



# THE EFFECT OF THE USE OF CLOUD ARTIFICIAL INTELLIGENCE ON IMPROVING THE QUALITY OF THE AUDITOR'S REPORT

**Dr. Mohammed Frayyeh Hassan**

Dhi Qar University, College of Administration and Economy, Accounting Department  
[Mohammedfr@utq.edu.iq](mailto:Mohammedfr@utq.edu.iq)

<b>Article history:</b>		<b>Abstract:</b>
<b>Received:</b>	10 <sup>th</sup> April 2023	The business environment in this period witnessed a set of technological developments, especially in information systems, which led to this development to change changes represented in the transformation from traditional systems to digital systems, which in turn affected the financial, administrative and operational aspects in all departments. Therefore, the goal of research is to explain the relationship of the use of cloud artificial intelligence with the process of review and the important role that the references experience in planning and implementing the review process in light of the review customers of the review of cloud computing technology in preserving and storing data and indicating the effect of the references process to obtain evidence that helps him in arrival To a neutral technical opinion and the completion of the report at the appropriate time and submitting it to decision -makers at the appropriate time to make appropriate decisions. In order to achieve the research objectives, the researcher approved the test assumptions of the research assignments on survey lists that were directed to a sample of auditors in the audit offices and accounting professors in Iraqi universities. By using statistical methods, the researcher concluded that the use of cloud artificial intelligence is of great importance and an impact in the performance of the account review profession as it has an effect Clear in improving the quality of the audit auditor's report.
<b>Accepted:</b>	11 <sup>th</sup> May 2023	
<b>Published:</b>	11 <sup>th</sup> June 2023	

**Keywords:** cloud artificial intelligence, cloud computing, digital transformation, reference report

## 1- INTRODUCTION

Due to the huge developments in the business environment in the field of information technology and artificial intelligence systems, cloud artificial intelligence has received international attention, as smart systems have provided innovative solutions in shortening time, reducing cost and improving the efficiency of the productive process, so many of the auditors called for an urgent result to keep pace with the technological development that The necessary technological skills need to deal with such developments and give more positive and accuracy to the profession of monitoring accounts.

With the enormous analytical capabilities of cloud artificial intelligence and the benefits of long -term work, which leads to a fundamental transformation in the function of monitoring accounts through the ability to perform accurate analyzes and the speed of completing calculations with high efficiency in a way that supports and enhances the capabilities of account monitors. It also contributes easily storing and recovering data and analyzing them to overcome the time element Cloud artificial intelligence is one of the

most important forms of technological development during the current period by relying on internet networks in communication and communication and converting data and information from its paper image into a digital image.

The accounting profession is considered one of the professions that depend a lot on the information that must be accurately available to its users through financial lists that enable the decision -makers to rely on.

Also, the profession of monitoring of accounts is one of the professions that are characterized by continuous development and modernization, as well as continuous competition between practitioners as a result of the rapid developments surrounding the audit installations, which makes it necessary for these facilities to keep pace with technological developments in order to improve their performance in a manner that ensures the provision of review services efficiently and effectively to increase the confidence of users of reports Review (Al -Haddad, 2022).



Based on the foregoing, it has become obligatory on the audit offices to rely on computers and information technology to perform their tasks.

The importance of the shift to cloud artificial intelligence is considered to be a tool to obtain the necessary information, which helps auditors to perform their duties with high efficiency and is artificial intelligence, cloud computing, robots, from advanced technological tools on which digital transformation depends greatly in collecting and analyzing data.

Despite the great technological development in the world, which is one of the most important mechanisms is the digital transformation, it is still at the beginning of its initial stages of application in many areas, the most important of which is accountability and review, as he did not find enough attention and expected in research and studies despite the occurrence of some crises such as the Corona Fund Which explained the importance of technological development and the use of modern technological means to deal with the crisis as an appropriate alternative to the continuation of work and reduce the physical and economic losses arising from the stopping of work for periods of time in many sectors and that the accounting and review professions are among the most professions that seek to achieve the highest quality in professional performance, it is expected that Digital transformation affects a positive and effective manner on the performance of the references for its tasks and improving the efficiency and effectiveness of the review process (Al -Haddad, 2022).

