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Assessment of Cloud Based Accounting Technology Adoption and Business Performance

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Abstract

This study made an assessment of Cloud Based accounting technology adoption and business performance in Jordan. The study adopted a descriptive research design. The study was conducted in Amman, Jordan. The purposive sampling technique was used to select 120 business administrators which constituted the sample size for the study. The main instrument of the study was a questionnaire. Face and content validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for regression. The test for significance was done at 0.05 alpha levels. The study concluded that the study concludes that the adoption and used cloud base accounting technology in business would enhance task completion quickly and with fewer resources. This would provide access to accurate and up-to-date information in real time, improving the reliability of cloud-based financial reporting. The study recommended that to improve their knowledge in all their activities for effective and efficient performance delivery in financial information, businesses are urged to adopt strategies for adapting cloud technologies in accounting and to ensure the training and retraining of professional accountants on the uses of cloud technologies in accounting.

Keywords: Cloud Based, Accounting Technology, Business, Performance

Introduction

Due to the acceptance of dynamic changes and problems in the business environment, information and communication technology (ICT) is widely employed by organizations of varying sizes all over the world (Alsyouf, 2021; Abu-Alsondos, 2023a). It's already common knowledge that advances in technology have dramatically altered the accounting industry and how bookkeepers do their jobs. The advent of cloud-based accounting technology, which provides businesses and accountants with easier, more timely, and more accurate access to financial data, may be the primary force behind this shift. Higher education institutions in

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Jordan have adapted to the changing technology landscape by introducing novel approaches to accounting. One of the most important duties of any organisation or company is the use of cloud-based accounting software. In smaller businesses, a bookkeeper or accountant could be in charge of this, whereas in larger corporations, a whole financial department with dozens of staff might be tasked with it (Deeksha & Rakesh, 2019; Alrjoub et al., 2021) (A. Y. A. B. Ahmad, 2023). Paper was used extensively for accounting purposes. Massive stacks of documents and filing cabinets were a regular sight in the accounting department. Since the advent of cloud computing and its accompanying cloud-based accounting software, which runs on a network of distant computers, Cloud accounting is a type of cloud computing, which is defined by Alqtish, Qatawneh, and Aljamil (2021) as "a collection of distributed computing resources residing on remote servers and accessed over the Internet rather than on a local area network," making it possible to perform tasks such as data processing, storage, synchronisation, etc., on demand via a standard programming interface.

Accounting technology in the cloud refers to a collection of remote servers, programmes, and services that can be accessed from anywhere and used to perform a variety of tasks. Many large Jordanian businesses have begun to accept and adopt cloud accounting in response to consumer demand (Al-Rabi'e & Ali, 2020; Rehman et al., 2023; Abu-AlSondos, 2023b). This includes financial institutions like banks as well as service providers like telecoms, from which customers can access a wide range of products and services online. As a result of the revolutionary developments brought about by cloud-based accounting technology, the accounting profession is experiencing profound transformations. The ability of universities to foresee and plan for the careers and education of their students and faculty members is becoming more crucial (Cunha, Martins, Carvalho, & Carmo, 2022; Alkhwalidi et al., 2023; Hatamlah et al., 2023a). There are two seemingly opposing effects of the expanding scope of accounting services: (1) accountants need to increase their technical specialization, and (2) the rapid and unpredictable changes in the profession bring forth the need for continuous learning, flexibility, and adaptation to new circumstances. The high rate of graduate unemployment and the low rate of return to higher education are just two of the many indices that illustrate the inefficiency of Jordan's higher education system, as reported by Al-Jaghoub, Al-Yaseen, Hourani, and El-Haddadeh (2009) and cited by Al-Ramahi, Odeh, Alrabie, and Qozmar (2020). One of the most fundamental factors contributing to these shortcomings is the inability of higher education programmes to use cutting-edge information technology (Salhab et al., 2023; Oudat, 2022). Therefore, the goal of this study is to examine assessment of cloud based accounting technology adoption and business performance in Jordan

Problem Statement

The use of cloud-based accounting services has been a hot topic at Jordan's universities for years. Cloud-based accounting is being used by universities in Jordan because of the positive effects it has on student learning, faculty efficiency, and institutional production. As of now, the difficulties associated with implementing cloud-based accounting technology in Jordan's higher education institutions have been limited to the accountant's role in maintaining financial records. But before cloud-based accounting technology can be totally successful in the classroom, there are several obstacles that must be cleared.

Research Objectives

1. To examine the effect of attitude towards Cloud based accounting technology and business performance
2. To examine the level of adoption of Cloud based accounting technology and business performance
3. To determine the challenges of adopting Cloud based accounting technology and business performance

Research Question

1. To examine the effect of attitude towards Cloud based accounting technology and business performance
2. To examine the level of adoption of Cloud based accounting technology and business performance
3. To determine the challenges of adopting Cloud based accounting technology and business performance

Hypotheses

HO: *There is no significant joint influence of attitude, level of adoption and challenges of adopting cloud based accounting technology and business performance*

Conceptual Review

Concept of Cloud Based

When anything is said to be "cloud-based," it means it comes straight from the servers of a cloud computing provider and may be accessed through the Internet whenever it is needed. Businesses often turn to cloud computing when they need to quickly expand their resources but can't afford to invest in new hardware or devote more manpower to supporting the expansion (Beal, 2021). Computing services such as servers, storage, databases, networking, software, analytics, and intelligence may be delivered through the Internet ("the cloud"), allowing for greater speed in new product development, more adaptability in meeting changing demands, and greater economies of scale. Cloud computing allows you to pay for just the resources you need, allowing you to save money on overhead while still getting the benefits of a smoothly running and scalable IT infrastructure. When it comes to the delivery of hosted services via the internet, "the cloud" or "cloud computing" is a catch-all word, as stated by Marielle (2022). An online service may be either restricted to a select group of users or open to the public. Services offered by a public cloud may be purchased by anyone with access to the internet. A private cloud is a secure and restricted network or data centre that only a select few people have access to. Both public and private cloud computing try to make IT resources and services easy to access over the Internet.

