#### ISSN: 2197-5523 (online)

# The Impact Of Using Computerized Accounting Information Systems In Quality Of Accounting Information; An Analytical Study For Construction Sector In Krg

Ayar Shirwan Hama Kareen<sup>1</sup>, Ass.pro. Dr Vian Sulaiman Hama saeed<sup>2</sup>

<sup>1</sup>Department of Accounting, College of Administrative and Economic, University of Sulamani, Kurdistan Region, Iraq.

<sup>2</sup>Department of Accounting, Faculty of Humanities and social Science, Koya University, Kurdistan Region, Iraq.

#### Abstract

This academic investigation attempts to ground the value of accounting information of construction companies. Even though organizations in the current era are confronted with technological advancements, but still no previous study in construction sector has investigated this study subject matter through the lens of CAIS, in KRG.

To obtain objective of the study, self-administrated questionnaires on five-point Likert scale was used to collect data, judgment sampling was applied, and the sample size was 140. Independent variables of the study represent components of CAIS and organized as structured characteristic, while dependent variables represent qualitative characteristic of accounting information. Empirically the statistical SPSS software has been used to analysis the identified data and concluded result indicate features of CAIS significantly in a statistical level promote quality of accounting information of construction sector firms.

Also, this research has reached to a number of recommendations but the most important of which is the need for using CAIS by KRG companies working in construction sectors in order to create value for the accounting information for intended users and related parties.

Keywords; CAIS, Information system, Information and Accounting information.

# 1. Introduction

Accounting as one of the information systems considered to be a unique tool that provides detailed information, financial and non-financial for the external and internal users. Lately, dependence on

information technology has crucially increased, thus rely on computer and electronic systems to provide statements and flow information increased as well. Computer technologies enable computerized accounting systems to capture and process firms financial data (Laudon & Laudon, 2011). Accounting events and transforms data in measurable information as the biggest consequences of information technology have resulted to develop of CAIS. Under CAIS record, transfer, summarize of accounting transactions have been translated into computer systems (Abdelraheem, et al 2021).

Developments of information technology contribute to strength accounting systems and reduce risks (Jasim & Raewf 2020); On the other hand information technology has the biggest ability on financial transaction (Ghasemi, et al 2011); additionally, under computer and network systems preparation and presentation of financial statements dramatically have shortened in time, and allow accountants to create reports quickly for decision makers. Currently in the era of using technology and numerous data managing, the leading role of computerized systems have brought much attention and circulating in the mind and plan of responsible individuals and organized agencies.

Major problem and concerns in this paper revolves around the deficiencies of manual or traditional systems and resulted to low quality of accounting information, thus in this investigation role of CAIS on accounting information quality at construction company have explored to achieve potential benefits of electronic based technology on accounting procedures and thereafter quality of accounting information. Accounting information in competitive business environment considered as a business resource (Romeny, et al 2021), as this perception makes necessary and assist as a vital starting point to explore information quality and accounting field of information system. Most developed computerized accounting software supports information inflows and dimension of computerized systems impacts dimension of accounting information quality (Abdelraheem, et al 2021); CAIS provide entities of different services to overcome problems of quality information. Finally, overall objective of study is to explain the impact of CAIS use as a commitment measures related to the quality of accounting information.

#### 1.1 Problem Statement

Recognizing valuable ways to overcome issues of not follow high standards of accounting information quality represent major answer to the research problem. In other words, it is necessary for organizations to look for operative techniques specially identifying effective approaches to produce quality of accounting information with the specific qualitative characteristic. Circumstances that

auditors and those charged with governance may not maintain and produce appropriate accounting information influence responsible persons plan to look after on mechanisms beyond human ability to manipulate misrepresentation in financial statements.

The core problem in this study needs to be showed represent shortages or deficiencies of manual accounting systems that have been employed by enterprises to carryout accounting activities. The contributing factor in the given circumstances looks to be disabilities of design information systems to set procedures to produce desired accounting information for the end users.

# 1.2 Significance of the Study

The study certainly contributes to construct a body of knowledge within infrastructural projects in KRG to determine qualitative characteristic of accounting information, based on the findings;

- 1- Reviewed scholars of this paper in general provide evidence and contribute as body of knowledge that would certainly extent current knowledge in the area on how CAIS is compared to other information systems increase efficiency of techniques that are publicly used to produce high quality of financial statements with the low level of material misstatements.
- 2- Paper performs whether developments of information technology enhance procedures that turns to higher quality of accounting information.

# 1.3 Objective of the Study

The prime objective of this paper is to address the usefulness of CAIS and its probable roles relating to quality of accounting information, with this regard study aims to evaluate;

- 1- Impacts related to quality of accounting information representation by CAIS, and the fact that misstatements due to unintentional errors has higher probability to be detected, may direct investigation to carefully organize attempts to follow misstatements.
- 2- Relationship between the information technology and quality of accounting information at the construction industry in KRG.
- 3- Provide methodology that gives evidence and a combination of qualitative and quantitative techniques of CAIS for investing accounting information quality.

#### 2. Theoretical framework and Literature Review

#### 2.1 Literature Review

In this section, several related empirical literatures related to the role of CAIS on accounting information quality have been reviewed. However, we provide a general review on how CAIS influences

accounting information to be gained a clear understand on the past studies in order to construct our study variables and related frameworks.

Sori (2009) carried out research in Kuala Lumpur from construction sector under title of "Accounting Information Systems (AIS) and Knowledge Management: A Case Study", carried out a research for the Aim of role & contribution of automated AIS in construction sector to the knowledge and strategic management. Current trend of knowledge management as important part of valuable assets needs to be explained since mostly embroiled in a person, taught and learned by a person, used or misused by a person. Thus, in current era intellectual asset as a problem need to be researched by distinctive industries to remain powerfully and attain competitive advantages.

