a crucial aspect of Accounting Information Systems (AIS) in the construction industry in Ethiopia. AIS plays a vital role in organizing and analyzing financial data to support decision-making processes. The collected data is processed and transformed into meaningful information that aids in identifying patterns and trends. Additionally, the analysis of financial data facilitates identifying risks and opportunities, which is essential for effective financial management in the construction industry. The study depended on both primary and secondary data.

Primary data was made up of first-hand data collected by the candidate through the use of questionnaires. The secondary sources of data were obtained using relevant books, journals, magazines and research papers.

3.4 Data Collection Techniques

Accounting information system provided to help corporate managers with the following functions, namely, planning, performing, controlling and decision making in the construction industry as the research model, which is employed to design the official survey questionnaire. The questionnaire was developed to collect the opinions of business managers about two aspects, namely, (i) evaluate the extent to which the demand for information in the management and accounting department of domestic construction company is assessed (1 is strongly dis agree to 5 is strongly agree in Likert scale); and (ii) evaluate the level of necessity of information system in management of construction company (1 is strongly dis agree to 5 is strongly agree). Designing and submitting survey questions to 100 accounting department at all levels in the construction business

3.5 Sample Design and sample Determination

The study employed Convenience sampling is a non-probability sampling method where units are selected for inclusion in the sample because they are the easiest for the researcher to access the population in to homogenies grouped and then taking a simple nonrandom sample in each group making it possible to make reliable estimates for each stratum as well as for the population as a whole to design and determination in the field of Accounting Information Systems (AIS) can be understood from the following results. The process of choosing a sufficient number of components from a population and group of individuals, objects, or items that are picked from bigger populations for measurements is known as sampling size. The sample size was 133 respondents only. Using Slovene's formula for determining sample size, the sample size will be ascertained. N/ (1+ (N*e^2) is where Sample size (e) = N - Total Population (n) - Errors at 5% Based on the Slog Van's formula, the sample comprises 110 small businesses in Mogadishu owned by the respondents.

$$n= N/1+N (e) 2$$

Where n=sample size N= total population e=level of significance (95%)

There for

N=133/1+133(0.05)2

=133/1+0.3325

=133/1.3325

=100

3.5.1 Target Population

The target population considered in this study was category one contractor registered on (2013) grade one construction company found in and around Addis Ababa city administration. The contractors companies had valid registration according to Ministry of Urban Development and Construction (MoWUD).

Therefore, the populations this research, includes General contractors classified as BC1, RC1 and GC1 that by reconnaissance survey in Addis Ababa and have a valid registration by MoWUD. Because those selected categories are have experience, efficiency and managerial and financial capability; Table 3.1 shows the Contractor grades and project size.

Table: - 1 A grades for BC, RC and GC

Categories	**Grade**	**Construction Cost (Birr)**		
		BC	**RC**	**GC**
(GC,BC,RC)	1	Above 210,000,000	Above 300,000,000	Above 350,000,000
(GC,BC,RC)	2	Up to 210,000,000	Up to 300,000,000	Up to 350,000,000
(GC,BC,RC)	3	Up to 160,000,000	Up to 225,000,000	Up to 270,000,000
(GC,BC,RC)	4	Up to 110,000,000	Up to 154,000,000	Up to 185,000,000
(GC,BC,RC)	5	Up to 54,000,000	Up to 76,000,000	Up to 100,000,000
(GC,BC,RC)	6	Up to 27,000,000	Up to 38,000,000	Up to 45,000,000
(GC,BC,RC)	7	Up to 11,000,000	Up to 15,000,000	Up to 18,000,000
(GC,BC,RC)	8	Up to 5,400,000	Up to 7,500,000	Up to 9,000,000
(GC,BC,RC)	9	Up to 3,000,000	Up to 4,200,000	Up to 5,000,000
(GC,BC,RC)	10	Up to 1,000,000	Up to 1, 500,000	Up to 1,800,000

[Source (MoWUD, 2013)]

3.6 Data Analysis Techniques

In the context of reporting and decision-making, Accounting Information Systems (AIS) play a crucial role in the construction industry by providing accurate, timely, and relevant financial information. This information is used by managers to make informed decisions regarding resource allocation, project monitoring, and evaluating financial performance. By integrating AIS into their operations, construction firms in Ethiopia can enhance their reporting capabilities and have a better understanding of their financial position. As a result, they can make proactive decisions based on reliable data and improve their overall performance in the industry. To provide information on data analysis techniques in the context of Accounting Information Systems (AIS); while the specific data analysis techniques are not explicitly mentioned in the provided excerpts, the following general insights can be inferred:

3.6.1 Use of Statistical Tools

In a study examining the effect of AIS on organizational effectiveness, both descriptive and inferential statistical tools were employed to analyze the data and test the formulated hypothesis

3.6.2 Quality Information Systems and Organizational Effectiveness

Another study emphasizes the need for quality information systems to efficiently manage business organizations, which implies the use of data analysis techniques to assess organizational effectiveness. While the specific data analysis techniques are not explicitly outlined in the provided excerpts, it can be inferred that statistical tools, hypothesis testing, and assessment of organizational effectiveness are relevant to the data analysis process in the context of AIS. For detailed information on the specific data analysis techniques used in AIS research,

3.7 Variables Definition and measurement

The data for the entire dependent and independent variables is collected using Liker scale. However, because our econometrics model developed above is a linear model we should convert the ordered data into continuous form. Therefore, we first compute the mean values of each variable depending on response to the constructs. Therefore, all variables are continues.

3.8 Model specification

Model specification in the context of Accounting Information Systems (AIS) involves outlining the relationships between variables and the assumptions made in a research study. Based on the following aspects can be identified: AIS as a Set of Formal Processes: AIS is a set of formal processes that organizations use to collect, store, manage, process, and generate financial reports. Design and Implementation Research: A structured literature review focuses on the design and implementation of systems in AIS research, highlighting the importance of model specification in understanding the components and processes of AIS. Conceptual Framework for AIS Components and Firm Performance: A conceptual framework is proposed that links the components of AIS with firm performance. This framework is based on the integration of design and implementation research. Bridging the User-IS Gap: A rich model of integration is developed based on normative, organizational, and work group features to bridge the user-IS gap in major information systems. The model is utilized to analyze survey results and case studies. Measurement and Operational Definitions: Measurement is a procedure for assigning symbols, letters, or numbers to empirical properties of variables according to rules. Variables are first defined by conceptual definitions and then by operational definitions, which specify how the variable will be measured in practice

Therefore, to investigate factors influencing the usefulness and prospects of AIS, this study use multiple regression model which is specified below.

$$Yi = \alpha + \beta 1(X1) + \beta 2(X2) + \beta 3(X3) + \beta 4(X4) + e$$

Where;

- Y_i = Effective usefulness of AIS.
- X_1 = Personal capacity
- X_2 = Interpretability
- X_3 = Organizational culture
- X_4 = Internal control
- e- error terms
- α is the intercept and $\beta 1$to $\beta 4$ are parameters

3.8.1 Validity and reliable Tests

To provide insights into the importance of validity and reliability tests in the context of Accounting Information Systems (AIS) research.

