



The Impacts of Implementing the Information Technology to Improve the Financial Accounting Performance of PLCs

Nael Jaafar Ali Alqudhayeb¹, Yousif Mousa Sabti², Aseel Hadi Mahmood³, Asia Hasan Hadi⁴ & Abdullah Abdulmalike Neema⁵

¹Department of Petroleum Project Management of Oil and Gas, College of Industrial Management for Oil and Gas, Basrah University for Oil and Gas, Basra, Iraq

²Department of Accounting, Administrative and Finance science College, Imam Ja'afar Al-Sadiq University, Iraq

³Ministry of Higher Education and Scientific Research, Baghdad, Iraq

⁴Al-Muthanna University College of Administration and Economics Department of Business Administration

⁵Department of Business Administration, College of Administration and Economics, Almaaqaq University, Basrah, Iraq

Corresponding Author: Yousif Mousa Sabti, **Email:** yousif_mousa@ijsu.edu.iq

Received: 12th May 2024

Accepted: 16th July 2024

Published: 5th August 2024

ABSTRACT

The goal of this study is to focus the effect of information technology on the financial accounting performance of Asian public listed companies. This study used secondary data for 120 companies from 2020 to 2023. The study also used OLS to test regression by using the Stata program. The study found that there is a positive and important link among information technologies on financial accounting performance. Information technology has become a focus of interest for all financial and economic organizations because of its effect on their public and private performance in overall and financial performance in specific. Its influence also comprises several elements of accounting and financial performance. The study extended a set of findings, the significant of which is the presence of a significant impact of information technology on financial accounting performance indicators.

Keywords: Information technology, financial accounting performance, PLCs

INTRODUCTION

Information technology (IT) is a term that refers to the use of technology to collect, store, process and transmit information in various forms. This technology includes hardware, software, and networks that facilitate communication and information exchange between individuals and organizations. The main goal of IT is to improve the flow of information, enhance communication, and enable rapid access to information needed by individuals and organizations.

Technology has become a reality that must be understood and its dimensions realized through what we touch and the transformations we experience these days in many service fields, so we will discuss the concept and types of technology. Definition of technology: “The source of “technology” goes back to the “Greek” word Technologos, which involves of two “syllables”: Techno, meaning industrial operation, and the second the meaning science, so in one meaning it is the science of artificial operation”. (Information technology is defined as: the systematic, systematic method that we follow when using heritage various knowledge after being arranged and organized in a special system with the aim of arriving at solutions. It is also known as: organized effort aimed at use (Al Natour, 2021 & Gyamera et al., 2023).

Technological advancements made around the world in recent decades have funded to significant variations in various areas of life, including economic, political, and social. The most significant features of current official the environments work are rapid variation, “openness” and social development. The most significant of these advances is what we now call “information technology”. It has brought about significant changes in institutional structures by the use of current tools, including computers, “global information networks” and various media.

It has become possible for workers to collect data and information, send them, process them, and retrieve them in order to shorten time and reduce costs, which generated an incentive for most institutions to use information technology as strategic connections to achieve the unit’s goals.

The technological revolution in the field of economic “communication information systems” has caused an enormous development in knowledge and methods of execution of service and production organizations, which to significant investments in “information systems”, have obtained significant benefits for the achievement of their work organizations. Effective the

“accounting information constitutes” the source and basic resource of accounting. For any organization, particularly subsequently we live in an “information technology society” with various information resources, the practice of “accounting information systems” is very significant to make a more operative and “effective database”, taking into account the development of all presented resources, by technical capabilities and current equipment to enhance value to the “accounting information system” by improving the efficiency of “accounting information production”, thus having a vital effect on the attainment of the organization's purposes (Taipaleenmäki, & Ikäheimo, 2013 & Al Natour, 2021).

It is noteworthy that the securities and financial securities documents have been fully audited. The new, reliable reinforcements have not yet been developed, and closely watching what I read. It has imposed the necessity of using them. Verify the location of the relevant documents so that they can verify compatible information. Really, the most important thing to consider is: the value of what you have done and what you should do to avoid risks, misfortunes and risks. There is absolutely no certainty regarding any fraudulent activity and with cows (Lunardi et al., 2014). The information governance technology is important because the method of implementation is based on verification you will need to know what you need to know about the strategies used to explain the objectives that may be achieved. The technical truth of the investments made in the future.

The importance of this study appears through the novelty of the topic and its various elements, as it dealt with variables of more significance at the current time, and in opinion of the several benefits decided by the good request of “communication and information technology” by the organization keeping pace with technological developments, it is important to know the reality of local organizations. And their level of modern information technology and their actual use of financial accounting to improve their performance. The research generally aims to answer the sub-questions and test the hypotheses presented to prove their validity or deny them by referring to the current situation and providing a vision about it, and how information and communication technology has affected the around us and against us, and identifying the truth about the relationship of the organization’s performance to information and communication technology, in addition to giving a picture of a reality of utilizing “information technology” in the economic institution and highlighting the value of this technology in improving administrative and productivity information, as well as clarifying the concepts of financial performance measures and indicators, and to support these results by attempting to model the relationship between “information and communication technology” and the financial

performance of the organization under study. Therefore, this study tests the relation between IT and FAP.