Paper considers perspectives of people working in company's operation to know how the automated accounting systems affect knowledge management. Responds from participants and level managers explain that accounting software produces monthly projects income statement, balance sheets and statement of changes in financial position for the strategic and tactical managers to plan, control and make decision on the resource allocation. Moreover, explains the accounting software enhance organizations accounting function and in a positive trend add value to the information. On the other hand, generating financial statements accelerates and gets control of human impairment in the data processing. The accounting software improves management of resources and process of monitoring, control and even prediction of the businesses for better future.

Finally, study recommends fully automated data processing, have advantages to the enterprises, also suggest systems should be upgraded to computerize the pre-tendering and post-tendering of projects to enable AIS integration.

Ghasemi, et al (2011) from Iran carried out an empirical exploration on impact of IT on abilities of companies to develop and use computerized systems to track and record financial transactions. The research title is "the impact of information technology on modern accounting systems", and the objective of paper represents impacts of information technology on accounting systems. Concluded results found; IT networks and computerized systems assist accountants in terms of time to prepare and present financial information to management, In addition result states computerized systems give opportunity to companies for creating individual reports in a short period of time and straightforwardly for responsible managers. Nevertheless, benefits of computerized systems greatly increase functionality, improve accuracy, faster processing and better external reporting.

Wisna (2013) carried out specific research under name of "The Effect of Information Technology on the Quality of Accounting Information system and its impact on the Quality of Accounting Information", for the aim shows the effect of information technology (functionality, ease of use and compatibility of technology) on the quality of accounting information system (reliability, timeliness, flexibility, usefulness and sophistication) and its impact on the specific measures of information quality (relevance, accuracy and completeness) in the university, institutes and polytechnics in Indonesia.

higher competition in economic globalization and new business environment that depends on information as a basis for development of products and services shows as a problem that push competitive companies to adapt information technology. Additionally, study concludes IT improves quality of accounting information systems, there by quality of accounting information can be better.

Specific research of **Sari and Purwanegara (2016)** under title "the effect of quality accounting information system in Indonesian Government", for the aim of explaining factors affecting quality of accounting information, researchers of the research by using qualitative data collection approach shows distinctive organizational factors as influential tools affects quality of accounting information system and its implications on the quality of accounting information in Indonesian Government. Result of paper stated organizational culture; implementation intern accounting information system; information technology and electronic commerce have a significant impact on the quality of accounting information systems. Further they explain better quality of AIS has a significant impact on quality of accounting information.

Herath & Albarqi (2017) conducted a literature review type of paper entitled "financial reporting quality: A literature review". The aim of the paper is to review existing articles and papers that concerned about influences and measures of the quality of financial reporting, Published papers that have been reviewed from the period 2009 to 2015 and totally 24 research papers have been reviewed. Major problems stand behind paper work to be done includes various facts surrounding quality of financial reporting such as, economic crises, growth in disclosure requirements and subjects of convergence and Harmonization of accounting quality.

Concluded result identifies the following elements as a measure of good financial reporting; relevancy, reliability, comparability, understandability, timeliness and faithful representation. The same research through reviewing many articles from top journals highlighted common influences of financial reporting quality, among them information technology and accounting information systems

explained to be essential in producing relevant and reliable information.

Research, by **Thoomkuzhy, 2018** in India under the title of "An evaluation of the compliance of double entry system and problems in computerized systems", carried out with the objective examine the existing system of financial reporting system in terms of compliance of double entry system of accounting and any inadequacies emerged due to application of the computerized accounting system. Mainly the compliance to the double entry system in the employed software information have been assessed in terms of four factors and includes each of creation and classification of accounts, compliance of accounting cycle, compliance of accounting process and compliance of carried forward of closing balances.

Concluded result is found that accounting principles are properly compiled and there are many shortcomings in the application of accounting software, additionally big issues are related to the implementation of accounting software represents provision for editing the figure even after the year-end closing and finalizing of the accounts.

Jasim and Raewf (2020), from Iraq- Kurdistan region for aim to explain impact of the information technology on accounting transaction transparency and safety, carried out an investigation entitled "impact of the information technology on the accounting system". Problem of the research is summarized into two major parts, first, issues of effectiveness and efficiency of accounting transaction and then security aspects related to the journalize accounting transaction.

With this regard result of the paper shows strength of AIS and manipulate accounting errors strongly linked with the development of information technology in the field of accounting, further they explain information technology positively contributed to the enhancement of corporate accounting systems, improved business performance and assist the exist of cloud accounting.

Despite these entire positive points of IT implications still there are major drawbacks that represent not having a standard technology used in all systems. Finally, they highly recommend companies should allocate portion of their profits in enhancing software of accounting systems.

Quite recent publication by **Abdelrahem, et al (2021)** on banking sector in Sudan under title of "the effect of information technology on the quality of accounting information", carried out for the aim to attain the effect of using information technology on the quality of accounting information by explaining the dimension of information technology and impacts on the characteristic of information quality. The problem of study revolves around what is the impact of Information technology on accounting information quality

Analysis of the qualitative data after collection of 104 questionnaires from respondents showed dimensions of information technology related to accounting practices such as (collecting, processing, storing, sending data and information) directly affects measures of accounting information quality (relevance, reliability, understandability, consistency and comparability).

A study entitled "accounting software in computerized business environment and quality of corporate reporting" by **Olufemi, et al (2021)**, and its major objective to find out the effect of accounting software on quality of corporate reporting. Cross sectional data approach and reliance on structure questionnaire represent ultimate method of study data collection. And major problem of the study includes low quality of financial reports that contains inaccurate and misleading information that may cause in losses and reduced confidence in corporate governance mechanism.