3.8.2 Data Reliability Assessment in AIS:

According to (Dianne et al., 1992), Reliability is concerned with the degree to which the measurement of a phenomenon produces stable and consistent results. Reliability is also related to repeatability. Reliability testing is important because it indicates the uniformity of measuring equipment components(*Www.Acetxt.Com*, n.d.). A scale is said to have high internal consistency reliability if the scale items are "related to each other" and measure the same construct (Taherdoost et al., 2016). The most commonly used method to measure internal consistency is Cronbach's Alpha. This is considered the most appropriate measure of reliability when using a Likert scale(Taherdoost et al., 2016). Although there are no absolute rules regarding internal consistency, most agree on a minimum internal consistency coefficient of 0.70 (Taherdoost, 2020), proposed four reliability thresholds, including excellent reliability (above 0.90), high reliability (0.70–0.90), moderate reliability (0.50–0.70), and low reliability (below 0.50). Therefore the reliability of the data will be checked by Cronbach Alpha.

Table 3.1 Reliability Test

Description	Cronbach Alpha	No. of Items
Personal Capability	0.745	4
Interpretability	0.788	4
Organizational Culture	0.731	4
Internal Control	0.723	4
Employee performance	0.882	7

Source own data, 2024

As shown the above Table 3.1 reliability result of the data, the Cronbach alpha coefficient for the data was 0.745, 0.788, 0.731, 0.723 and 0.882 respectively. According to Hinton if the Cronbach alpha coefficient falls under (0.7-0.9) indicates high reliability, since the result of Cronbach alpha

for all of data was greater than 7 and less than 9 therefore the reliability of the data was high reliability.

3.9 Ethical Clearance

Ethical approval was obtained from St. Mary University, Post Graduate Studies Program. Ethical letter or official permission was also obtained from various firms. Then after, the objectives and benefits of the research were discussed in detailed with the selected organizations officials. Then, a similar discussion was held with officials and staffs. The study considered the well-established and thorough research ethics reminds us that it is unethical to a researcher to present a biased report or not to report the truth as it is.

Participation in the study is voluntary and confidentiality of the information was assured during as well as after data collection. The participants were informed about their right not to participate, privacy, risk and no direct benefits of the study and not to answer any question or all of the questions. Data collectors obtained verbal consent from employees after informing them about the nature of the study and that their participation was voluntary. The information sought was be used for any other purpose than that to which participants consented and will not be passed to a third party. After the successful thesis defense and approval, Academic Commission and the University Senate, the questionnaire will be incinerated in a secure manner.

CHAPTER FOUR

DATA ANALYSIS AND INTERPRITATION

4.1 Questionnaires Response Rate

The primary objective of this study is to analyze the factors influencing the effectiveness and prospects for the uses of accounting information system in Ethiopian's construction industry. Within this chapter, particular attention is given to the presentation, analysis, and organizational interpretation of data collected from questionnaires.To effectively address the research questions, the collected data were subjected to analysis using the Statistical Package for the Social Sciences (SPSS) version 27.

4.1 Questionnaires Response Rate

Table 4.1 Questionnaires Response Rate

Questionnaire	Frequency	Percentage
Total number of questionnaires distributed	100	100%
Total number of questionnaires returned	94	94%
Total number of questionnaires unreturned	6	6%
The total number of questionnaires rejected	---	---

Source :Researcher survey,2024

The response rate, which indicates the proportion of participants in the sample who completed and returned the survey, plays a significant role in evaluating survey effectiveness. In the scope of this study, precisely 100 questionnaires were distributed to the respondents. Out of the total distribution, 94 questionnaires were completed, reflecting a remarkable response rate of 94%. It is worth noting that 6 individuals did not return the questionnaire, and their responses are not included in the final analysis.

4.2 Demographic characteristics of the Respondents

The respondents' gender, age, level of education, and work experience are among their demographic features. The frequency and proportion of respondents from a sample of Ethiopian's construction industry in Addis Ababa were shown in below table 4.2.

Table 4.2 Demographic characteristics of the Respondents

		Frequency	Percent
Gender	Male	56	59.6
	Female	38	40.4
	Total	94	100
Age	20-30 years	12	12.8
	31-40 years	45	47.9
	41-50 years	24	25.5
	>50 years	13	13.8
	Total	94	100
Qualification	Diploma	15	15.95
	BSc	61	64.89
	Postgraduate	14	13.16
	Other Advanced Degree (Ph.D., etc.)	4	4.3
	Total	94	100
Work experience	Less than 5 years	31	33
	6-10 years	35	37.2
	11-15 years	14	14.9
	above 15 years	14	14.9
	Total	94	100

Source own survey 2024

As shown in the above table 4.2 majority of the respondents were male with 56(59.6%) and Female was 38(40.4%).the result of the study indicates that male respondents made up the majority of those who participated in the study and one can infer that the majority of Ethiopian's construction industry

As shown the above table 4.2 educational level of the respondent, the result show that out of 94 the respondents that the majority and met the minimum requirement of educational levels diploma were 15(15.95%), and followed by of the respondent that met first degree were 61 (64.89 %), those who met master with number 14(14.89%) and the last one those were PHD holders with 4(4.3). This

shows that majority of respondents have first degree which implies that the Ethiopia's construction industry has relatively high qualified employees in their academic status.

As shown the above table 4.2 working experience of the respondent most of employee have working experience of 6-10 years with number of employee 35(37,2%).This was followed by Less than 5 years' experience that was 31(33%) employees, those who have 11 to 15 and above 15 years' experience were same with 14(14.9%), The result of the study indicates that most of respondents made up those who participated in the study were experienced and had good knowledge basis of AIS. Likewise, they were well experienced and had the knowledge to evaluate the factors that affect AIS.

4.3 General Information on AIS

Before we directly identify the factors affecting the usefulness of AIS, we first evaluate the companies general information related to AIS.

Table 4.3 General Information on AIS

What kinds of accounting method your organization use to record and analyze financial data?

		Frequency	Percent
Valid	Peachtree accounting	57	60.6
	Microsoft excel	25	26.6
	IBEX	4	4.3
	IFMIS	7	7.4
	Total	94	100

Source own survey 2024

According to above Table 4.3,1 the general information on accounting information system was briefly discussed in this section. The information in Table 4.3.1 reveals majority Ethiopian's construction industry use Peachtree accounting method to record and analyze financial data with agreement rate of respondent was 60.6%. Followed Microsoft excel users with rate of respondent was 26.6%, the third place; Ethiopian's construction industry use IFMIS with rate of respondent was 7.4% and the last one was IBEX used with rate of respondent was 4.3%. This finding shows that majority of Ethiopian's construction industry used Peachtree software to facilitate their duties..

Table 4.4 organizational Information on AIS

Has your organization applied accounting information system?

		Frequency	Percent
Valid	Yes	62	66
	no	23	24.5
	cannot say	9	9.6
	Total	94	100

Source own survey 2024

Has your organization applied accounting information system? According to the data, 66% of respondents have yes applied AIS about the use of AIS in their business. Followed by 24.5% of respondents has not applied AIS. The rest of respondent 9.6% are cannot say .The finding indicates that Ethiopian's construction industry highly applied the uses of AIS.

Table 4.5 understanding on AIS

Level of understanding about AIS?