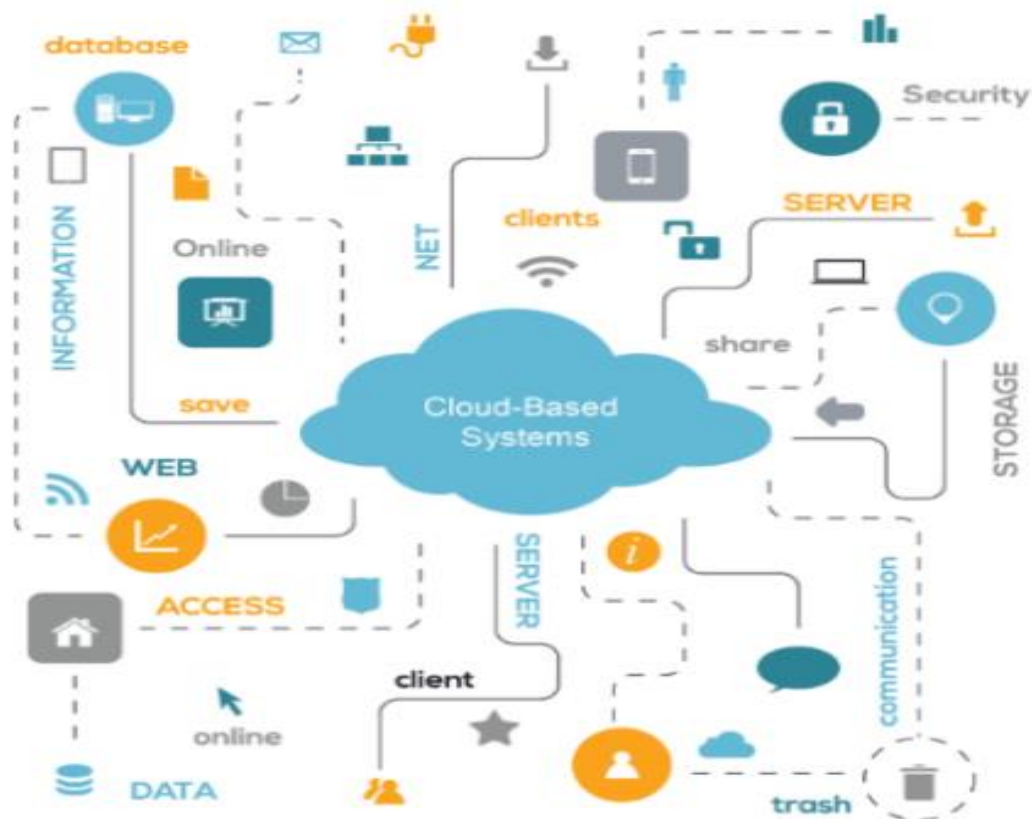


Figure 1: Showing a Cloud Based System.

Computing in the cloud, or cloud computing, is the practise of providing various services through remote access to a shared network of remote computers. Things like data storage, servers, databases, networking, and software fall under this category of resources. People and organisations alike are increasingly turning to cloud computing due to its many benefits, such as lower overhead and higher output rates, as well as improved speed, economy, performance, and safety (Frankenfield, Mansa, & Schmitt, 2022; Bataineh et al., 2022). With cloud computing, data is stored, managed, processed, and/or communicated via remote servers. Off-premises systems are those that exist in "the cloud" (the internet) rather than on your local machine. Email servers, software, data storage, and hardware upgrades are all within the realm of possibilities.

Cloud computing is defined by Chai and Bigelow (2021) as the provision of hosted services over the internet. These offerings may be broken down into three distinct cloud computing models: infrastructure as a service (IaaS), platform as a service (PaaS), and software as a service (SaaS). Cloud computing refers to the practise of making available, through the Internet, a variety of computer resources and services, including but not limited to servers, storage, databases, networking, software, analytics, and intelligence. The use of cloud services continues to grow in popularity. It's the newest fad that's inspiring businesses to use the phrase in their ads. On the other hand, cloud computing is the practise of relying on remote servers and other computer resources to meet one's information technology requirements (ALNSOUR et al., 2021; Hatamlah et al., 2023b).

Understanding the Basics of Accounting

Accounting is a method used to keep tabs on a company's financial transactions, compile relevant data into reports, and share those results with management. The term "accounting" refers to the process of keeping numerical and narrative records of business dealings in the form of financial statements. It's crucial for things like client invoicing, debt management, profit analysis, and cash flow monitoring (Accounting Play. Com, 2022). Stakeholders, including company owners, lenders, workers, managers, consumers, and others, are the primary focus of the system's design and regulation. Investors, lenders, and others who have a financial stake in a company use financial statements as a resource for making choices. Accounting, often known as accountancy, is the act of keeping track of monetary and non-monetary data pertaining to companies and other economic organisations (Wikipedia, 2022). The purpose of accounting, sometimes referred to as the "language of business," is to provide information about a company's financial performance to various interested parties, such as shareholders, creditors, managers, and government agencies. Professionals in the accounting field are called accountants. Accounting and financial reporting are frequently used interchangeably but mean essentially the same thing.

Accounting is the systematic recording of economic events relevant to a company. As part of the accounting procedure, all of these dealings are summed up, analysed, and reported to the appropriate authorities for review and taxation purposes. Accounting financial statements provide a succinct description of a company's activities, financial condition, and cash flows across an accounting period (Fernando, 2022). Keeping accurate financial records is essential for almost every kind of organisation. At smaller businesses, this could fall under the purview of a single bookkeeper or accountant, whereas at bigger corporations, it might be the responsibility of an entire finance department staffed by hundreds of people. Reports created by different types of accounting, such as cost accounting and managerial accounting, are very useful in assisting upper-level management in making well-informed company choices. The term "accounting" refers to the method of keeping track of monetary transactions and their presentation and analysis. Accounting, as defined by Merriam-Webster (2022), is the process of keeping track of monetary and commercial dealings and then summarizing, analyzing, and reporting the findings. Financial transactions, however, can only be understood via accounting. It informs interested parties about the company's financial health. It aids in transforming a company's inner workings into comparable reports.

Cloud-Based Accounting Information Systems

Cloud computing (CC) is not a new concept in theoretical computer science, but cloud accounting (or cloud-based AIS) is seen as innovative and emerging in the fields of business, accounting, and finance. The term "cloud accounting" refers to a set of accounting services that are stored centrally and made available to various users through the cloud computing model (Dimitriu and Matei, 2014). When it comes to AIS, cloud services are provided online. Because of this adaptability, authorised users of smartphones, tablets, desktops, and laptops may all use the same set of computing resources (Yau-Yeung et al., 2020).

Financial reporting using cloud-based AIS systems now makes use of disruptive technologies like blockchain, big data, and artificial intelligence (Akter et al., 2020). Services provided in the cloud that deal with financial transactions are variously referred to as "virtual accounting systems," "web accounting," "online accounting," "SaaS accounting software," and "cloud-based accounting" (Akter et al., 2020; Sastararuji et al., 2021). The majority of public cloud

services are SaaS-based, which is the paradigm most often used to offer cloud-based AIS (Yau-Yeung et al., 2020). Service providers (SPs) in the cloud sell AIS (software) to businesses for a subscription fee. This lets businesses handle a variety of financial tasks (Almaqableh et al., 2022).