Concluded result explains accounting software has positive effect at a significant level on the reliability of corporate reporting and also results of positive effect on accuracy of corporate reporting, in addition the study shows accounting software are crucial in gathering and processing data and information to produce quality corporate reports. Finally, the study recommends the more friendly accounting software's should be used by corporate since it maintains unique environment for businesses to manage financial reporting procedures and processing.

In summary, review of researches reveals information technology and computerized accounting systems in many steps and from many aspects influence quality of accounting information. Linkage of accounting information to the CAIS in positive trend implicates qualitative characteristic of accounting information.

#### 2.2 Theoretical Framework

# 2.2.1 Accounting Information System

Accounting information system as other accounting subjects covered many topics in the accounting courses; recent publication of the Sarbanes-Oxley Act (SOX) of 2002 impacts what should be covered in AIS course. Even though this legislation doesn't explain the whole content of AIS course, but it does show major significant areas and established standards for public companies management and of their auditors.

Every business to meet their objectives very vastly depends on information, thus information considered to be as a business resource like other assets; raw material, plants, capital and equipment (Hall, 2011). Flow of information on regular base meet the internal needs of decision makers and other needs and wants of end

users. Information is quite different of data, data regarded to be facts that are collected, recorded, stored and processed by an information system. Whilst, information is data that have been organized and processed to provide meaning that can improve the decision making process (Romney, et al 2021). Regarding to the quality of information it must be evaluated in relation to the purposes to be served; usually decision maker judges what kind of information is useful. Generally there isn't optimal information for the whole users, since there are factors that affects judges is made about the information, information should provide knowledge of many users according to the user-specific factors and primarily decision specific qualities, In fact artificially constructed systems particularly of computers and programs impacts in a positive trend the way of producing information in a sequence manner with different qualification.

Nevertheless, A Common perception of system is generating information; In fact business system is an artificial system includes many interrelated components. Term of system defined as a "comprehensive framework for a set of parts and interrelated elements related to the surrounding environment that interact with each other to achieve specific goals that benefit the beneficiary", (AL-Dalahma, 2008). Also, system is "a set of detailed methods, procedures and routines that carry out specific activities, perform a study, achieve goals or objectives or solve one or more problems" (Romney, et al 2012). By Hall, (2011) system is a "group of two or more interrelated components or sub systems that serve a common purpose". In broader meaning each specific system must have multiple components and to perform well, components of the system should functions independently of the others to assist businesses achieve common goals, thus it can be concluded while particular component does not serve to obtain common goals considered to be not part of the combined system. Thus, through system significant interaction and association keep secure among organization various subunits (Mele, et al 2010).

System in accounting profession are vastly connected to IT and computerized software packages, explanation of information technology influences accountants work and way we do our accounting and business work. Modern business environment could replace our understanding about accounting systems, system as a processing procedure could be automated, and we properly noticed use of AIS as systems collect, store and process data and accounting events to final users. In modern era and well organized business environments all systems mostly referred to computerized information systems, that have bring startling changes to the accounting profession. Information system means an operation and analysis process to provide managers with the necessary information

to assist them in carrying out business and market decision within the organization, provided that this information is appropriate in terms quality, timing and cost.

Accounting Information System regarded to be a system when it is viewed independently, and is called subsystem if it is viewed in relation to the larger system of which it is a part (Romney, et al 2021), The importance of AIS seem to have influential to the enterprises from perspective of American Accounting Association (AAA), AIS is part of management information system that collect, summarize and process information to the decision makers. Also, to the business owner and managers CIS play a key role to make relevant, timely and accurate decisions (el-Dalabeeh & Alshbiel 2012). AIS viewed to be unique for better management and better internal control implementation (Nicolaou, 2000). In fact the establishment of AIS extends to improve decision making process, quality of accounting system, performance assessment, performance evaluation, internal control and facilitating enterprise transaction (Sajady, et al 2012), Among other information systems, the AIS more generous for providing information to the user from inside and outsides (Mihalache, 2011). Despite that, AIS improves quality of financial statements and there after quality of accounting information, additionally it considers to be a good instrument that improves organizational ability to compete in competitive business environment by adding value to the businesses (Fitriati & Mulyani 2015).

# 2.2.2 Computerized Accounting Information Systems

Benefits of technology adaption and related risks of non-application thoroughly examined by academicians as factors of business failure (Edison, et al 2012), and further claimed non-adaption of technology results of negative consequences to the businesses due to forfeit the inherent advantages of CAS use. Benefits of implementing CAS are not just gained by the businesses adapt computerized systems, there are other benefits of the systems to the outside parties (Kapp & Heslop 2011), because computerized systems provide accurate information with the required level of efficiency, share of information to the larger users and better compliance with the government regulations. For the economic units application of computerized systems impacts management of financial information (Radu & Marius 2012), enhance efficiency of external auditors work and better controlling of financial reporting (Poonpool and Chanthinok 2011), Despite great impacts on cash management (Radu & Marius 2012). However, considered as a developed tool in hand of managers to complete businesses practices effectively by providing information for making different decisions in connection with planning, control, performance evaluation and other decisions (Nayef, et al 2011).

Accounting literature proposed specific implications of CAIS on accountancy and more specifically of AIS, when distinctive accounting software packages put in practice by businesses the features of accounting information more prone to change in wide scopes. Generally application of new technology in great extent affects accounting, auditing and financing (Ismail, 2017), CAIS as major part of IT developments enable businesses to speed up and enhance of their capacity of accounting systems (Duxbury, et al 2002).

Usually under computerized systems collect and recording, transfers and analyzing of different types of data can be automated, and improvements of data processing in a quick and more accurate are obtained. Concerning the output of accounting systems under electronic systems its more than easy handle output of the data conveniently in terms of store and management.