LITERATURE REVIEW

The Concepts about information technology and financial accounting performance (FAP) in this section, we will discuss some general concepts about information technology, as well as its components and characteristics areas of application. The concepts of financial accounting performance and the most commonly used indicators will also be discussed. The first requirement: The conceptual framework of information technology we begin this requirement by introducing the concept of information technology, moving on to its components. Before mentioning the most important areas its application will highlight its characteristics that distinguished it from other technologies, which were a direct reason for the speed its spread and penetration into various areas of life.

The concept of information technology and its characteristics information technology, like other modern terms, does not have a single definition. Researchers have differed about defining its concept according to each one's vision of it. It was also distinguished by unique characteristics that made it occupy the forefront of the era present. "The concept of information technology is defined as the use of modern technology" to collect, transmit, process, store, retrieve, and delivering "information, whether in the form of digital data, text, and image". In another definition, we mean by information technology "all types of technology used in operation, transmission, and storage information is in electronic form, and includes computer technology, means of communication, networking, and devices fax and other equipment widely used in communications".

Study by Hakima (2021), digital technology: A reading of concepts and some theoretical dimensions: The modern technical developments that the world is witnessing have created a revolution in information and communication technology over the past few years. This has led to the emergence of qualitative changes in many aspects of life. At a high pace, it paved the way for the process of transition from industrial society to the information society. This revolution began to leave its economic, social, cultural and other impacts on contemporary society in an unprecedented quantity and quality. The basis for the communications and information technology revolution was the convergence and interconnection that took place between hardware and computers and software, as well as communications networks. Over the course of half the twentieth century and the beginning of the third millennium, this technology

has advanced, through a series of qualitative shifts, towards smaller, faster, and more easily used systems. The world today is experiencing a new phase in which the information and communication network represents one of the manifestations of this revolution. It played a fundamental role in shaping the main activities of man in various aspects of life, noting that the barriers of time and space were removed.

The previous research paper seeks to explore and define the features and dimensions of the modern technological revolution that depends on the exploitation of means of communication and information networks, by defining the concept of digital technology, its origins and development, explaining its characteristics and most important forms, and then highlighting the motives for its uses and effects on society. The study by Al-Qatawneh et al., (2005) on the effect of the utilize of “information technology” on the effectiveness of the “accounting information system”: In the last years of the last century and the beginning of the current century, “the world seen a revolution in information technology, and reliance on information technology in all fields has become an indispensable necessity”. It is one of the most important elements of success for enterprises. “Enterprises have become increasingly aware of the strategic role played by information systems in general and the accounting information system in particular in achieving a competitive advantage” for their enterprises. “IT leads to innovation, making new equipment and increasing awareness. The research problem can be limited to the following the leading hypothesis”.

H1. There is an important and positive link among IT with financial accounting performance of PLC.

METHODOLOGY

The topic that we wish to address, the nature and type of information available about it, and the method of analyzing it, impose on us the use of a specific approach for such a study, and this approach is represented in the “descriptive-analytical approach,” which suits the nature and type of the study and reveals its various aspects, especially the theoretical aspect. “Through this approach, it is also possible to analyze reality and diagnose variables to reach accurate interpretations and results. In addition, an applied study approach was used in relation to the field study. As for the tools used in the study, it is the Stata program for data analysis in the ordinary least squares (OLS) regression”.

“This section defines the data and sample size as well as the variables’ dimensions and regression models using in this study. This study utilises the data of Asian PLC from 2020 to 2023, which list 120 companies. The variables measures are also taken into consideration in confirming that the index covers items covering the variables revealed prior. For example, this paper uses ROA to measure financial accounting performance”. Apart from the IT which measure by using an “index with a scale of 0 to 1, where a score of 1” is for IT “information disclosure”, and 0 for “non-formation disclosure”

The “control variables” are utilised in this study for instance (company ownership, “manufacturing”, and company age). This is to display that the present study “controls” the possible related among IT on financial accounting performance in the companies in Asia. The company ownership measure by using “The percentage of organization shares owned by executive directors”. Manufacturing measuring by “1 indicates “industrial” organization and 0 otherwise”. Company age in the research is measured by the number of years the company has been established.

The model is used to test the link among IT and FAP. This research used one regression method using the OLS. “This study suggested results are practical using this model to enhance their compare to that of additional studies”. The “regression model” below clarifies the association”.

$$FAP_{it} = \beta_0 + \beta_1 IT_{it} + \beta_2 COWN_{it} + \beta_3 MANF_{it} + \beta_4 CAGE_{it} + \varepsilon$$

FINDINGS

Table 1 “shows a sample of 120 companies in Asian companies, presenting the effects for the main objective. Table 1 presents that the mean FAP of the sample is 27.559 with a maximum of 9.233 and a minimum of 1.533, which presents the FAP of Asian by the study period. Regarding to the IT, the mean score of the index for IT greatest often disclosed was 11.969”.