Influencing Factors for Using Accounting Software on the Cloud

The "Theory of Reasoned Action," "Social Cognitive Theory," "Technology Acceptance Model," "Theory of Planned Behavior," "Model of Personal Computer Utilization," "Diffusion of Innovation," "the Motivational Model," "the Combined TAM and TPB" (C-TAM-TPB)," and the "Unified Theory of Acceptance and Use of Technology," which synthesises constructs of the eight aforementioned models, are all widely accepted and applied in the (Venkatesh et al., 2012) The UTAUT was developed with the goal of elucidating users' attitudes about and behaviours in relation to IT and IS. According to the UTAUT paradigm, perceived ease (PE), expected effort (EE), social impact, and an enabling environment are the four most important factors in determining the BIs and AUs of IT and IS. In addition, the UTAUT considers four moderating variables—gender, experiences, age, and voluntariness—that affect the direct relationships between cloud-based accounting information systems. Several empirical studies have looked at the adoption and usage of cloud-based information systems, particularly cloud AIS, due to their numerous benefits. TAM (Arpaci, 2017), the Technology-Organization-Environment (TOE) Framework (Khayer et al., 2020), and institutional theory (Alshira'h et al., 2021) are only a few of the theoretical models of IT and IS adoption that have been employed in this research.

The two main components of the widely applied IT/IS acceptance theoretical model are the organizational-level models (such as the Theory of the Organizing Enterprise and the Design of Innovation) and the individual-level models (TAM and UTAUT). The TAM and its variations are among the most often used theoretical models at the individual level in this field of study (Alam et al., 2020; Hatamlah et al., 2023c). TAM, however, was shown to have poor explanatory power (almost 40%) and fails to account for the "subjective norm" element (Alkhwaldi, 2019). For example, TAM isn't perfect at predicting how people will utilise cloud-based artificial intelligence services (Shareef et al., 2017). It was also observed that TAM works well in business settings (Alalwan et al., 2017). The goal is to build a more complete theory by fixing what's wrong with the ones that already exist.

Impact of Moving to Cloud-Based Accounting Technology on Business Organizational Outcomes

Business performance, as defined by Frolick, Thilini, and Ariyachandra (2012), is the result of integrating management and analytic procedures to realise an organization's objectives. Optimal business performance is achieved by scrutinising all aspects of an organisation at both high and low levels of activity (Mann and Kehoe, 2009). Organizations in a market economy acknowledge widespread and continuous shifts in virtually all facets of doing business; these shifts, in turn, bring about significant alterations in the organisations' internal and external business environments, all of which contribute to subpar performance in commercial dealings (Kaplan and Norton, 2010). For businesses to adapt to their changing environments, conventional management philosophies must be revised to refocus efforts on more effective use of tools like business performance metrics (Slater, Olson, and Reddy, 2012).

It is generally agreed that there are three basic facets to business performance assessment: target selection, information gathering on how well the organisation is doing at achieving those

objectives, and managerial interventions based on that data. In order to improve performance, businesses adopt a technique called "business performance management," which takes a broader view than their individual departments and focuses instead on harmonising the company's strategic and operational goals. Successful firms in today's uncertain market must regularly adjust their competitive strategy. This includes, but is not limited to, creating systems of control and performance assessment that provide sufficient and timely information about how the organisation is doing (Maskell, 2012).

Company KPIs are always the responsibility of the business management, which must always design a sensible procedure to calculate these metrics. Systems analysis gives a method that may be included into the performance system in a logical way. Profit, return on investment (ROI), turnover (or number of customers), design quality, and product improvement are some of the most prominent indicators used to evaluate a company's success (Al-Okaily et al., 2022; Abu-Salih et al., 2022; Wood, 2006). (Laura, Shawnee, and Cornelia, 2009) since the business performance measurement (BPM) system is a useful instrument in several fields of study, including economics, management, and sociology, it might be used to gauge an organization's success. This approach dissects and examines every factor that has an impact on a company's bottom line, classifying it into two main categories: operational business performance and strategic business performance (Mann and Kehoe 2009). In line with the research goals, sales growth, market share, profits, and working capital were some of the sub-variables that were chosen most often as signs of a company's success. Their importance is briefly discussed below.

Sales are up, says Penrose (2010). In common parlance, "sales growth" might have two distinct meanings. It may mean nothing more than a numerical rise in certain contexts, such as when discussing increases in production, exports, or sales. In other contexts, however, "growth" is used in its original sense, implying an increase in size or improvement in quality as a result of a process of development akin to natural biological processes in which an interacting series of internal changes leads to increases in size accompanied by changes in the characteristics of the growing object. For every company to succeed, expanding their market share must be a top priority. A company's market share is an indicator of its success and is relatively immune to changes in the economy and government tax policies. Because of the risk of excessive market share liability in the U.S., companies that make dangerous items that can be switched out may find it hard to get more customers (Shugan, 2008).

Challenges of Cloud-Based Accounting Technology in Business Performance

Financial data kept in the cloud is crucial to the performance of universities in Jordan. Accounting transactions are recorded, data analysis is performed, and financial performance is presented to users to aid in decision-making. Aryanti and Adhariani (2020) observed that it is crucial for accounting students to learn about work ethics, collaboration, time management skills, financial statement analysis, Microsoft Office programmes, and participation in various extracurricular activities. However, the difficulties encountered by accountants are becoming easier as a result of improvements in the ways in which educational institutions function and manage their financial information (Alghazzawi et al., 2022; Lutfi et al., 2022; Al-Okaily & Al-Okaily, 2022). Many accountants working at Jordan's universities and colleges encounter a wide range of difficulties.

Lack of Remote Access to Financial Data and Software: Nowadays, the adage "time is money" is universally recognized as a true statement of economic reality. Surprisingly, the accounting world is where it feels most at home. Firms specializing in accounting conduct the

tedious task of overseeing their customers' financial records. They aren't restricted to doing their jobs just in the workplace. Their customers' time is more important than ever, therefore they need to be efficient with it (Watson, 2022). Accountants often run into trouble when they need to get their hands on financial data but can't because of restrictions on where or how they may use their accounting software. Accounting software like QuickBooks, Sage, etc. is often installed on individual workstations inside an organisation. An accountant's presence is required to get access to these files. This makes it hard for them to do any urgent work that comes up outside of regular business hours.

Provisioning a Secure, Confidential, and Private Cloud: It is beneficial to set up a private cloud network. This is so because nothing gets leaked outside the office. The problem is that the IT department must construct and repair everything on its own (Sarangam, 2022). The group must also guarantee that the cloud is always operational. Most of the tedious, laborious work must be automated. Proper procedure should be followed while carrying out a series of actions. Consequently, establishing a private cloud from scratch seems to be an arduous task at the time. However, this is something that a lot of companies want to do in the near future.

not feeling safe Investing in cloud services is fraught with apprehension due to the prevalence of security concerns around cloud computing. It's because a vendor stores and processes your data behind your back, without your knowledge or consent. It seems like every day a new story emerges about a company that has had a data breach, account hacking, exposed credentials, etc. It raises your level of skepticism (Sarangam, 2022). Thankfully, cloud service companies these days are working to strengthen security. You may take further precautions by checking the provider's user identity management system and access control processes for security vulnerabilities. Also, make sure it follows all regulations concerning the privacy and security of user data and database access.