Moreover, computerized systems through electronic components assist economic units to construct a single source of data and information, this makes easy deal with them by authorized personals by which guarantee the need and wants and users whether they are internal or externals. Thus, source of data and information characterized by IT as a virtual container enhance storing of data, ease of access and return (Al-Qudah, 2011). Also, creating master file as a centralized collection with logical connection between them facilitate store, add, delete, edit and retrieve of the data (Romney & Steinbart, 2012).

practically several benefits gains in case application of CAIS and drive improvements to the accounting systems, Daniel (2018) shows computerized systems help to eliminate spreadsheets, avoid manual accounting documents and accounting books, as a result of this real time analysis of the accounting data are deduced and there by improve the reporting across various accounting goals by real time reporting.

Accounting in practice would be adequate and more efficient, while computerized systems put in practice, CAIS involve technology and computers in the process of accosting function, which overcome the cons of manual accounting systems. CAIS are those that rely on information technology tools to perform the functions of recording, storing, and retrieving accounting data to help in making decisions (Alhosban & Almagableh 2014). As mentioned by Ghasemi, et al (2011) advantages linked to the CAIS includes; increased functionality, improved accuracy, faster processing and better external reporting.

Nature of accounting data and accounting practices in terms of vast and complexity, to large extent extract beneficial features of computerized systems. Thus, performance productivity and better management of accounting data obtained (Azleen, et al 2007). However speed of carrying out routine transactions, time and cost saving, quick analysis, regulatory compliance, accuracy and on time decision making for management (Mbilla & Nyeadia 2020).

# 2.2.3 Accounting Information

Accounting information defined as "all quantitative and non-quantitative information related to the economic events that are processed and reported by accounting information systems in financial statements submitted to external, parties in operating plans and reports used internally", (Alsaqa, 2011). Based on this definition clearly we conclude accounting information represent output of operational operations that take place on the accounting data by internal and external parties that are related to the economic unit to achieve the benefit of its use. Usually the need of accounting information accelerated in case of information shortage and uncertainty conditions connected to the economic events. Thus, accounting information to be useful at least should contain the following conditions; 1) it should decrease level of uncertainty by the decision makers and 2) increase knowledge of decision makers.

Economic units and management for substantive cases require real information, pertinent, relevant and available in a timely manner (Radu, 2011). In practice accounting information is not always available, and users of information whether they are internal or external they have to define the kind of accounting information facilitate their goals, and understand conceptual characteristics of accounting information for intended use.

# 2.2.4 Quality of Accounting Information

Accounting information regarded to be proper if the information produced by relevant and reliable systems and related characteristics influence the behavior of the decision makers (Porter & Norton, 2011), usually the user has criteria that define the quality of the accounting information to determine the quality of decision by providing additional assurance of sustainability, timeliness, accuracy and completeness. As mentioned by Baltza, (2012); Binh, et al (2020), accuracy, completeness, consistency and timeliness are major requirements of accounting information. Yuniars, et al (2021) states human resources competency, accounting information system and internal control promote quality of information in government sector. The quality of accounting information refers to the efficiency and effectiveness of accounting information and should serve the top management and help it achieve maximum productivity (Keiso, et al 2010).

On other hand Financial Accounting Standard Board (FASB) explains qualitative characteristics of accounting information by Statement of Financial Accounting Concept NO, 2. In this statement specific characteristic of good accounting information must relies to the

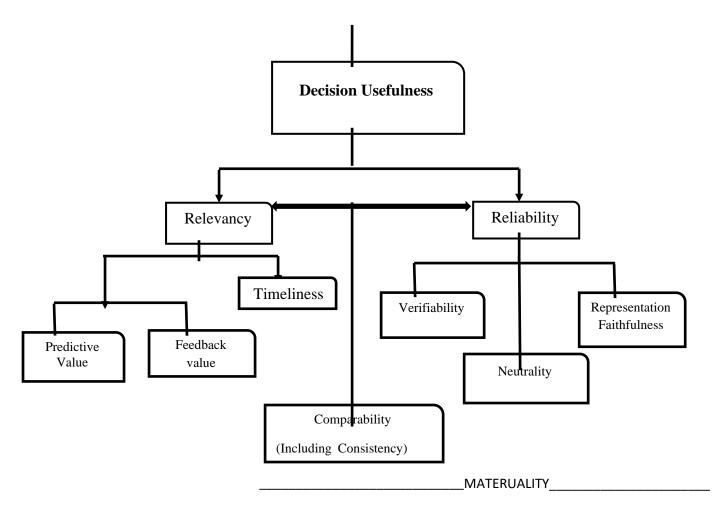
needs of particular users for select and evaluate accounting alternatives. Also, in this framework the particular characteristic of information hierarchy based on usefulness and importance for decision makers have been settled, as described in the statement without usefulness the information worthless to set against its costs, the following figure (2-3) explains the hierarchy of quality

FIGURE 2-2 A Hierarchies of Accounting Qualities

Decision makers and their characteristics

Benefits > Costs

Understandability



Source; FASB, Statement of Financial Accounting Concepts NO.2

#### 2.2.5 Factors Affecting quality of Accounting Information

Integrated association have been notice between quality of AIS and quality of accounting information, value of accounting information in a best way connected with the quality of AIS, AIS considered to be an instrument create accounting information, the usefulness of AIS assessed by quality of its information produced (Narasimhan and Kim 2001). Mainly navigating into accounting publication concludes quality of accounting information greatly connected to the quality of the system they produce. For instance each of Al- Hiyari, et al (2013), Susanto, (2015) and Komala, (2012) explained the AIS is suitable if produce useful accounting information for the internal and external users.

Moreover, accounting packages to be implemented sound objectively human resource skills certainly help through many dimensions (Doll, 1995), As investigated by Machmuddah, et al (2020) human resources competency has impact on the quality of financial statements. Thus, training users of AIS make implement systems more correct and successful (Choe, 1996). Accounting systems as part of main information systems are interrelated with one another and work conveniently to convert financial data in to financial information that

would be needed by internal and external users (Susanto, 2016 and Hertati, et al 2019).