		Frequency	Percent
Valid	Very high	40	42.55
	high	29	30.85
	medium	14	14.89
	low	11	11.70
	Total	94	100

Source own survey 2024

Level of understanding about AIS: according to the data, 42.55% of respondents have medium understanding about the use of AIS in their business. Followed by 30.85% of respondents has high understanding about the use of AIS. At third place 14.89% of respondents have very high understanding about the use of AIS. And the last one was 11.7% of respondents that have low understanding about AIS. The finding indicates that Ethiopian's construction industry needs to train their employee to improve employees understanding about AIS

Table 4.6 Implementation of AIS

Dose accounting knowledge a critical component in the implementation of an accounting information system in your organization?

		Frequency	Percent
Valid	yes	75	79.8
	no	17	18.1
	Total	94	100

Source own survey 2024

Accounting Knowledge and Implementation of AIS, according to the data, 79.8% of respondents believe that accounting knowledge is a critical component in the implementation of an accounting information system in their organization. And 18.1% of respondents do not believe that accounting knowledge is a critical component in the implementation of an accounting information system in their organization.

Table 4.3.5 implementation of AIS

Is management concerned with training and continuing education programs for employees in effective implementation of AIS?

		Frequency	Percent
Valid	yes	57	60.6
	no	37	39.4
	Total	94	100

Source own survey 2024

Management Commitment to Training and Continuing Education, according to the data, 60.6% of respondents believe that management is concerned with training and continuing education programs for employees. And 39.4% of respondents do not believe that management is concerned with training and continuing education programs for employees.

Based on the data, the researcher found that majority of Ethiopian's construction industry uses Peachtree accounting method to record and analyze financial data, with an agreement rate of 57%. Furthermore, the study revealed that 62% of Ethiopian's construction industry uses accounting

information system (AIS). However, the level of understanding about AIS is moderate, with 40% of respondents having medium understanding, and 11% having low understanding. The study also found that accounting knowledge is a critical component in the implementation of AIS, with 79.8% of respondents agreeing. Moreover. The study also identified some challenges and areas for improvement, including the need for training and continuing education for employees, and the need for management commitment to training and continuing education programs. Overall, the findings suggest that Ethiopian's construction industry needs to improve its understanding and implementation of AIS to fully benefit from its use.

4.4 Descriptive Statistics Analysis

Descriptive analysis is a type of statistical analysis that aims to summarize and describe the main features of a dataset, typically in a visual and quantitative manner. It is the first step in data analysis, and it provides a foundation for further analysis, such as inferential statistics.For this study Quantitative data obtained from the questionnaires were analyzed descriptively in terms of mean, overall mean and standard deviation. All analyses were performed using the Statistical Package for the Social Sciences (SPSS) software version 27. Interpretations were made for all dimensions on a 5-point Likert scale based on: Scale: 5 =Strongly Agree; 4=Agree; 3=Medium; 2=Disagree; 1 = Strongly Disagree. Thus, the scales were averaged and neutral posture “3” was taken as the reference point. That is, the average you get the same score as above 3 (neutral) if the opinion favors the given view, and below 3 (Neutral) when opinions tend to be unfavorable to a particular point of view. (Rungsinanont, 2020) describes the interpretation of Likert scales, accordingly, in this study the essence of the interpreted data is as follows: 1.0–1.8 = Strongly Disagree, 1.81–2.6 =Disagree, 2.61–3.20 =Medium, 3.21–4.20 = Agree, 4.21–5.00 = Strongly Agree.

4.4.1 Personal Capability

Table 4.7 Personal Capability

S/no	Description	N	Mean	Std. Deviation
1	I have high level of understanding about AIS in my organization.	94	3.64	0.94
2	I have enough knowledge and skill to use AIS in my organization	94	3.22	1.00
3	Information provided by our AIS meets and fits our needs.	94	3.51	1.01
4	I can easily store information and retrieve information from our AIS.	94	3.00	0.96
6	Grand mean	94	3.34	

Source own survey 2024

As shown in table 4.4 Descriptive Statistics of personal capability in Ethiopian construction company. I have high level of understanding about AIS in my organization, for this statement, the respondent agreed with a mean of 3.64 and a St.devation of 0.94. This implies that in employee of the Ethiopian construction company high level of understanding about AIS within their organization .

I have enough knowledge and skill to use AIS in my organization, for this statement, the respondent agreed with a mean of 3.22 and a St.devation of 1.00. This implies that employee of the Ethiopian construction company have some knowledge and skills to use AIS in their organization, but not necessarily to the highest level. Regarding, Information provided by our AIS meets and fits our needs, for this statement, the respondent agreed with a mean of 3.51 and a St.devation of 1.01. This implies that the information provided by AIS meets and fits employees needs

I can easily store information and retrieve information from our AIS, for this statement, the respondent agreed with a mean of 3.00 and a St.devation of 0.96. This implies that employee of the Ethiopian construction company can store and retrieve information from AIS, but not necessarily with ease.

The grand mean of 3.34 indicates that respondents generally have a positive attitude towards AIS in their organization, with a high level of understanding and agreement on the quality of information

provided by AIS. However, there is some room for improvement in terms of ease of use and storage/retrieval of information from AIS.

4.4.2 Interpretability

Table 4.8 Interpretability

S/no.	Description	N	Mean	Std. Deviation
1	Managers provide clear and concise information about the organization's performance, strategy, and resource allocation through AIS.	94	3.85	1.34
2	My organization uses AIS to give Clear and interpretable financial information and facilitates effective communication with stakeholders.	94	3.90	1.22
3	Our AIS provide sufficient information related to my tasks.	94	2.95	0.82
4	Our AIS provide me information in appropriate format.	94	3.00	0.80
5	Grand mean	94	3.43	

Source own survey 2024

As shown in table 4.5 Descriptive Statistics of interpretability of AIS in Ethiopian construction company. Managers provide clear and concise information about the organization's performance, strategy, and resource allocation through AIS, the respondent agreed with a mean of 3.85 and a St.devation of 1.34. This implies that in managers of the Ethiopian construction company provide clear and concise information about the organization's performance, strategy, and resource allocation through AIS.

My organization uses AIS to give Clear and interpretable financial information and facilitates effective communication with stakeholders, the respondent agreed with a mean of 3.90 and a St.devation of 1.22. This implies that Ethiopian construction company uses AIS to provide clear and interpretable financial information and facilitates effective communication with stakeholders.

Our AIS provide sufficient information related to my tasks, the respondent medium with a mean of 2.95 and a St.devation of 0.82. This implies that their organization's AIS provides less information

related to their tasks. Regarding, Our AIS provide me information in appropriate format. the respondent medium with a mean of 3.00 and a St.devation of 0.80. This implies that their organization's AIS provides them information in some appropriate format. So Ethiopian construction industries needs to improve their AIS to provide information in sufficient and appropriate formats.

The grand mean of 3.43 indicates that the respondents generally agree that their organization uses AIS to provide clear and interpretable financial information, facilitates effective communication with stakeholders, but provides less sufficient information related to their tasks in an appropriate format. Generally the finding indicates positive attitude towards the use of AIS in their organization.