Due to a lack of knowledge and experience, managing cloud-based resources has become more challenging as the use of these technologies has grown in importance. A skilled labour force that is familiar with cloud computing technologies and services has been in high demand. Therefore, businesses need to prepare their IT workers to deal with this issue. High Availability (HA) and reliability are key issues in cloud computing. A system's reliability is measured by how consistently it performs, whereas its availability is measured by how consistently it performs at any given moment. The reliability and sturdiness of cloud systems are especially important today because most enterprises rely on outside providers. There is still no 24/7 support available from cloud providers, leading to frequent disruptions. In order to ensure quality service, it is essential to use either proprietary or external monitoring systems.

Methodology

The study adopted a descriptive research design. The study was conducted in Amman, Jordan. Purposively sampling technique was used to select 120 business administrators which constituted the sample size for the study. The main instrument of the study was a questionnaire. Face and content validation of the instrument was carried out to ensure that the instrument has the accuracy, appropriateness, completeness and the language of the study under consideration. Cronbach Alpha technique was used to determine the level of reliability of the instrument. The reliability coefficient obtained was 0.84 and this was high enough to justify the use of the instrument. The researcher subjected the data generated for this study to appropriate statistical techniques regression. The test for significance was done at 0.05 alpha levels.

Model Specifications

Econometrics is a branch of science that applies the tools of statistics and mathematics to analyse economic phenomena. After formulating economic theory, econometrics gives it a numerical or qualitative expression. For this research, we will look at the Ordinary Least Square (OLS) method for estimating the parameters and also consider multi-collinearity, heteroskedasticity, and autocorrelation as statistical tools for analysing the economic phenomenon. Multiple linear regression involves an extension of the regression model from the two-variable model to the K-variable ($K > 2$) model. This type of model is determined by two or more independent variables. Assuming that a linear relationship exists between a dependent variable Y and an independent variable K, the model is given by:

$$Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \dots + \beta_K X_{Ki} + e_i$$

Where:

$$i = 1, 2, \dots, n$$

Y = Dependent Variable

$X_1 \dots X_K$ = Explanatory / Independent variables $\beta_0 \dots \beta_K$ = Parameters to be determined

e_i = Error or disturbance terms.

Testing for Significance of Regression Coefficients

The aim is to determine whether at least one of the independent variables contribute significantly to the model.

Given the Model

$$\hat{Y} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \dots + \beta_k X_p \text{ then; } H_0: \beta_i = 0$$

$H_1: \beta_i \neq 0$ for at least one i The test procedure requires:

$$F_0 = MSR / MSE \sim F_{\alpha, K-1, n-K}$$

Where MSR = Mean Square due to regression and MSE = Mean Square due to Error.

This procedure can be summarized using the analysis of variance table (Table 1).

Source of Variance	Degree of Freedom	Sum of Squares	Mean Squares	F
Regression	k-1	$\beta'XY - n\bar{Y}^2$	$\beta'XY - n\bar{Y}^2 / (k-1)$	MSR/MSE
Error	n-k	$Y'Y - n\bar{Y}^2$	$(Y'Y - n\bar{Y}^2) / (n-k)$	
Total	n-1	$Y'Y$		

Decision

Reject H_0 if $F_0 > F_{\alpha, K-1, n-K}$ and conclude that the at least one of the explanatory variable contribute to the model.

Multi-Collinearity

One of the assumptions of this OLS technique is that there is no linear relationship between the explanatory variables (i.e., they are independent or $\text{Cov}(X_i, X_j) = 0$ for $i \neq j$) when this assumption fails then we've a problem of multi-collinearity. This will be tested using the Farrah Gluaber method to test for the presence and severity of multi-collinearity in a data.

Variables	Options	Frequency
	Percentage %	
Education level	BSC	84
		70
	Higher studies	24
		20
Position	Manager	20
		24
	Supervisor	36
		30
	Head Section	50
		60
	Less than 5 years	15
		18
Experience	5 – 9 years	54
		45
	10 – 14 years	25
		30
	15 +	15
		18

The analysis indicated that 60% of the sample were male and 40% were female. 10% were younger than 25, 50% were in the group 25 to 34, 25% were 35 to 44, and 18% were 45 or over. 12% of respondents had a diploma degree, 70% had a bachelor's degree, and 20% had higher qualifications. 20% of the total sample were managers, 30% were supervisors, and 50% were section heads. 15% of the subjects had less than 5 years' experience, 45% had 5 to 9 years, 25% had 10 to 14 years, and 15% had 15 or more years.

Table 3: Model Summary.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				Durbin-Watson	
					R Square Change	F Change	df1	df2		Sig. F Change
1	.955 ^a	.912	.909	.895	.912	399.517	3	116	.000	2.007

The Durbin-Watson statistic gives a value of 2.007, which indicates absence of autocorrelation in the data at a 5% significance level. Since the R-value is 0.955, there is a very strong positive correlation between the predictors and the business performance. The correlation coefficient matrix reveals that the chi squared value is $\chi^2 = 32.60$, which is greater than the critical value of 2 (3.84). This indicates there is a need to reject the null hypothesis and conclude that there is multi-collinearity in the data. The F-test, which was employed to identify the variables that are intercorrelated, exposed the fact that employee attitude, adoption of CBTA, and challenges are each intercorrelated. Goldfield Quandt's Test gives us a F-value of 65.624, so we accept the null hypothesis, $F_{\text{calculated}} = 65.624$, and therefore conclude that the disturbance terms are homoscedastic.

Table 4: Anova.

	Model	Sum of Squares	df	Mean Square	F	Sig.
1	Regression	272.414	3	90.805	65.624	.000 ^b
	Residual	160.511	116	1.384		
	Total	432.925	119			

Table 5: Coefficients.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	5.733	.749		7.656	.000
Attitude	.608	.560	.329	1.084	.281
Adoption	.154	.736	.088	.209	.835
Challenges	.952	.406	.413	2.343	.021

When testing a hypothesis about regression coefficient, the calculated F-value is 65.624, which is greater than $F_{0.05}(4)(15) = 3.06$. We therefore reject the null hypothesis (H_0) and conclude that the independent variables (attitude, level of adoption, and challenges of cloud-based accounting technology) contribute significantly to the business performance in Jordan (Y), which is the dependent variable.

$$\beta_1, t_{cal} = .329$$

$$\beta_2, t_{cal} = .088$$

$$\beta_3, t_{cal} = .413 \text{ and}$$

$$t_{0.05}(15) = 2.131.$$

This shows that the independent variables (attitude, level of adoption and challenges of cloud base accounting technology) contribute significantly to the business performance in Jordan (Y) which is the dependent variable.

From the analysis in Table 5:

$$GDP = \beta_0 + \beta_1(ATCBTA) + \beta_2(LACBTA) + \beta_3(CCBTA) + U_t$$

Where:

BP = Y = Business Performance

ATCBTA = X_1 = attitude towards cloud base technology accounting

LACBTA = X_2 = level of adoption of cloud base technology accounting

CACBTA = X_3 = challenges of adopting cloud base technology accounting

Therefore:

$$GDP = 5.733(ATCBTA) + .608(LACBTA) + .154(CACBTA) + .952$$

This can be interpreted as that each unit increase in the attitude towards cloud based accounting technology will bring about a .608 units fall in the BP when other variables are fixed. For a unit increase in level of adoption of cloud based accounting technology, we expect a moderate .154 increase in the BP keeping other variables fixed. A unit increase in challenges of adopting cloud base technology accounting will bring about .952 increases in the BP with other predictors kept constant.