Better concentrating of accounting information quality requires explore consequence factors that influence data quality with identifying to what extent those factors have play a role on AIS data quality.

On the other hand, Xu (2015) explains top management commitment, nature of the information systems and input controls are most frequent factors that affect accounting information quality. The Role of internal control system, accounting systems on the quality of financial statements explained by moderating role of organizational commitments (Bangsa, 2018), result explained positive impacts at a significant level between quality of financial statements and each of internal control and accounting sub-systems. But, organizational commitments didn't have any influence on internal control and accounting systems as a moderator factor.

Even though, AIS as main and big part of any information system, but in a great extent role of information system prominent in reliability of information, good information system place more effect on accounting information systems. For instance, Hertati, (2015) empirically explained unique information system is a prime factor for better application of AIS. In addition many other factors in literature mentioned as a determinant of successful implementation of accounting systems particularly individual capabilities of accounting information system in engineering, user involvement, training, education level, steering committee, department location and organization size.

# 3 Research Methodology

Aim of this paper was obtained through qualitative approach method after collection required data via questionnaire source; 5-point scale design of the data instrument was developed and considered to be unique. Data collected through personal distribution of questionnaire and electronic questionnaire distribution to the selected sample in order to ascertain their perception on the effectiveness of accounting computerized systems on quality of accounting information.

#### 3.1 Research Instrumentation

Employed questionnaire was constructed based on review of prior published literature and personal experience of the researcher. The employed questionnaire before their distribution over selected sample have been reviewed by several doctorate academic staff as arbitrators from different universities, to ensure the reliability of collected data, comments and their suggestions were carefully considered before usage of final copy. The employed questionnaires of the study was distributed through 2 channels, as follows: online

version distribution to professionals across Kurdistan regional cities and hard copies distribution in the Sulaimani districts over government agencies and enterprises involved in construction sector projects.

# 3.2 Population and Sample source

The final version of questionnaire sent to the identified respondents which includes (Auditors and accountants, public accountants (CPA), financial and account managers) which have certain experience in accounting computerized systems of construction nature firms to provide a template for all Kurdistan region, ultimately the focused population includes respondent's works within Kurdistan region and totally 140 answers have been collected to administrate the research data.

### 3.3 Hypothesis Development

As discussed in the theoretical section part, the specific features of CAIS have been perceived as modern techniques for the businesses to produce accounting information with the designated qualitative characteristic, thus following interested hypothesis with this regard viewed to be appropriate;

**H0**; there isn't an impact of CAIS on quality of accounting information. **H1**; there is an impact of CAIS on quality of accounting information.

#### 3.4 Model of the Study

Objective of the study needs develop a specific model to identify the elements that lead to high quality of construction firms accounting information. In this paper major components of CAIS widely viewed as unique techniques and represented as structured characteristic to produce high quality of accounting information. To describe how subject matter of the study (quality of accounting information) is related to CAIS and error term the following joining is depicted and the model of the regression as follows;

Model; QAI=  $\beta$ 0+ $\beta$ 1 CAIS+  $E_{it}$ 

Where;

QAI= Quality of accounting information

CAIS= computerized accounting information system

 $\beta 0$  = constant; **B** = beta coefficient and E<sub>it</sub> = error term

#### 4 **Result Interpretation**

In this section, we present (1) respondents background; (2) Descriptive statistics of variables; (3) Pearson's correlation analysis; and (4) Multiple regression analysis.

### 4.1 Respondents Background

**Table (1) Descriptive of Respondents** 

	Frequency	Percentage
Characteristic o	of Respondents organization	
Public Sector	79	56.4
Private Sector	58	41.4
Employer	3	2.1
Lev	vel of Education	
Diploma	9	6.4
Bachelor	76	54.3
Master	48	34.3
PHD	7	5.0
Characte	eristic of Respondents	
Accountant or Auditor	65	46.6
public Accountant (CPA)	12	8.6
Finance & Accounting manager	43	30.7
Accounts Organizer	20	14.3
Yea	ar of Experience	
1-5	8	5.7
6-10	40	28.6
11-15	47	33.6
16-20	31	22.1
More than 20 years	14	10.0

More than half of the respondents work in public sector which represents of 56.4%. Then, those individuals participated in the survey and belonged to the private sector represent 41.4% of total respondents, and finally just 2.1% are employer. And more than half of respondents with the rate of 54.3% have bachelor certificate, master certificate with the rate of 34.3% are participated in the survey. Each of the participants with the diploma and PHD degree represent 6.4% and 5% respectively.

Although, approximately have of the participants are between in accountant or auditor of 46.4%. While those respondents participated in the survey as finance and accountant manager was of 30.7 percent. Accounts organizer and public accountant represents just; 14.3% and 8.6% of total respondents, respectively. Majority of respondents have 11 to 15 years of experience with the rate of 33.6%. After that, 28.6% of respondents have the practical experience "between" 6 to 10 years. On the other hand, those participants their experience fall between 16 to 20 years equal to 22.1 percent of total numbers, and just 10 percent of participants were above 20 years of

experience. Finally, the lowest rate of experience belongs to the group of 1 to 5 years of experience.

# 4.2 Descriptive Analysis

The first main objective of the paper was to identify importance of CAIS on quality of accounting information. Hence, collected data on questionnaire items was analyzed and used to answering the related research questions on first main objective. the mean value of respondent's opinion toward each statement fairly positive and greater than 3 without any exception, this concludes features of CAIS in a great extent assist to promote quality of accounting information and thereby satisfy distinctive end users. Concluded analysis from respondents in table (2) shows mean value of all measurement items greater than 3, this certainly proves positive opinion toward implementation of CAIS connected with improving quality of accounting information.