4.4.3 Organizational Culture

Table 4.9 Organizational Culture

S/no.	Description	N	Mean	Std. Deviation
1	In my organization, I freely exercise AIS to develop my knowledge and skill.	94	2.98	1.13
2	Our organization encourages employees to being excellence with AIS.	94	3.57	0.90
3	My organization provides training about AIS to develop my knowledge and skill.	94	3.29	1.15
4	My Organization management's committed to accommodate the AIS in their decision making process.	94	3.39	0.83
5	Grand mean	94	3.31	

Source own survey 2024

As shown in table 4.6 Descriptive Statistics of organizational culture in Ethiopian construction industries. In my organization, I freely exercise AIS to develop my knowledge and skill, the respondent agreed with a mean of 2.98 and a St.devation of 1.13. This implies that employee of Ethiopian construction industries have some freedom to exercise AIS to develop their knowledge and skill, but not entirely freely.

Our organization encourages employees to being excellence with AIS, the respondent agreed with a mean of 3.57 and a St.devation of 0.90. This implies that Ethiopian construction industries encourages its employees to be excellent with AIS. Regarding, my organization provides training about AIS to develop my knowledge and skill, the respondent agreed with a mean of 3.29 and a St.devation of 1.15. This implies that Ethiopian construction industries provides training for employees about AIS to develop my knowledge and skill.

My Organization management's committed to accommodate the AIS in their decision-making process, the respondent agreed with a mean of 3.39 and a St.devation of 0.83. This implies that Ethiopian construction industries was committed to incorporating AIS in their decision-making process.

The grand mean of 3.31 indicates that the respondents generally agree that their organization encourages employees to be excellent with AIS, provides training about AIS, and commits to incorporating AIS in their decision-making process. The overall mean of 3.31 indicates a positive attitude towards the use of AIS in their organization. However, there is room for improvement in terms of freedom to exercise AIS for personal development.

4.4.1 Internal Controls

Table 4.10 Internal Controls

S/no.	Description	N	Mean	Std. Deviation
1	Our AIS is fully automated or computerized	94	3.24	0.89
2	In our organization ensures financial transaction security	94	3.27	0.87
3	Managers of the organization rely on AIS for their decision.	94	3.23	0.81
4	The inputs of AIS are presented in an easy and clear manner	94	4.10	1.31
5	Grand mean	94	3.46	

Source own survey 2024

As shown in table 4.6 Descriptive Statistics of internal controls of AIS in Ethiopian construction industries. Our AIS is fully automated or computerized, the respondent agreed with a mean of 3.24

and a St.devation of 0.89. This implies that AIS of Ethiopian Construction Industries was partially automated or computerized, but not fully. Regarding in our organization ensures financial transaction security, the respondent agreed with a mean of 3.27 and a St.devation of 0.87. This implies that the organization takes measures to ensure financial transaction security.

Managers of the organization rely on AIS for their decision, the respondent agreed with a mean of 3.23 and a St.devation of 0.81. This implies that managers of Ethiopian Construction Industries in their organization rely on AIS for their decision-making process. Regarding, The inputs of AIS are presented in an easy and clear manner, the respondent agreed with a mean of 4.10 and a St.devation of 1.31. This implies that the inputs of AIS are presented in an easy and clear manner.

The grand mean of 3.31 indicates that the respondents generally agree that their AIS is partially automated or computerized, ensures financial transaction security, and is used by managers for decision-making purposes. However, they strongly agree that the inputs of AIS are presented in an easy and clear manner. The overall mean of 3.46 indicates a positive attitude towards the use of AIS in their organization.

4.4.1 Effectiveness of AIS

Table 4.11 Effectiveness of AIS

S/no.	Description	N	Mean	Std. Deviation
1	Our AIS provides me the necessary information in a timely manner.	94	2.94	1.21
2	The information from our AIS improves the quality of my work.	94	2.96	1.28
3	Our AIS help to generate required information quickly	94	3.31	1.22
4	Information provided by our AIS is accurate, free of errors.	94	3.50	1.15
5	Information produced by our AIS reflects the real condition.	94	3.68	0.95
6	Our AIS provides correct data to prepare financial statement	94	3.47	1.19
7	Information provided by our AIS is easy to read and understand.	94	3.47	1.20
8	Grand mean	94	3.33	

Source own survey 2024

As shown in table 4.6 Descriptive Statistics of Effectiveness of AIS in Ethiopian Construction Industries . Our AIS provides me the necessary information in a timely manner, the respondent medium with a mean of 2.94 and a St.devation of 1.21. This implies that employees of Ethiopian Construction Industries receive the necessary information from AIS, but not necessarily in a timely manner. Regarding the information from our AIS improves the quality of my work, the respondent medium with a mean of 2.96 and a St.devation of 1.28. This implies that the employees of Ethiopian Construction Industries receive the information from AIS but it does not necessarily improve the quality of their work.

Our AIS helps to generate required information quickly, the respondent agreed with a mean of 3.31 and a St.devation of 1.22. This implies that the AIS of Ethiopian Construction Industries was able to generate required information quickly and efficiently. Regarding Information provided by our AIS is accurate and free of errors, the respondent agreed with a mean of 3.50 and a St.devation of 1.15. This implies that the information provided by AIS is accurate and free of errors.

Information produced by our AIS reflects the real condition, the respondent agreed with a mean of 3.68 and a St.devation of 0.95. This implies that AIS provides accurate and reliable information about the current situation. Our AIS provides correct data to prepare financial statements, the respondent agreed with a mean of 3.47 and a St.devation of 1.19. This implies that AIS provides accurate and reliable data for financial reporting purposes.

Information provided by our AIS is easy to read and understand, the respondent agreed with a mean of 3.47 and a St.devation of 1.20. The finding indicates that AIS provides clear and understandable information.

The grand mean of 3.31 indicates that the respondents generally agree that AIS provides accurate and reliable information, is easy to understand, and is useful for generating required information quickly and efficiently. However, they have some reservations about the timeliness of the information and its impact on the quality of their work.

4.5 Inferential Analysis

Inferential analysis in research refers to the process of making predictions, generalizations, or concluding a larger population based on findings from a sample or subset of that population. This type of analysis involves using statistical techniques to infer or deduce patterns, trends, or relationships that may exist in the data

4.5.1 Correlation

The degree to which two variables have a linear relationship is determined by correlation. To determine whether there are relationships between the variables as well as to characterize the direction and strength of those relationships, Pearson's correlation is utilized. As per(*Berndt-and-Harty-Classification (1)*, n.d.), the degree of correlation between the two variables, as determined by Pearson's coefficient, ranges from -1 to +1 points, signifying the degree and direction of the association. The correlation results can be interpreted as follows: a correlation between 0 and 1 suggests a positive relationship, 0 (zero) indicates no relationship, 1 indicates a perfect positive relationship, -1 indicates a perfect negative relationship and -1 to 0 indicates the presence of a negative relationship. While the results below ±0.61 indicate the presence of a positive or negative relationship, their strength is not high (Profile, 2014).

Table 4.12 Correlation

		Effectiveness of AIS	Personal capability	Interpretability	Organizational Culture	Internal Control
Effectiveness of AIS		1				
Personal capability		.722**	1			
Interpretability		.858**	.736**	1		
Organizational Culture		.712**	.549**	.641**	1	
Internal Control		.600**	.626**	.617**	.774**	1
**. Correlation is significant at the 0.01 level (2-tailed).						

Source own survey 2024

As shown in Table 4.9 the correlation analysis of the dependent and independent variables, among independent variables that are Personal capability, Interpretability, Organizational Culture and Internal Control related factors have a positive correlation with the dependent variable effectiveness of AIS. As shown in Table 4.9 the person correlation coefficients for the independent and dependent variables were (0.722, 0.858, 0.712, and 0.600) respectively for Personal capability, Interpretability, Organizational Culture and Internal Control related factors.