Implication of the Research Findings

Businesses in Jordan are increasing both the breadth and depth of their use of cloud accounting apps in response to the proliferation of such tools made possible by the maturation of cloud computing. A current study confirmed that cloud accounting adoption is influenced by

favorable attitudes. Therefore, it is essential for enterprises to foster constructive cloud AIS attitudes within their customer bases. Resistance to CC technology may be mitigated by the dissemination of awareness training programmes and information to those involved with cloud-based AIS. Workers in any field that involves the cloud should be required to undergo this training, and users should be kept up-to-date on the latest developments regularly. Businesses need to develop a long-term plan to reform and improve their business performance, provide better services to customers in various fields (such as accounting), and boost their reputation relative to other service providers internationally by providing more dependable and efficient administrative practices.

Conclusion

The study concludes that the adoption and used cloud base accounting technology in business would enhance task completion quickly and with fewer resources. This would provide access to accurate and up-to-date information in real time, improving the reliability of cloud-based financial reporting (Dimitriu et al., 2014, Khan, Yasser, et al ,2022, cited in Efosa and Oseikhuemhen) (2022). When management uses cloud technology to improve how employees work together, security and dependability will continue to be of the utmost importance.

Recommendations

To improve their knowledge in all their activities for effective and efficient performance delivery in financial information, businesses are urged to adopt strategies for adapting cloud technologies in accounting and to ensure the training and retraining of professional accountants on the uses of cloud technologies in accounting. Company leaders should put funds into IT that will help the business succeed. This demonstrates that the approach that the company's leadership takes toward adopting new technology, such as cloud computing, will influence the company's ultimate success. In order to encourage the rest of the company to accept a new breakthrough, senior executives might serve as "champions" of that technology. This is because companies function through their workers, many of whom are almost certainly using cloud computing in their day-to-day operations.

References

- A. Y. A. B. Ahmad, S. S. Kumari, M. S, S. K. Guha, A. Gehlot and B. Pant, "Blockchain Implementation in Financial Sector and Cyber Security System," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, 2023, pp. 586-590, <https://doi.org/10.1109/AISC56616.2023.10085045>
- Abu-ALSondos, I. (2023a). The impact of business intelligence system (BIS) on quality of strategic decision-making. *International Journal of Data and Network Science*, 7(4), 1901-1912.
- Abu-ALSondos, I. (2023b). An empirical study of critical success factors in implementing knowledge management systems (KMS): The moderating role of culture. *Uncertain Supply Chain Management*, 11(4), 1527-1538.
- Abu-Salih, B., Wongthongtham, P., Morrison, G., Coutinho, K., Al-Okaily, M., & Huneiti, A. (2022). Short-term renewable energy consumption and generation forecasting: A case study of Western Australia. *Heliyon*, 8(3), e09152.
- Abusaimh, H. (2020). Distributed denial of service attacks in cloud computing. *International Journal of Advanced Computer Science and Applications*, 11(6).

- Abusaimeh, H., Shkoukani, M., & Alshrouf, F. (2014). Balancing the network clusters for the lifetime enhancement in dense wireless sensor networks. *Arabian Journal for Science and Engineering*, 39, 3771-3779.
- Abusaimeh, H., & Alshareef, Y. (2021). Detecting the phishing website with the highest accuracy. *TEM Journal*, 10(2), 947.
- Abusaimeh, H. (2020). Virtual machine escape in cloud computing services. *International Journal of Advanced Computer Science and Applications*, 11(7).
- Mahafzah, A. H., & Abusaimeh, H. (2018). Optimizing power-based indoor tracking system for wireless sensor networks using ZigBee. *International Journal of Advanced Computer Science and Applications*, 9(12).
- Abusaimeh, H. (2022). Computation Offloading for Mobile Cloud Computing Frameworks and Techniques. *TEM Journal*, 11(3), 1042-1046.
- Abusaimeh, H. (2020). Enhance the security and prevent vampire attack on wireless sensor networks using energy and broadcasts threshold values. *International Journal of Advanced Computer Science and Applications*, 11(3).
- Abusaimeh, H., Sharabati, A., & Asha, S. (2023). Using cloud computing services to enhance competitive advantage of commercial organizations. *International Journal of Data and Network Science*, 7(3), 1349-1360.
- ABUSAIMEH, H., & ISAID, O. (2017). HYBRID DATA DEDUPLICATION TECHNIQUE IN CLOUD COMPUTING FOR CLOUD STORAGE. *Journal of Theoretical & Applied Information Technology*, 95(24).
- Accounting Play. Com (2022). Introduction to Accounting. Available at: Ahmad, A. Y. B., Kumari, D. K., Shukla, A., Deepak, A., Chandnani, M., Pundir, S., & Shrivastava, A. (2024). Framework for Cloud Based Document Management System with Institutional Schema of Database. *International Journal of Intelligent Systems and Applications in Engineering*, 12(3s), 672-678.
- Ahmad, A. Y. B., Tiwari, A., Nayeem, M. A., Biswal, B. K., Satapathy, D. P., Kulshreshtha, K., & Bordoloi, D. (2024). Artificial Intelligence Perspective Framework of the Smart Finance and Accounting Management Model. *International Journal of Intelligent Systems and Applications in Engineering*, 12(4s), 586-594.
- Ahmad, A., Abusaimeh, H., Rababah, A., Alqsass, M., Al-Olima, N., & Hamdan, M. (2024). Assessment of effects in advances of accounting technologies on quality financial reports in Jordanian public sector. *Uncertain Supply Chain Management*, 12(1), 133-142.
- Ahmad, A. (2024). Ethical implications of artificial intelligence in accounting: A framework for responsible ai adoption in multinational corporations in Jordan. *International Journal of Data and Network Science*, 8(1), 401-414.
- Ahmad Y. A. Bani Ahmad, "Firm Determinants that Influences Implementation of Accounting Technologies in Business Organizations," *WSEAS Transactions on Business and Economics*, vol. 21, pp. 1-11, 2024
- Ahmad, A. Y. B., William, P., Uike, D., Murgai, A., Bajaj, K. K., Deepak, A., & Shrivastava, A. (2024). Framework for Sustainable Energy Management using Smart Grid Panels Integrated with Machine Learning and IOT based Approach. *International Journal of Intelligent Systems and Applications in Engineering*, 12(2s), 581-590.
- Ahmad, A. B., Atta, A. A. B., Asma'a Al-Amarneh, M. S., & Dahbour, S. A. (2023). Fund Family Selectivity Skills and Market Timing Ability: Comparison Study
- Ahmad, A. Y. Bani ahmad , (2019). Empirical Analysis on Accounting Information System Usage in Banking Sector in Jordan. *Academy of Accounting and Financial Studies Journal*, 23(5), 1-9.