Descriptive analysis result shows respondents result and rank quality criteria according to the respondent's perspective, First in ranking with mean of 4.49 was "objectively process data by CAIS and provide unbiased or impartial information to the intended users". 2<sup>nd</sup> item has mean of 4.37 and identified by respondents which includes "automated data collection speed up the process to generate financial statements and overcome weaknesses with this regard". After that, features of CAIS that "improve accessibility of accounting information whatever needed", has mean of 4.35 and 3<sup>rd</sup> in ranking among all measurements of quality criteria.

Nevertheless, "improve storing, retrieving, transmitting and process of data by CAIS and make easy to apply different tasks" has mean of 4.33, and rank 4<sup>th</sup> according to the descriptive analysis result. Next, average mean of item 39 equal to 4.32 and rank fifth according its importance which is related to "correct and reliable information", finally, each of other identified measures to asses importance of CAIS on quality of accounting information have distinctive mean and related importance, but the final and overall result shows positive association at a significant level between features of CAIS and quality of accounting information.

In literature there are great publications shows positive at significant level implications of CAIS on quality of accounting information and businesses financial reporting. Tilahum (2019) and Wilkinson (2007) found accounting software is effective in collecting and processing data and relevant information to produce high quality corporate reports. Furthermore, CAIS enhance functionality of accounting cycle through increasing speed and accuracy of process and preparing high quality financial report. In addition the use of computerized system enables organizations better performance and reliable accounting

information Ganyam and Ivungu (2019) and Gaynor, et al (2016). Other findings such as; Abdul Ghanis (2018) explains information technology assist to raise the efficiency of accounting information by preparing financial statements and affects the specific characteristic of accounting information.

Organizations and business entities in recent years encounter the benefits of CAIS, thus mostly employ different computer systems to store, capture, process and publish financial information to increase the reliability and quality of financial information (AI-Hanini, 2011; Handoko, et al 2019). Advantages of computerized systems results of access to the information, which reflects on the main characteristic of the information that involves reliability, accessibility, accuracy, appropriateness and timely reducing probability of the falsification of financial information (Belfo & Trigo, 2013).

Benefits of computerized systems and information technology are not just directly improve quality of accounting information, through positive implications impacts accounting systems and there by improve quality of accounting information, as supported by (Lim, 2013). Additionally make accounting looks better through enhance speed and accurateness of computations, as well as enhance its flexibility to change and safety storage of information. Predominately, technology advancements greatly help accounting systems, and more crucially this advancement includes computerized accounting information systems. Contribution of CAIS are great to the strength of AIS ( Jasim & Raewf 2020; Ghasemi, et al 2011and Salehi and Abdipour, 2011).

Table (2) Results of the Descriptive Analysis of the Dependent Variable (Quality of Accounting Information)

Construct Variable	Mean	NO	Mean	Std. Error	Rank
Variable					
Quality of Accounting Information	0.63	Item 1	4.26	.068	6
		Item 2	4.35	.055	3
		Item 3	4.24	.079	7
		Item 4	4.32	.052	5
		Item 5	4.33	.047	4
		Item 6	4.49	.073	1
		Item 7	4.37	.074	2
		Item 8	4.21	.069	8
		Item 9	4.20	.067	9
		Item 10	4.21	.080	8
		ltem 11	4.17	.061	11
		Item 12	4.12	.065	12
		Item 13	4.19	.059	10

#### 4.3 Multiple Regression Analysis

Table (3) shows coefficient determination of 0.752, which means one point increase of employing CAIS the quality of accounting information will began to rise by 0.752, with the assumption that other factors remained unchanged. And, the intercept of the estimated regression line equal to (-8.347), this statistically concludes relationship between CAIS and quality of accounting information is linear. In other words we can state a significant portion of variability in of quality of information over range of application CAIS, thus model of this construct variable like this;

# Quality Accounting Information = - 8.347+ 0.752+Error

Also, R square of this group variable has a value of 0.629 as can be noticed in the same table, this means 62.9% of the variation in the quality of accounting information is explained by the variation in the CAIS, the remained 37.1% is unexplained due to error. Nevertheless, hypothesis of paper which is constructed to discover the relationship between CAIS and quality of accounting information has been tested, ANOVA test summarize the results linear regression. The test significant, lower than 0.05 and equal to 0.000 this call for the rejection of the null hypothesis and leads to the conclusion, success application of CAIS would certainly have positive and significant impact on quality of accounting information. Thus, CAIS and quality of accounting information significantly related, this significant relationship certainly found to be confident to predict frauds by putting computerized accounting systems in practice.

TABLE (3) RESULTS OF MULTIPLE REGRESSION ANALYSIS

Independent Variables	Beta Coefficient	R square	Adjusted(R)	Sig
CAIS on Quality of accounting information	.752	.629	.627	0.000

#### 5 Conclusion

Results of this paper considered to be one of the greatest attempts to address the CAIS implementation in the KRG construction sector, despite the factual condition that information technology in the KRG is not up to the highest international standards. This finally assists corporates to acquire CAIS and implement them willingly with the highest aware of its relevant consequences. Additionally, provided result rank asked statements as unique techniques to the corporates which certainly looks fit to the need of decision makers. Therefore, justification revealed in this study helps to minimize risk of failure and maximize potential ability to operate effectively and more efficiently. Accounting information system is a component of every business process, and accounting is an important aspect of business process

integration. In current period due to the nature of the business transaction, it is important to implement a computerized system that enhances efficiency of corporates activity and daily tremendous economical transaction.

major aim of paper includes investigating the association between CAIS and ability to promote quality of accounting information, to obtain this aim the researcher employ independent (features of CAIS) and dependent (specific characteristic of accounting information) variables. Finding of this study confirms positive effects of CAIS on selected subject matter which include (quality of accounting information).