4.5.2 Regression Analysis

One or more independent variables are used in regression analysis to determine the effect on a dependent variable (Albaum, 1997). A statistical tool used to examine relationships between variables is regression analysis. Most of the time, the goal of research is to determine the causal relationship between factors. Gathering information on the underlying variables of interest and using regression to calculate the quantitative impact of the causative variables on the variable under investigation, the researcher investigates such problems. Additionally, the investigator normally evaluates the "statistical significance" of the estimated relationships or the degree to which the true relationship is believed to be closely related to the estimated relationship (Birks, n.d.). Before performing the regression analysis, the researcher in this study attempted to test the assumptions.(Olawole et al., 2021)

4.5.3 Assumption Testing

To preserve the validity and robustness of the research's regressed result under multiple regression models, the fundamental assumptions must be met. Thus, assumption tests like multi-Co linearity, linearity, and Heteroscedasticity test have been carried out in this study.

4.5.3.1 Linearity

As stated by(Hayes, 2012) to perform a linear regression analysis, the relationship between the independent and dependent variables must be a linear function. Consequently as shown below in Figure 4.1, scatter plots illustrating the relationship between the two variables (IV and DV).

SPSSV-27 software was used to test the linearity of the relationship between independent and dependent variables. The residuals scatter plot shows that the points were arranged from bottom left to top right in a fairly straight line. As such, it exhibits linearity. Regression analysis relies on the fundamental premise that there is a linear relationship between the variables, meaning that the patterns formed by the points in the straight-line plot can be roughly represented by a straight line.

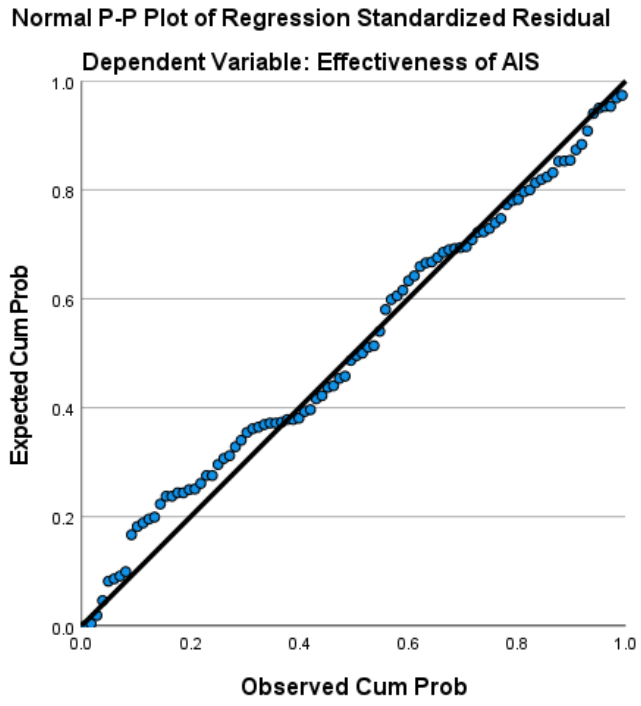

Figure 4.1 Linearity Test

4.5.3.2 Normality Test

The assumption of normality assumes whether the error terms are normally distributed or not. In a regression analysis, the normality of errors is indicated when the standardized residual becomes bell-shaped(Gujarati, n.d.).

Figure 4.2 below shows the errors are normally distributed since the Histogram result indicated bell-shaped. So we can say that the errors are approximately normally distributed.

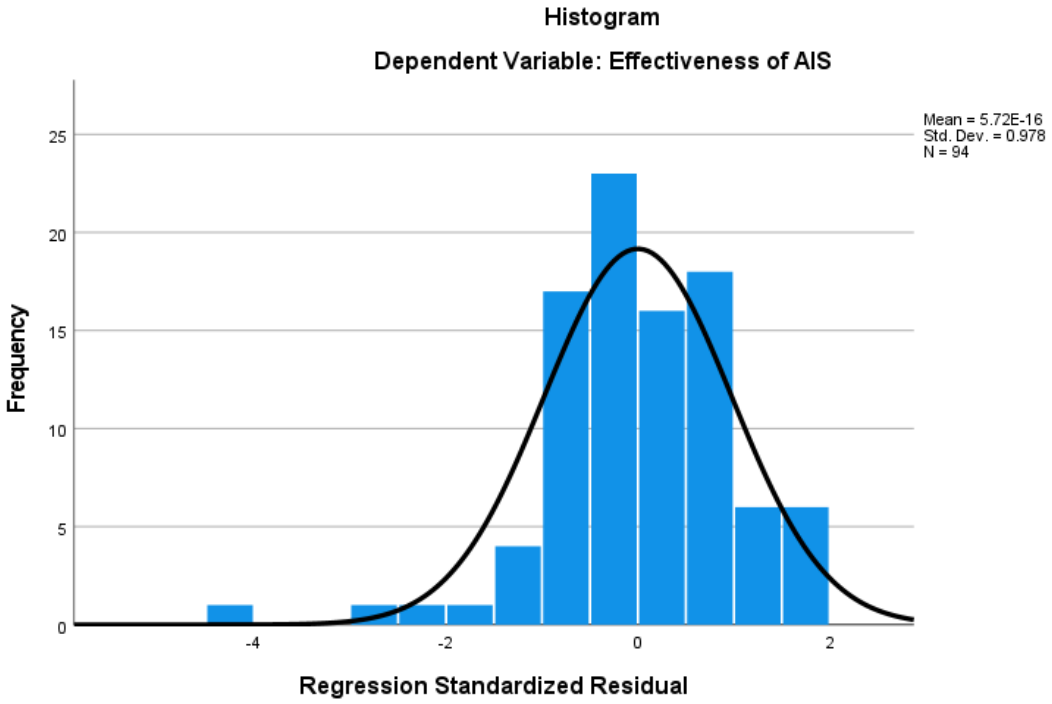

Figure 4.1 Normality Test

4.5.3.3 Multi-Co linearity

Multicollinearity test is a statistical test used to assess the degree of correlation between two or more independent variables in a regression analysis. Multicollinearity can cause problems in regression analysis, such as inflated standard errors and unstable coefficients.

As stated by (McClelland 2017), the majority of regression software can calculate the variance inflation factor (VIF) for every variable. Generally speaking, a VIF greater than 10 points indicates issues with the multicollinearity test. (Erik, 2014) and the values for Tolerance values below 0.1 indicate serious issues.

Variance Inflation Factor (VIF): VIF measures how much the variance of an estimated regression coefficient is increased due to collinearity. A VIF greater than 10 is often considered indicative of multicollinearity.

Tolerance: Tolerance is the reciprocal of VIF and measures the proportion of variance in an independent variable that is not explained by other independent variables. A tolerance value less than 0.1 is considered indicative of multicollinearity.

Table 4.13 Multicollinearity Test

Model		**Collinearity Statistics**	
		Tolerance	**VIF**
	Personal capability	**0.408**	**2.452**
	Interpretability	**0.377**	**2.652**
	Organizational Culture	**0.355**	**2.815**
	Internal Control	**0.342**	**2.92**
a. Dependent Variable: Effectiveness of AIS			

Source own survey 2024

As shown in Table 4.10 the multicollinearity test for all independent variables the tolerance is greater than 0.1 and the VIF is less than 10, therefore there is no multicollinearity.