- Ahmad, A. Y. B., Gongada, T. N., Shrivastava, G., Gabbi, R. S., Islam, S., & Nagaraju, K. (2023). E-Commerce Trend Analysis and Management for Industry 5.0 using User Data Analysis. *International Journal of Intelligent Systems and Applications in Engineering*, 11(11s), 135-150.
- Alhawamdeh, H., Al-Saad, S. A., Almasarweh, M. S., Al-Hamad, A. A.-S. A., Bani Ahmad, A. Y. A. B., & Ayasrah, F. T. M. (2023). The Role of Energy Management Practices in Sustainable Tourism Development: A Case Study of Jerash, Jordan. *International Journal of Energy Economics and Policy*, 13(6), 321–333. <https://doi.org/10.32479/ijeeep.14724>
- Allahham, M., & Ahmad, A. (2024). AI-induced anxiety in the assessment of factors influencing the adoption of mobile payment services in supply chain firms: A mental accounting perspective. *International Journal of Data and Network Science*, 8(1), 505-514.
- Y. A. B. Ahmad, S. S. Kumari, M. S, S. K. Guha, A. Gehlot and B. Pant, "Blockchain Implementation in Financial Sector and Cyber Security System," 2023 International Conference on Artificial Intelligence and Smart Communication (AISC), Greater Noida, India, 2023, pp. 586-590, <https://doi.org/10.1109/AISC56616.2023.10085045>
- Ahmad, A. Y. B., Atta, A. A. B., Shehadeh, M. A. H. A., Baniata, H. M. A., & Hani, L. Y. B. (2023). Fund family performance: Evidence from emerging countries. *WSEAS Trans. Bus. Econ*, 20, 951-964.
- <https://accountingplay.com/introduction-to-accounting/>
- Akter, S., Michael, K., Uddin, M.R., McCarthy, G. and Rahman, M. (2020), "Transforming business using digital innovations: the application of AI, blockchain, cloud and data analytics", *Annals of Operations Research*, Vol. 308, pp. 1-33.
- Alalwan, A.A., Dwivedi, Y.K. and Rana, N.P. (2017), "Factors influencing adoption of mobile banking by Jordanian bank customers: extending UTAUT2 with trust", *International Journal of Information Management*, Vol. 37 No. 3, pp. 99-110.
- Alam, M.Z., Hoque, M.R., Hu, W. and Barua, Z. (2020), "Factors influencing the adoption of mHealth services in a developing country: a patient-centric study", *International Journal of Information Management*, Vol. 50, pp. 128-143.
- Alghazzawi, R., Alkhwaldi, A.F. and Al-Okaily, A. (2022). The effect of digital accounting systems on the decision-making quality in the banking industry sector: a mediated-moderated model", *Global Knowledge, Memory and Communication*, Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/GKMC-01-2022-0015>.
- Alkhwaldi A., Abu-ALSondos, I. Abdulmuhsin A., Shehadeh M., Aldhmour F. (2023). Toward an Understanding of Cutting-Edge Technologies in Financial Industry: Cryptocurrency Adoption, The 18th Annual Scientific International Conference for Business (SICB) "Sustainability and Cutting-Edge Business Technologies. 22 May 2023, Amman, Jordan.
- Alkhwaldi, A. (2019), "Jordanian citizen-centric cloud services acceptance model in an e-government context: security antecedents for using cloud services".
- Almaqableh, L., Reddy, K., Pereira, V., Ramiah, V., Wallace, D. and Veron, J.F. (2022a), "An investigative study of links between terrorist attacks and cryptocurrency markets", *Journal of Business Research*, Vol. 147, pp. 177-188.
- Alnsour, I. A., Somili, H. M., & Allahham, M. I. (2021). Impact of Social Networks Safety on Marketing Information Quality in the COVID-19 Pandemic in Saudi Arabia. *The Journal of Asian Finance, Economics and Business*, 8(12), 223-231.
- Al-Okaily, A., Al-Okaily, M., & Teoh, A. P., and Al-Debei, M. (2022). An Empirical Study on Data Warehouse Systems Effectiveness: The Case of Jordanian Banks in the Business Intelligence Era. *EuroMed Journal of Business*. Vol. ahead-of-print No. ahead-of-print. <https://doi.org/10.1108/EMJB-01-2022-0011>.

- Alqtish, A., Qatawneh, A. & Aljamal, K. (2021). The Impact of the Quality of the Accounting Information on Minimizing Risks of Cloud Accounting in Jordanian Working Companies. *Journal of Management Information and Decision Sciences*.24(1).
- Al-Rabi'e, A. & Ali, O. (2020). The Intellectual Impact of Cloud Accounting in Enhancing the Quality of Auditing for Jordanian Audit Offices. *Journal of Business & Economic Policy*,7(3), Pp 32-41.
- Al-Ramahi, N., Odeh, M. Alrabie, Z. & Qozmar, N. (2020). The TOEQCC Framework for Sustainable Adoption of Cloud Computing at Higher Education Institutions in the Kingdom of Jordan. *Sustainability*, Pp 1-19.
- Alrjoub, A. M. S., Almomani, S. N., Al-Hosban, A. A., & Allahham, M. I. (2021). The Impact Of Financial Performance On Earnings Management Practice Behavior (An Empirical Study on Financial Companies in Jordan). *Academy of Strategic Management Journal*, 20, 1-15.
- Alsyouf, A. (2021). Self-Efficacy and Personal Innovativeness Influence on Nurses Beliefs about EHRs Usage in Saudi Arabia: Conceptual Model. *International Journal of Management (IJM)*, 12(3), Pp 1049-1058.
- Arpaci, I. (2017), "Antecedents and consequences of cloud computing adoption in education to achieve knowledge management", *Computers in Human Behavior*, Vol. 70, pp. 382-390.
- Aryanti, C., & Adhariani, D. (2020). Students' Perceptions and Expectation Gap on the Skills and Knowledge of Accounting Graduates. *Journal of Asian Finance, Economics and Business*, 7(9), 649-657.
- Bataineh, A., Abu-AlSondos, I., Salhab, H., & Al-Abbas, L. (2022) A structural equation model for analyzing the relationship between enterprise resource planning and digital supply chain management, *Uncertain Supply Chain Management*. Volume. 10, Number 4, pp. 1289-1296
- Bani Atta, A. A., Ali Mustafa, J., Al-Qudah, S. S., Massad, E., & Ahmad, A. B. (2023). The effect of macroprudential regulation on banks' profitability during financial crises [Specialissue]. *Corporate Governance and Organizational Behavior Review*, 7(2), 245-258.
- Beal, V. (2021). Cloud-Based. Available at: <https://www.webopedia.com/definitions/cloud-based/>
- Chai, W. & Bigelow, S. (2021). Definition of Cloud Computing. Available at: <https://www.techtarget.com/searchcloudcomputing/definition/cloud-computing>
- Cheng, Congbin, Sayed Fayaz Ahmad, Muhammad Irshad, Ghadeer Alsanie, Yasser Khan, Ahmad Y. A. Bani Ahmad (Ayassrah), and Abdu Rahman Aleemi. 2023. "Impact of Green Process Innovation and Productivity on Sustainability: The Moderating Role of Environmental Awareness" *Sustainability* 15, no. 17: 12945. <https://doi.org/10.3390/su151712945>
- Cunha, T., Martins, H., Carvalho, A., & Carmo, C. (2022). Accounting Higher Education Preparing the Future of Accounting. In *Encyclopedia*. <https://encyclopedia.pub/entry/25017>
- Deeksha, R. & Rakesh, C. (2019). A Study on Challenges in Adoption of Cloud-Based Accounting in CA Firms in Bangalore. *Amity Journal of Management Amity Business School*, 7(2), Pp 23-33.
- Dimitriu, O. and Matei, M. (2014), "A new paradigm for accounting through cloud computing", *Procedia Economics and Finance*, Vol. 15, pp. 840-846.
- Daoud, M. K., Al-Qeed, M., Ahmad, A. Y. B., & Al-Gasawneh, J. A. (2023). Mobile Marketing: Exploring the Efficacy of User-Centric Strategies for Enhanced Consumer Engagement and Conversion Rates. *International Journal of Membrane Science and Technology*, 10(2), 1252-1262.