Table 1: *The descriptive statistics*

| Variable | Obs | Mean | Std. Dev. | Min | Max |
|----------|-----|--------|-----------|-------|--------|
| FAP | 120 | 27.559 | 20.771 | 1.533 | 9.233 |
| IT | 120 | 11.969 | 49.563 | 0.300 | 2.900 |
| COWN | 120 | 6.500 | 9.788 | 0.000 | 43.770 |
| MANF | 120 | 0.840 | 0.324 | 0.000 | 1.000 |
| CAGE | 120 | 17.378 | 10.822 | 1.000 | 70.000 |

“The control variables comprising company ownership (COWN), “manufacturing” (MANF), and company age (CAGE). The range for COWN is wide, with the mean 6.500 with a minimum 0.000 and the “maximum” being 43.770. “For MANF, the average of the observed companies is 0.840, with minimum of 0.000 and a maximum of 1.000. Finally, for CAGE, the mean for companies is 17.378, with a minimum of 1.000 and a maximum of 70.000”.

Analyzing the correlation relationship in order to fulfill the requirements of the research and the analysis of the “hypotheses”, we present the nature of the link between information technology and financial accounting performance, as it is evident from Table 2. The results show there is a positive correlation relationship between IT, MANF, and CAGE with FAP. But the COWN has a negative and significant link with FAP. Which indicates that there is a compatibility and connection between information technology and performance of financial accounting in the companies under investigation.

Table 2: *Correlation analysis*

| Variables | FAP | IT | COWN | MANF | CAGE |
|-----------|-----------|----------|--------|--------|-------|
| FAP | 1.000 | | | | |
| IT | 0.332*** | 1.000 | | | |
| COWN | -0.541*** | 0.311*** | 1.000 | | |
| MANF | 0.188* | 0.255** | 0.178* | 1.000 | |
| CAGE | 0.337*** | -0.002 | -0.043 | -0.168 | 1.000 |

Table 3 shows the data employed for the OLS regression analysis. The results described on IT presenting that IT found a “positively” and significant relation with FAP. ($t=0.04$, p -value=0.094). The MANF, and CAGE has a positive and significant link with FAP which is the similar result with (Kang, & Kim, 2019). But the COWN shows a negative but significant link with FAP.

Table 3: *Regression analysis*

| FAP | Coef. | Std. Err. | t-stat | sig |
|----------|--------|-----------|--------|---------|
| IT | 1.033 | 1.325 | 0.04 | 0.094* |
| COWN | -3.054 | 2.630 | -0.60 | 0.053** |
| MANF | 2.079 | 2.542 | 0.40 | 0.071* |
| CAGE | 3.182 | 1.342 | 0.29 | 0.078* |
| Constant | -5.189 | 1.124 | -0.4 | 0.771 |

The study results indicate that IT variable in general contributed positively. This that confirms the importance of its IT to support the financial accounting performance. The IT is important because the method of implementation is based on verification you will need to know what you need to know about the strategies used to explain the objectives that may be achieved.

CONCLUSIONS AND SUGGESTIONS

The impacts of information technology on the FAP, despite the price of its adoption, still require further investigation. The results found there is important and positive relation with FAP. It would be better if it were driven by the adoption of information technology. The results of the hypothesis testing revealed two bonding variables.

Analytical research results indicate that information technology variable in general contributed positively. This that confirms the importance of its IT to support current and future financial accounting performance. The two researched organizations should pay attention to the center and expansion of information technology institutes. The developments in which private enterprises are represented by the category of technology Its tools, techniques and jurisprudence Information is a suitable field and an opportunity to provide improved and innovative services that enhance exemplary performance in researched organizations.

This study assumes it is best to disseminate and develop information technology tools by describing them as a field. In the organizations researched to achieve effectiveness, the organizations developed should employ intelligent tools are used to obtain information from its various sources using the triangular method. Paying attention to information technology by creating infrastructure and expanding the ranges across which training can be done Beneficiaries on how to use it to motivate workers in the researched organizations, which ultimately leads to enhancing ideal performance therein and increasing the price of the value achieved therein, and then creating and enhancing the value thereof.

It is necessary for the researched organization to have a wide variety of groups, and to seek to they are interested in it, preferring to constantly develop the knowledge of its employees as a strategic resource rather than an attraction individual with distinguished specializations at work. The concentration regarding interaction with new technologies and the extent of their development during the rapid development. Information technology and dealing with technology may lead it to leave the field of competition. The managements of the investigated organizations should strive to introduce the latest technologies into their networks and

encourage its employees to use new technologies to perform their work and enhance the quality of its services provided to beneficiaries.

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