4.5.3.4 Heteroscedasticity

The heteroscedasticity test is a statistical test used to check for the presence of heteroscedasticity, which is a violation of the assumption of homoscedasticity in regression analysis. Homoscedasticity means that the variance of the errors is constant across all levels of the independent variables. Heteroscedasticity, on the other hand, occurs when the variance of the errors is not constant.

Error terms don't have a continuing variance, according to this assumption. Hypothesis testing is no longer valid or reliable if heteroscedasticity occurs because the standard least square method's estimators become inefficient and underestimate variances and standard errors. The variance of the

error term that is constant across all model measures is used to test heteroscedasticity graphically or visually. This implies that, in the absence of heteroscedasticity, the data is not heteroscedastic.

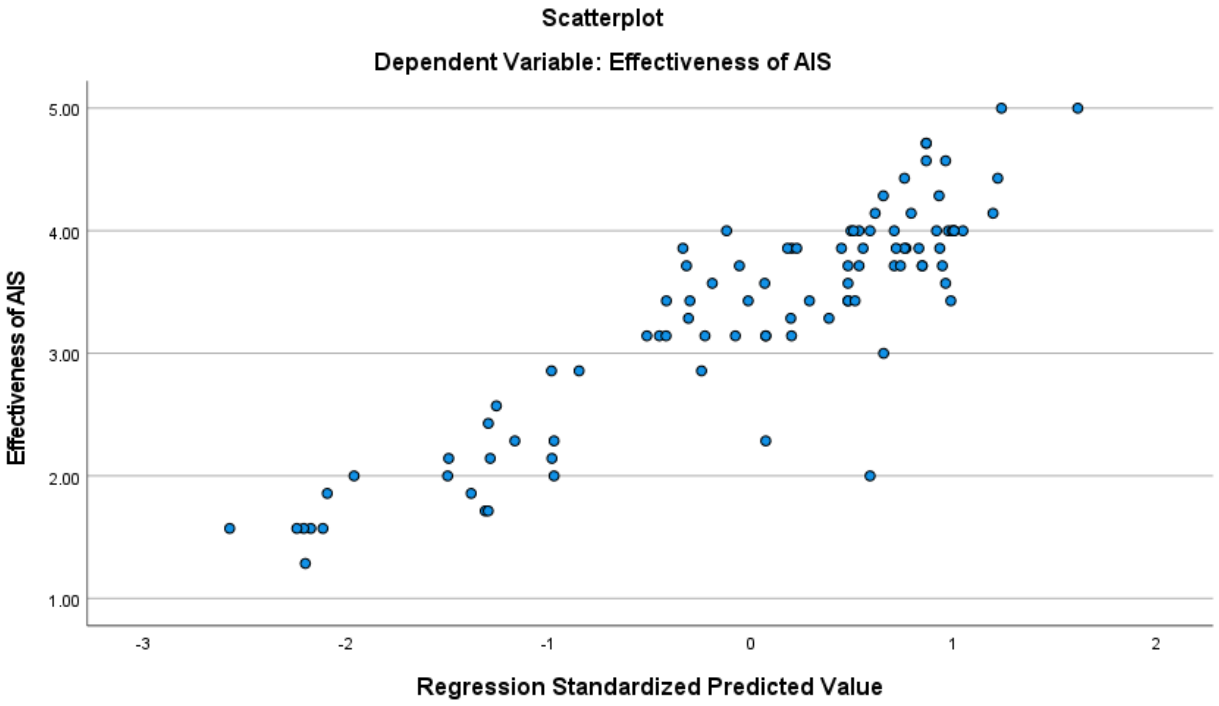

Figure 4.3 Heteroscedasticity Test

As shown in the above graph the residuals do not make regular patterns, therefore there is no heteroscedasticity.

4.5.4 Multiple Linear Regression Analysis

Multiple linear regression analysis is a statistical method used to examine the relationship between two or more independent variables and a single dependent variable. For this research, researcher examined the relationship between influential factors (independent variables) and effectiveness of AIS (dependent variable).

The regression analysis helps us understand how this factors influence effectiveness of AIS and to what extent. By analyzing the data and calculating regression coefficients, the researcher can determine the strength and direction of these relationships.

The results of the regression analysis can provide valuable insights for company looking to improve effectiveness of AIS. By understanding which factors have the greatest effect on effectiveness of

AIS. The company can make informed decisions about how to control factors that influence effectiveness of AIS to create reliable accounting information system.

Table 4.14 Multiple Linearity Regression Analysis

Model Summaryb					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.894a	0.799	0.79	0.411	1.803
a. Predictors: (Constant), Internal Control, Interpretability , Personal capability, Organizational Culture					
b. Dependent Variable: Effectiveness of AIS					

Source own survey, 2024

Overall, Table 4.11 revealed that all independent variables accounted for 79.9% of the contribution to effectiveness of AIS. Thus, 79.9% of the variation in effectiveness of AIS can be explained by Personal capability, Interpretability, Organizational Culture and Internal Control factors. The remaining 20.1% were other factors that limit effectiveness of AIS in Ethiopia's construction industry. (Abera, 2018)

R: Indicates the value of the multiple correlation coefficients between the predictors and the result, with a range from 0 to 1, a larger value indicating a larger correlation, and 1 representing an equation that completely predicts the observed value (Pedhazur, 1982). The model summary (R=0.894) indicated that the linear combination of the four independent variables (Personal capability, Interpretability, Organizational Culture and Internal Control) strongly predicted the dependent variable (effectiveness of AIS).

R Square (R^2): Indicates the proportion of variance that can be explained in the dependent variable by the linear combination of the independent variables. In other words, R^2 evaluates how much of the variability in the outcome is accounted for by the predictors. The values of R^2 also range from 0 to 1(Petrocelli et al., 2003). The linear combination of factor influence variables or predictors" explains 79.9% of the variance in effectiveness of AIS and the remaining 20.1% is explained by extraneous variables, which have not been included in this regression model. In other words, 79.9%

of the variation in effectiveness of AIS is explained by the changes in the above-mentioned independent variables while the rest 20.1% is explained by other factors.

Adjusted R Square (R^2): The adjusted R^2 gives some suggestion of how well the model generalizes and its value to be the same, or extremely close to the value of R^2. That means it adjusts the value of R^2 to more correctly represent the population under study(Petrocelli et al., 2003). The difference for the final model is small (the difference between R^2 and Adjusted R^2 is (0.799 – 0.790 = 0.009) which is about 0.9%. This reduction means that if the model were derived from the population rather than a sample it would account for approximately 0.9% less variance in the conclusion.

Durbin-Watson: The Durbin–Watson statistic expresses whether the supposition of independent errors is acceptable or not. As the conservative rule suggested, values less than 1 or greater than 3 should raise alarm bells(Taherdoost, 2017). So that the desired result is when the value is closer to 2, and for this data, the value is 1.803, which is so moderate to 2 that the assumption has almost certainly been met.