- Daoud, M., Taha, S., Al-Qeed, M., Alsafadi, Y., Ahmad, A., & Allahham, M. (2024). EcoConnect: Guiding environmental awareness via digital marketing approaches. *International Journal of Data and Network Science*, 8(1), 235-242.
- Fernando, J. (2022). Accounting Explained with Brief History and Modern Job Requirement. Available at: <https://www.investopedia.com/terms/a/accounting.asp>
- Frankenfield, J., Mansa, J. &Schmitt, K. (2022). What is Cloud Computing? Pros and Cons of Different Types of Services. Retrieved from: <https://www.investopedia.com/terms/c/cloud-computing.asp>
- Glossary (2022). Educational technology. Retrieved from: <https://tophat.com/glossary/e/educational-technology/>
- Hatamlah, H., Allahham, M., Abu-AlSondos, I., Al-Junaidi, A., Al-Anati, G., & Al-Shaikh, M. (2023b) The Role of Business Intelligence adoption as a Mediator of Big Data Analytics in the Management of Outsourced Reverse Supply Chain Operations, , *Applied Mathematics & Information Sciences*. 17 (5) 897-903
- Hatamlah, H., Allahham, M., Abu-AlSondos, I., Mushtaha, A., Al-Anati, G., Al-Shaikh, M., & Ali, B. (2023c) Assessing the Moderating Effect of Innovation on the Relationship between Information Technology and Supply Chain Management: An Empirical Examination, *Applied Mathematics & Information Sciences*. 17(5) 889-895
- Hatamlah, H., Allan, M., Abu-AlSondos, I., Shehadeh, M., & Allahham, M. (2023a). The role of artificial intelligence in supply chain analytics during the pandemic. *Uncertain Supply Chain Management*, 11(3), 1175-1186.
- Khan, Yasser, et al. "Application of Internet of Things (IoT) in Sustainable Supply Chain Management." *Sustainability* 15.1 (2022): 694. <https://doi.org/10.3390/su15010694>
- Lutfi, A., Al-Okaily, M., Alsyouf, A., & Alrawad, M. (2022). Evaluating the D&M IS success model in the context of accounting information system and sustainable decision making. *Sustainability*, 14(13), 8120.
- Marielle, G. (2022). What's a Cloud-Based System and How Does It Work? Retrieved from: <https://unity-connect.com/our-resources/tech-insights/what-is-a-cloud-based-system-and-how-does-it-work/>
- Merriam-Webster (2022). Accounting. Retrieved from: <https://www.merriam-webster.com/dictionary/accounting>
- Yacoub Nasereddin, Ahmad (2023) "The Impact of Lean Thinking on Strategic Planning in Industrial Companies in Jordan from the Upper and Middle Management: A Perspective Study," *Information Sciences Letters: Vol. 12 : Iss. 6 , PP -*
- SALIH, A. A., & NASEREDDIN, A. Y. The Role of Strategic Awareness in Developing the Practice of Strategic Foresight in Business Organizations-Epistemological Perspective.
- Nasereddin, A. (2023). Exploring the effect of corporate environmental management responsibility on firm performance. *Uncertain Supply Chain Management*, 11(2), 625-636.
- Salih, A., Mousa, Z., & Nasereddin, A. (2023). The impact of career capital on sustainable competitive advantage: The mediating role of human resource management capabilities. *Uncertain Supply Chain Management*, 11(2), 489-502.
- Raza, A., Al Nasar, M. R., Hanandeh, E. S., Zitar, R. A., Nasereddin, A. Y., & Abualigah, L. (2023). A Novel Methodology for Human Kinematics Motion Detection Based on Smartphones Sensor Data Using Artificial Intelligence. *Technologies*, 11(2), 55.
- Nasereddin, A. Y. (2023). Impact of the Blue Ocean Strategy Dimensions in Achieving Competitive Advantage from the Perspective of Faculty Members.
- Nasereddin, A. Y. (2023). A Business Analytics Approach to Strategic Management using Uncovering Corporate Challenges through Topic Modeling.