Certainly, this finding contributes in the organizations ability to enhance quality of organizations accounting information. thus, result of this study bring to existent several questions about the role played by CAIS in enhancing organizations ability to improve quality of accounting information in the KRG construction sectors organizations. Moreover, connected hypothesis which states there isn't impact of CAIS on quality of accounting information, has been rejected and analysis of data illustrates success application of CAIS significantly at a statistical level implicates quality of accounting information.

In conclusion, it can be said there are no doubt about the benefits of CAIS whether it is types to produce high quality of accounting information in case compared with manual accounting information systems that use in past. However companies at management level should understand importance role of computerized systems and employ them successfully with high level of control to its components, therefore, companies to should employ computerized systems to apply effective techniques, procedures and implement principal's work in the field of accounting information.

#### References

- Abdelraheem, A., Hussaien, A., Mohammed, M., & Elbokhari, Y. (2021). The effect of information technology on the quality of accounting information. Accounting, 7(1), 191-196.
- Abdul-Ghani's Darji, "The effect of the use of information technology on the qualitative characteristics of accounting information An exploratory study of a sample from the wilaya of Oum El Bouaghi", unpublished master's thesis, Faculty of Economic Sciences, Commercial Sciences and Management Sciences, Elaraby Ben Mahidi University, Algeria, 2018.
- Al-Hanini, E. (2011). The Role of Using Information Technology in Enhancing the Quality of Auditing Services in Jordan-Empirical study at auditing offices and companies working in Jordan. Master thesis An-Najah University
- Al-Hiyari, A., AL-Mashre, M. H. H., Mat, N. K., & Alekam, J. M. (2013). Factors that affect accounting information system implementation and accounting information quality: A survey in University Utara Malaysia. American Journal of Economics, 3(1), 27-31.
- 5. Alhosban A. And Maqableh , A. (2014). The Role of Computerized Accounting Information in Product Pricing and Cost Measurement in Jordanian Industrial Corporations. International Journal of Sciences: Basic and Applied Research, vol 15(1).
- Azleen., I., Mohd Rushdan,Y., Mohd Zulkeflee,A.R., Rahida., A.R. .
   (2007). The Study Of End-user Computing Satisfction (EUCS) On Computerised Accounting System (CAS) Among Labuan F.T Government Sectors: A Case Study In The Responsibility Centres. Labuan E-journal Of Muamalat And Society. vol.1: 1-14.
- Bangsa, I. N. (2018). The effect of internal control systems, accounting systems on the quality of financial statements moderated by organizational commitments. Accounting Analysis Journal, 7(2), 127-134 Hertati.L. (2015). Total Quality Management As Technics On Strategic Management Accounting. International Journal of Recent Advances in Multidisciplinary Research 2, (11), 0942-0949
- 8. Belfo, F., & Trigo, A. (2013). Accounting information systems: Tradition and future directions. Procedia Technology, 9, 536-546.
- 9. Binh, V., Tran, N., Thanh, D., & Pham, H. (2020). Firm size, business sector and quality of accounting information systems: Evidence from Vietnam. Accounting, 6(3), 327-334.
- Choe, J.M. (1996). The Relationship Among Performance of Accounting Information System, Influence Factors, and Evolution Level of Information System. Journal of Management Information System. 12(4): 215-239
- 11. Doll, W.J. 1995. Avenues for Top Management Involvement in Successful MIS Development. MIS Quarterly. 9(1): 17-35.
- 12. Duxbury, L, Decady, Y and Tse, A (2002) "Adoption and use of Computer Technology in Canadian small businesses: A comparative

- study" Managing Information Technology in small business: Challenges and solutions, 19-47. Hersey, PA: Idea Group Publishing.
- Edison, G., Manuere, F., Joseph, M., & Gutu, K. (2012). Evaluation of factors influencing adoption of accounting information system by small to medium enterprises in Chinhoyi. Interdisciplinary Journal of Contemporary Research in Business, 4, 1126-1141. Retrieved from http://www.ijcrb.webs.com/
- 14. el-Dalabeeh, A. H., & Alshbiel, S. (2012). The role of computerized accounting information systems in reducing the costs of medical services at King Abdullah University Hospital. Interdisciplinary Journal of Contemporary Research in Business, 4, 893-900. Retrieved from <a href="http://www.ijcrb.webs.com">http://www.ijcrb.webs.com</a>.
- 15. Fitriati, A., & Mulyani, S. (2015). The imfluence of leadership styles on accounting information system success and its impact on accounting information quality. Research Journal of Finance and Accounting, 6(11), 167-173.
- 16. Ganyam, A. I., & Ivungu, J. A. (2019). Effect of accounting information system on financial performance of firms: A review of literature. Journal of Business and Management, 21(5), 39-49.
- 17. Gaynor, M., Andrea, S. K., Molly, M and Teri, L. Y (2016) Understanding the Relationship between Financial Reporting Quality and Audit Quality. Auditing: A Journal of practice & theory 35 (4).
- 18. Ghasemi, M., Shafeiepour, V., Aslani, M., & Barvayeh, E. (2011). The impact of Information Technology (IT) on modern accounting systems. Procedia-Social and Behavioral Sciences, 28, 112-116.
- 19. Ghasemi, M., Shafeiepour, V., Aslani, M., & Barvayeh, E. (2011). The impact of Information Technology (IT) on modern accounting systems. Procedia-Social and Behavioral Sciences, 28, 112-116.
- 20. Hall, J.A (2011), Accounting information system, seventh ed., Australia. South-western cengage learning.
- 21. Handoko, B. L., Sabrina, S., & Ayuanda, N. (2019, August). Admission of Information Technology in External Audit Profession: Impact of Organizational, Social and Individual Factors. In 2019 International Conference on Information Management and Technology (ICIMTech) pp. 36-41.
- 22. Herath, S. K., & Albarqi, N. (2017). Financial reporting quality: A literature review. International Journal of Business Management and Commerce, 2(2), 1-14.
- 23. Hertati.L. Hertati.L. Zarkasyi.W.Suharman.H.Umar.H. (2019). The Effect of Human Resource Ethics on Financial Reporting Implications for Good Government Governance (Survey of Related Sub-units in State-owned Enterprises in SUMSEL). International Journal of Economics and Financial. 9(4), 267-276
- Ismal, N (2017) "Factors influencing AIS effectiveness among manufacturing SMEs: evidence from Malaysia", The electronic journal on Information Systems in developing countries, Vol 38 Issue 1, 1-19