4.5.5 Coefficient Analysis

Table 4.15 Coefficient Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig
	B	Std. Error	Beta		
(Constant)	0.34	0.227		1.500	0.137
Personal capability	0.238	0.091	0.195	2.627	0.010
Interpretability	0.628	0.083	0.586	7.573	0.000
Organizational Culture	0.413	0.095	0.346	4.346	0.000
Internal Control	0.187	0.100	0.152	1.872	0.064
a. Dependent Variable: Effectiveness of AIS					

Source own survey 2024

Based on the multiple linear regression analysis as shown table 4.12, it was determined that all four independent or predictor factors were significant in explaining effectiveness of accounting information system (AIS). Or the variation in the dependent variable AIS was strongly influenced by all the independent variables (Personal capability, Interpretability, Organizational Culture and Internal Control).

The unstandardized beta coefficients for Personal capability, Interpretability, Organizational Culture and Internal Control were 0.238, 0.628, 0.413 and 0.187 respectively.

Based on these results, the regression equation that predicts the factor influencing on the effectiveness of AIS was:

$Yi = \beta 0 + \beta 1X1 + \beta 2\ X2 + \beta\ 3X3 + \beta\ 3X4 + E$

Where Y= effectiveness of AIS

X1= Personal capability

X2= Interpretability

X3= Organizational Culture

X4= Internal Control

$Y = 0.34O + 0.238\ X1 + 0.628\ X2 + 0.413\ X3 + 0.187X4$

The unstandardized beta coefficients of in Table 4.12 above indicated that Interpretability have the largest positive and significant effect on effectiveness of AIS ($\beta 2 = 0.628$, $t = 7.573$, $p < 0.05$). This means that when interpretability increased by one point, effectiveness of AIS will increase by 0.628. This suggests that the Ethiopian's construction industries need to focus on interpretability of AIS more so as to increase the effectiveness of AIS in the organization. Secondly, followed by the unstandardized beta coefficients of organizational culture with ($\beta 3 = 0.413$, $t = 4.346$, $p < 0.05$), which suggested that organizational culture has a positive and significant effect on effectiveness of AIS. This suggests that a unit rise in organizational culture will result a 0.413 growth in effectiveness of AIS. In the third place was personal capability with ($\beta 1 = 0.238$, $t = 2.627$, $p < 0.05$) was the positive and significant effect on effectiveness of AIS. It means that if one unit rises in personal capability; effectiveness of AIS will increased by 0.238.

In the fourth place was Internal Control with ($\beta 4 = 0.187$, $t = 1.872$, $p < 0.05$) was the fourth positive and significant value to have an effect on effectiveness of AIS. It means that one unit rise in training content was followed by 0.188 unit growths in effectiveness of AIS.

4.6 Hypothesis Testing

The researcher stated four hypotheses in this study that were obtained from independent variables or predictors (Personal capability, internal control, Organization culture, and Interpretability) that had significant associations with effectiveness of accounting information system. The researcher compared these assumptions to the p-values determined by the regression approach. As a result, the hypotheses that were tested are given below:

H1: Personal capability has positive and significant effect on effectiveness of accounting information system.

The unstandardized beta coefficient with ($\beta 1 = 0.238$, $p=0.010 < 0.05$) indicated that Personal capability have a positive and significant effect on effectiveness of accounting information system. Therefore the hypothesis is accepted.

H2: Interpretability has positive and significant effect on effectiveness of accounting information system.

The unstandardized beta coefficient with ($\beta 2 = 0.628$, $p=0.000 < 0.05$) indicated that Interpretability have a positive and significant effect on effectiveness of accounting information system. Therefore the hypothesis is accepted.

H3: Organization culture has positive and significant effect on effectiveness of accounting information system.

The unstandardized beta coefficient with ($\beta 3 = 0.413$, $p=0.000 < 0.05$) indicated that Organization culture have a positive and significant effect on effectiveness of accounting information system. Therefore the hypothesis is accepted.

H4: Internal control has positive and significant effect on effectiveness of accounting information system.

The unstandardized beta coefficient with ($\beta 4 = 0.187$, $p=0.064 < 0.05$) indicated that Internal control have a positive and insignificant effect on effectiveness of accounting information system. Therefore the hypothesis is not accepted.

Table 4.16 Summary of Hypothesis Testing

S/ no	Hypothesis	βi-value	P-value	Expected value	Finding result	Decision
1	Personal capability has positive and significant effect on effectiveness of accounting information system.	0.238	0.010	Positive	Positive	Accepted
2	Interpretability has positive and significant effect on effectiveness of accounting information system.	0.628	0.000	Positive	Positive	Accepted
3	Organization culture has positive and significant effect on effectiveness of accounting information system.	0.413	0.000	Positive	Positive	Accepted
4	Internal control has positive and significant effect on effectiveness of accounting information system.	0.187	0.064	Positive	Positive	Not Accepted

Source own survey 2024

CHAPTER FIVE

FINDING SUMMARY, CONCLUSION, AND RECOMMENDATION

These chapter discuses a summary of the study findings and results conclusions, and recommendations are drawn and future studies are indicated.

5.1Summary of Finding

The main goal of the study was to investigate Factors Influencing the effectiveness and Prospects for the Uses of Accounting Information Systems in Ethiopia's Construction Industry. Hence, this study has attempted to identify which Factors have the highest Influence on the effectiveness of AIS Ethiopia's Construction Industry.To undertake the study, 100 questionnaires were distributed, and 94 questionnaires have been duly filled and returned. Descriptive analysis revealed that most of the employees of Ethiopia's Construction Industry were male, and most of the respondents fall between the ages of 31 to 40, meaning the adult age group. Regarding the education level, most of the respondents with 60.6% are first diploma holders. And most of the respondents are experienced.

The descriptive statistic result revealed that the factors influence on effectiveness of AIS. This suggests that the dimensions of personal capability, interpretability, organizational culture and internal control all influence effectiveness of AIS. Among independent variables Interpretability was highly influence the effectiveness of AIS, followed by Organizational Culture. The correlation coefficients between effectiveness of AIS and personal capability, interpretability, organizational culture and internal control are all positive with coefficients of 0.238, 0.628, 0.413 and 0.187 respectively. This finding indicates that the dimension of personal capability, interpretability, organizational culture and internal control have a positive relationship with effectiveness of AIS.

The R-square value for the regression model is 79.9%. This means that the explanatory variables in this study, personal capability, interpretability, organizational culture and internal control, explain approximately 79.9% of the variation in the level of effectiveness of AIS. The 20.1% of the variation in effectiveness of AIS with influencing factors at Ethiopia's Construction Industry is explained by other variables not included in the model. However, this does not imply that all the factors have an equally significant effect on effectiveness of AIS levels. As a result of the multiple linear regression analysis, the influencing factors have affected effectiveness of AIS with varying degrees of effect, such that personal capability, interpretability, organizational culture and internal control lead to

increase in effectiveness of AIS of by 19.5%%, 58,6%,34.6 and 15.2% respectively. This study's hypothesis statement is accepted, and the results are significant at 5% level of precision.

5.2 Conclusion

The main objective of the study was to investigate Factors Influencing the Usefulness and Prospects for the Uses of Accounting Information Systems in Ethiopia's Construction Industry. The researcher came to the conclusion with personal capability, interpretability, organizational culture and internal control had an effect on effectiveness of AIS in the studied Ethiopia's Construction Industry. The study also attempts to address the research objectives given in the introductory section. The self-administered questionnaire utilized in the study includes 23 statements about the four independent variables and effectiveness of AIS. The data is analyzed using descriptive and inferential statistics in the Statistical Package for Social Science (SPSS) software version 27. The correlation analyze result shows a strong positive and significant relationship between the independent variables (i.e. personal capability, interpretability, organizational culture and internal control) and the dependent variable (i.e. effectiveness of AIS) in Ethiopia's Construction Industry.