- Oudat, M. S. (2022). The COVID-19 pandemic and the performance of the stock exchange market: Evidence from the Bahrain Stock Exchange indexes. *Corporate & Business Strategy Review*, 3(1), 19–28. <https://doi.org/10.22495/cbsrv3i1art2>
- Rehman S., Al-Shaikh M., Washington P., Lee E., Song Z., Abu-AlSondos, I., Shehadeh M. & Allahham M. (2023) Fintech adoption in SMEs and Bank Credit supplies A Study from Manufacturing SMEs, *Economies*, 11, 213
- Fraihat, B. A. M., Ahmad, A. Y. B., Alaa, A. A., Alhawamdeh, A. M., Soumadi, M. M., Aln'emi, E. A. S., & Alkhawaldeh, B. Y. S. (2023). Evaluating Technology Improvement in Sustainable Development Goals by Analysing Financial Development and Energy Consumption in Jordan. *International Journal of Energy Economics and Policy*, 13(4), 348
- Lin, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Irshad, M., Telba, A. A., Awwad, E. M., & Majid, M. I. (2023). Green production and green technology for sustainability: The mediating role of waste reduction and energy use. *Heliyon*, e22496.
- K. Daoud, D. . Alqudah, M. . Al-Qeed, B. A. . Al Qaied, and A. Y. A. B. . Ahmad, “The Relationship Between Mobile Marketing and Customer Perceptions in Jordanian Commercial Banks: The Electronic Quality as A Mediator Variable”, *ijmst*, vol. 10, no. 2, pp. 1360-1371, Jun. 2023
- Mustafa, J. A., ATTA, A. A. B., AHMAD, A. Y. B., SHEHADEH, M., & Agustina, R. (2023). Spillover Effect in Islamic and Conventional Fund Family: Evidence from Emerging Countries. *WSEAS Transactions on Business and Economics*, 20, 1042-1058.
- Mohsin, H. J., Hani, L. Y. B., Atta, A. A. B., Al-Alawnh, N. A. K., Ahmad, A. B., & Samara, H. H. (2023). THE IMPACT OF DIGITAL FINANCIAL TECHNOLOGIES ON THE DEVELOPMENT OF ENTREPRENEURSHIP: EVIDENCE FROM COMMERCIAL BANKS IN THE EMERGING MARKETS.
- Ni, L., Ahmad, S. F., Alshammari, T. O., Liang, H., Alsanie, G., Irshad, M., ... & Ayassrah, A. Y. B. A. (2023). The role of environmental regulation and green human capital towards sustainable development: The mediating role of green innovation and industry upgradation. *Journal of Cleaner Production*, 138497.
- Peng, Yixuan, Sayed Fayaz Ahmad, Ahmad Y. A. Bani Ahmad, Mustafa S. Al Shaikh, Mohammad Khalaf Daoud, and Fuad Mohammed Hussein Alhamdi. 2023. "Riding the Waves of Artificial Intelligence in Advancing Accounting and Its Implications for Sustainable Development Goals" *Sustainability* 15, no. 19: 14165. <https://doi.org/10.3390/su151914165>
- Peiran Liang, Yulu Guo, Sohaib Tahir Chauhdary, Manoj Kumar Agrawal, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad, Ahmad A. Ifseisi, Tiancheng Ji, 2024” Sustainable development and multi-aspect analysis of a novel polygeneration ,system using biogas upgrading and LNG regasification processes, producing power ,heating, fresh water and liquid CO2”,*Process Safety and Environmental Protection*
- Peiran Liang, Yulu Guo, Tirumala Uday Kumar Nutakki, Manoj Kumar Agrawal, Taseer ,Muhammad, Sayed Fayaz Ahmad, Ahmad Yahiya Ahmad Bani Ahmad, Muxing Qin 2024. “ Comprehensive assessment and sustainability improvement of a natural gas power plant utilizing an environmentally friendly combined cooling heating and power-desalination arrangement”,*Journal of Cleaner Production*, Volume 436,,140387
- R. A. Y. A. Bani Ahmad, Y. M. A. Tarshany, F. T. M. Ayasrah, F. S. Mohamad, S. I. A. Saany and B. Pandey, "The Role of Cybersecurity in E-Commerce to Achieve the Maqasid of Money," 2023 International Conference on Computer Science and Emerging Technologies (CSET), Bangalore, India, 2023, pp. 1-8, doi: 10.1109/CSET58993.2023.10346972.

- Salhab, H., Allahham, M., Abu-ALSondos, I., Frangieh, R., Alkhwaldi, A., & Ali, B. (2023). Inventory competition, artificial intelligence, and quality improvement decisions in supply chains with digital marketing. *Uncertain Supply Chain Management*, 11(4), 1915-1924.
- Sarangam, A. (2022). Top 14 Challenges of cloud computing. Retrieved from: <https://www.jigsawacademy.com/blogs/cloud-computing/challenges-of-cloud-computing/>
- Sastararuji, D., Hoonsopon, D., Pitchayadol, P. and Chiwamit, P. (2021), "Cloud accounting adoption in small and medium enterprises: an integrated conceptual framework: five factors of determinant were identified by integrated Technology-Organization-Environment (TOE) framework, diffusion of innovation (DOI), institutional theory (INT) and extended factors", Paper presented at the 2nd International Conference on Industrial Engineering and Industrial Management, Barcelona.
- Sen, V. (2021). Differentiate between technology of education and technology in education. Available at: <https://www.preservearticles.com/difference/differentiate-between-technology-of-education-and-technology-in-education/16476>
- Shareef, M.A., Dwivedi, Y.K., Kumar, V. and Kumar, U. (2017), "Content design of advertisement for consumer exposure: mobile marketing through short messaging service", *International Journal of Information Management*, Vol. 37 No. 4, pp. 257-268.
- Teach-Mint (2022). Technology in Education. Available at: <https://www.teachmint.com/glossary/t/technology-in-education/>
- Venkatesh, V., Thong, J.Y.L. and Xu, X. (2012), "Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology", *MIS Quarterly*, Vol. 36 No. 1, pp. 157-178.
- Venpakal, P. (2020). An Introduction to Educational Technology. Available at: https://www.academia.edu/38339610/AN_INTRODUCTION_TO_EDUCATIONAL_TECHNOLOGY_pdf
- William, P., Ahmad, A. Y. B., Deepak, A., Gupta, R., Bajaj, K. K., & Deshmukh, R. (2024). Sustainable Implementation of Artificial Intelligence Based Decision Support System for Irrigation Projects in the Development of Rural Settlements. *International Journal of Intelligent Systems and Applications in Engineering*, 12(3s), 48-56.
- Wang, C., Ahmad, S. F., Ayassrah, A. Y. B. A., Awwad, E. M., Irshad, M., Ali, Y. A., ... & Han, H. (2023). An empirical evaluation of technology acceptance model for Artificial Intelligence in E-commerce. *Heliyon*, 9(8).
- Watson, J. (2022). Top Challenges Faced By Accountants and How Cloud Solves Them. Available at: <https://www.acecloudhosting.com/blog/cloud-solves-accounting-challenges/>
- Web Solutions (2022). Technology in Education. Retrieved from: <https://education.stateuniversity.com/pages/2495/Technology-in-Education-SCHOOL.html>
- Wikipedia (2022). Accounting. Retrieved from: https://en.wikipedia.org/wiki/Accounting#cite_note-NP_2013-1
- Wikipedia (2022). Technology education. From Wikipedia, the free encyclopedia. Available at: https://en.wikipedia.org/wiki/Technology_education
- Yau-Yeung, D., Yigitbasioglu, O. and Green, P. (2020), "Cloud accounting risks and mitigation strategies: evidence from Australia", *Accounting Forum*, Vol. 44 No. 4, pp. 421-446
- Yahiya Ahmad Bani Ahmad (Ayassrah), Ahmad; Ahmad Mahmoud Bani Atta, Anas; Ali Alawawdeh, Hanan; Abdallah Aljundi, Nawaf; Morshed, Amer; and Amin Dahbour, Saleh (2023) "The Effect of System Quality and User Quality of Information Technology on Internal Audit Effectiveness in Jordan, And the Moderating Effect of Management Support," *Applied Mathematics & Information Sciences*: Vol. 17: Iss. 5, Article 12.DOI: <https://dx.doi.org/10.18576/amis/170512>

Zhan, Y., Ahmad, S. F., Irshad, M., Al-Razgan, M., Awwad, E. M., Ali, Y. A., & Ayassrah, A. Y. B. A. (2024). Investigating the role of Cybersecurity's perceived threats in the adoption of health information systems. *Heliyon*, 10(1).