- 25. Jasim, Y. A., & Raewf, M. B. (2020). Information Technology's Impact on the Accounting System. Cihan University-Erbil Journal of Humanities and Social Sciences, 4(1), 50-57.
- 26. Kapp, L. A., & Heslop, G. (2011). What you don't know won't hurt you. Internal Auditor, 68(5), 71-73. Retrieved from http://www.theiia.org/intauditor/
- 27. Komala, A. R. (2012). The influence of the accounting managers' knowledge and the top managements' support on the accounting information system and its impact on the quality of accounting information: A case of Zakat Institutions in Bandung. Journal of Global Management, 4(1), 53-73.
- 28. Laudon, K.C., & Laudon, J.P. (2011). Management Information Systems: Managing the Digital Firm (Upper Saddle River, NJ: Prentice Hall).
- 29. Lim, F. P. C. (2013). Impact of information technology on accounting systems. Asia-pacific Journal of Multimedia Services Convergent with Art, Humanities, and Sociology, 3(2), 93-106.
- Mbilla, E. A. S and Nyeadi, J (2020) "Impact of computerized accounting systems on the quality of financial reports in the banking sector of Ghana", European Journal of Business and Management, Vol.12 No 17
- 31. Mele, C., Pels, J., & Polese, F. (2010). A brief review of systems theories and their management applications. Service Science, 2(1/2), 126–135.
- 32. Mihalache, A. S. (2011). "Risk Analysis of Accounting Information System Infrastructure."
- 33. Narasimhan, R. and S. W. Kim (2001). "Information system utilization strategy for supply chain integration." Journal of business logistics **22**(2): 51-75.
- 34. Nicolaou, A. I. (2000). "A contingency model of perceived effectiveness in accounting information systems: Organizational coordination and control effects." International Journal of Accounting Information Systems 1 (2): 91-105.
- 35. Olufemi, O. O., Festus, A. F., & Adekunle, A. M. (2021). Accounting Software in Computerized Business Environment and Quality of Corporate Reporting. Journal of Finance and Accounting, 9(3), 101.
- 36. Poonpool, N., & Chanthinok, K. (2011). Computerized-audit competency and audit efficiency of certified public accountants (CPAS) in Thailand: Mediating influences of audit judgment. International Journal of Business Research, 11(2), 156-169. Retrieved from http://www.iabe.eu/domains/abex/joural.aspx?journalid=12
- Radu, D. & Marius, D. (2012). Changes caused by computerization in accounting management. Annals of the University of Oradea, Economic Science Series, 21, 655-661. Retrieved from <a href="http://www.steconomiceuohadea.ro.en/">http://www.steconomiceuohadea.ro.en/</a>
- 38. RADU, Florin, Globalizarea sistemelor informaţionale şi influenţa asupra contabilităţii, Editura Bibliotheca, Târgovişte, 2011, pp. 9.

- 39. Romney, M. B, Steinbart, P. j, Summers, S. L and Wood, D, A, (2021) accounting information systems, fifteenth ed., Harlow, Pearson 2021.
- 40. Romney, M. B., & Steinbart, P., J. (2012). Accounting Information Systems. Pearson Education Limited, 686.
- 41. Sajady, H., et al. (2012). "Evaluation of the effectiveness of accounting information systems." International Journal of Information Science and Management (IJISM) 6(2): 49-59.
- 42. Sari, N. Z. M., SE, M., & Purwanegara, H. D. (2016). The effect of quality accounting information system in Indonesian government (BUMD at Bandung area). Research Journal of Finance and Accounting, 7(2).
- 43. Sori, Z. M. (2009). Accounting information systems (AIS) and knowledge management: a case study. American Journal of scientific research, 4(4), 36-44.
- 44. Susanto, A. (2015). What factors influence the quality of accounting information. International Journal of Applied Business and Economic Research, 13(6), 3995-4014.
- 45. Susanto. (2016). The influence of Accounting Information System Quality to Accounting Information Quality and its Implication to the Good Study of Governance Programs International Business Management 10 (24): 5767-5776,2016 ISSN: 1993-5250 Medwel Journal, 2016
- 46. Thoomkuzhy, J. J. (2018). AN EVALUATION OF THE COMPLIANCE OF DOUBLE ENTRY SYSTEM AND PROBLEMS IN COMPUTERIZED ACCOUNTING IN GRAMA PANCHAYAT IN KERALA.
- 47. Tilahun, M. (2019). A Review on Determinants of Accounting Information System Adoption. Science Journal of Business an Management, 7 (1), 17, DOI: 10.11648/j.sjbm.20190701.13.
- 48. Wisna, N. (2013). The Effect of Information Technology on the Quality of Accounting Information system and its impact on the Quality of Accounting Information. Research Journal of Finance and Accounting, 4(15), 2222-2847.
- 49. Xu, H. (2015). What are the most important factors for accounting information quality and their impact on ais data quality outcomes?. Journal of Data and Information Quality (JDIQ), 5(4), 1-22.
- 50. Yuniarti, R. D., & Ariandi, I. (2017). The effect of internal control and anti-fraud awareness on fraud prevention (A survey on intergovernmental organizations). Journal of Economics, Business, and Accountancy Ventura, 20(1), 113-124.