The researcher has put all the multiple regression assumptions to the test. The explanatory variables in this study, the personal capability, interpretability, organizational culture and internal control; explain approximately 79.9% of the variation in the level of effectiveness of AIS.The value of R square is 0.799; shows that 79.9 % of the deviation of effectiveness of AIS in Ethiopia's Construction Industry was explained by the four influencing factors of can affect the effectiveness of AIS. The remaining 20.1% was caused by other variables, which are not included in this study.

All the indicated hypothesis statements of this research are accepted, and these results are significant at a 5% level of precision. As a result, it is feasible to conclude that factors such as personal capability, interpretability, organizational culture and internal control had a positive effect on the effectiveness of AIS of Ethiopia's Construction Industry.

5.3 Recommendation

In conclusion, the analysis highlights the importance of developing employees' knowledge and skills to use AIS effectively, as well as improving the organization's culture and control systems to enhance the effectiveness of AIS. Therefore, we recommend that Ethiopian's construction companies:

- Should provide training and development programs to enhance employees' knowledge and skills to use AIS effectively.
- Should to implement organizational culture changes that promote freedom to exercise AIS for personal development and encourage excellence.
- Should to install Automate and computerize financial transactions to improve the efficiency and accuracy of financial reporting.
- To implement robust internal controls to ensure the security of financial transactions.

By implementing these recommendations, Ethiopian construction companies can improve the efficiency and accuracy of their financial reporting, decision-making, and overall operations, ultimately leading to improved business performance and competitiveness

5.4 Recommendation for Future Research

This study also investigates the factors that have a significant effect on effectiveness of AIS at Ethiopian's construction companies. But this study may be limited in its generalizability of the findings to others industries in the country. So, future researchers should have to draw sample of respondents from other industries in the country for the sake generalizing the results of the study.

And also the study's variables were not complete. Other variables not included in this study could be incorporated into future studies. Given the foregoing, the researcher proposes that findings be made available for the study to be reproduced in other industries.

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Appendixes

Appendix

Introduction

Dear Sir/… …….

All parties involved in a construction industry, including contractors, have a responsibility to improve the accounting information system's adoption, efficiency, and other criteria. This survey's primary goal is to find out how well-informed construction contractors are regarding the variables that influence project adoption, efficiency, and quality during the cpnstruction phase. The questionnaire is required to be filled with exact relevant facts as much as possible. It is necessary to complete out the questionnaire with as many precise and pertinent details as you can. After all questionnaires are collected and analyzed, interested participants of this study will be given feedback on the overall research results.

Kindly cross the relevant answer.

1. Year of company establishment

a) < 5 yrs b) 6-10 yrs

c) 11-15 yrs d) >15 yrs

2. Gender

a) Male b) Female

3. Age group of the respondent

a) 20-30 b) 31-40

c) 41-50 d) Above 50

4. Marital status

a) Single b) Married c) Divorced

5. What kinds of accounting method your organization use to record and analyze financial data?

a) Peachtree accounting b) Microsoft excel c) IBEX d) IFMIS

6. What is your highest level of education?

a) Diploma b) Bachelor c) Postgraduate d) Other Advanced Degree (Ph.D., etc.)

7. Has your organization applied accounting information system?

a) Yes b) No c) Can't say

8. Does your organization have improvement plan to uses AIS?

a) No b) Such a plan is under consideration

c) It has been implemented recently d) It has been implemented for a long time

9. How long have you worked at the organization?

a) <5 yrs b) 6-10 yrs c) 10-15 yrs d) >15 yrs

10. What do you think of your level of understanding about AIS in your organization?

a) Very high b) high c) Medium d) low e) very low

11. Where do you think AIS is more applied?

a) budgeting and expenses b) planning c) decision making d) all

12. Dose accounting knowledge a critical component in the implementation of an accounting information system in your organization?

a) Yes b) No

13. In a managerial role, do you support the proper implementation of an accounting information system as part of the enterprise?

a) Yes b) No

14. How will you define the effectiveness of AIS in your organization?

a) Very high b) high c) Medium d) low e) very low

15. Does a fully functional and effective accounting information system reduce inefficiency and increase performance?

a) Very high b) high c) Medium d) low e) very low

16. What would make the AIS work effectively in your organization?

a) the presence of well trained professionals
b) having enough material to do the work
c) up to date software presence
d) all

17. What causes the system ineffective? Or what lead to ineffectiveness of the system?

a) lack of trained professionals

b) lack of well-placed system

c) lack of up to date software and equipment

d) All

18. Does the available accounting information system require updating to meet goals and objectives?

a) Yes it requires full update

b) Yes it requires some update

c) No update requirement

19. Is your organization accounting department structured in such a way that it can produce relevant information?

a) Yes, absolutely b) I am not sure

c) Yes, to some extent d) No, I don't think so

20. Is management concerned with training and continuing education programs for employees?

a) Yes b) No

21. Do managers in your organization rely on the accounting information for their decision?

a) Yes, always b) Yes, sometimes

c) Never d) I don't know

22. How do you evaluate the management's commitment to accommodate the accounting information in their decision making process?

a) Excellent b) Very Good c) Good d) Fair e) Weak

23. Is your accounting information systems are computerized/ automated?

a) Yes b) Yes, partially c) No, I don't think so d) No, they are not

Part 2

Note- 1 strongly disagree 2 disagree, 3 Normal, 4 Agree, 5 strongly agree

s/no	Personal capability	1	2	3	4	5
1	I have high level of understanding about AIS in my organization.					
2	I have enough knowledge and skill to use AIS in my organization					
3	Information provided by our AIS meets and fits our needs.					
4	I can easily store information and retrieve information from our AIS.					
Interpretability						
5	Managers provide clear and concise information about the organization's performance, strategy, and resource allocation through AIS.					
6	My organization uses AIS to give Clear and interpretable financial information and facilitates effective communication with stakeholders.					
7	Our AIS provide sufficient information related to my tasks.					
8	Our AIS provide me information in appropriate format.					
Organizational Culture						
9	In my organization, I freely exercise AIS to develop my knowledge and skill.					
10	Our organization encourages employees to being excellence with AIS.					
11	My organization provides training about AIS to develop my knowledge and skill.					
12	My Organization management's committed to accommodate the AIS in their decision making process.					
Internal Control						

13	Our AIS is fully automated or computerized					
14	In our organization ensures financial transaction security					
15	Managers of the organization rely on AIS for their decision.					
16	The inputs of AIS are presented in an easy and clear manner					

no	Effectiveness of AIS	1	2	3	4	5
1	Our AIS provides me the necessary information in a timely manner.					
2	The information from our AIS improves the quality of my work.					
3	Our AIS help to generate required information quickly					
4	Information provided by our AIS is accurate, free of errors.					
5	Information produced by our AIS reflects the real condition.					
6	Our AIS provides correct data to prepare financial statement					
7	Information provided by our AIS is easy to read and understand.					

THANKS FOR YOUR TIME!!!