## **2-RESEARCH FRAMEWORK**

### **2-1 The search problem**

Despite the advantages provided by cloud artificial intelligence, it constituted a major challenge to the audit offices because the data collection and review process requires the presence of auditors who have high skills in using such technology, which led to the emergence of a gap while the contemporary business environment needs and the skills and experiences that the auditors need in The use of modern technology as well as the current criteria for review is not sufficient to ensure the work of systems based on cloud artificial intelligence techniques, which requires more amendment due to the effect of digital transformation, as the success of the audit offices depends on the permanent keeping pace with digital transformation and modern developments in business that need great interest in Technical aspects, which shows the importance of studying to explain the effect of these changes on the review process. Accordingly, the

research problem can be formulated with the following two questions:-

- 1-Is cloud artificial intelligence related to the review?
- 2- Is there a role for cloud artificial intelligence in improving the quality of the auditor's report?

### **2-The aim of the research**

Search objectives can be determined with :- the following

1-Cloud artificial intelligence is related to the review profession.

3- Cloud artificial intelligence has a role in improving the quality of the auditor's report.

### **3-2 Search hypotheses**

In light of the research problem, and in order to achieve its goals, the research hypothesis was formulated as follows:-

- 1- The first hypothesis:- There is a relationship of cloud artificial intelligence with the audit profession.
- 2- The second hypothesis:- The application of cloud artificial intelligence plays an important role in improving the quality of the auditor's report.

### **4-The importance of research**

The importance of research is due to the following:-

- 1-Highlighting the effect that occurs in the review profession as a result and a reflection of the use of cloud artificial intelligence in light of an environment characterized by accelerating technological developments.
- 2- Enhancing the quality of the auditor's report by providing some predictions that urge auditors to develop their profession and keep pace with the digital transformation to carry out the review process more accurately at a lower cost.

### **5-Research curriculum**

The research curriculum is:-

- 1-The inductive approach by reviewing the literature of accounting thought related to research in order to identify the results and recommendations reached as well as the publications of accounting professional organizations regarding the digital transformation to benefit from it in formulating the theoretical framework of the research.
- 2- The deductive curriculum is to conduct a field study in an anchor on the list of survey and analysis and extract results through the application of the statistical methods contained in the group of statistical programs for social sciences.

### **3-Cloud artificial intelligence**

Artificial intelligence is one of the innovations that works to take advantage of the computer's capacity



to simulate human intelligence by building programs that can do what man does (Owais, pp. 257: 2023).

Artificial intelligence or digital transformation was used in recent years and is considered an important and effective element in the success of professionals in various fields in the world, so most facilities are currently facing the digital transformation using artificial intelligence, which increases the exchange of information between organizations and clients.

The cloud artificial intelligence is known as a way to understand the data collected in a way that leads to the development of predictions and the solution of potential problems before they occur Henry & Rafique, .((2021

A study (Taha, et al, 2021) stated that it is an advanced system that combines modern technologies for artificial intelligence and advanced technology of cloud computing by pulling a set of servers for the databases that cloud computing uses in a way that preserves the information that requires artificial intelligence, whether to reach or use in Decision - making with the possibility of sending this information again to the cloud to help other artificial intelligence systems.

As for the study (Kefeng, et al, 2021), it was defined as a system based on learning from the historical data derived from the cloud structure while setting standards and providing recommendations during the analysis of data free of human errors in a way that benefits the facility and its customers in making decisions.

The researcher believes that artificial intelligence is the process of using efficiently for a group of technologies based on the use of a group of programs that are characterized by efficiency and education to the use of algorithms to understand the data listed in the cloud with the facility that the facility can manage large data warehouses and simplify them and determine the necessary path to produce decisive decisions at an appropriate time .

#### **4- The relationship of cloud artificial intelligence with the review**

In the study (Owais, p. 259: 2023), it was necessary to apply the strategy of artificial intelligence for the purpose of digital transformation to provide auditors with the necessary adjustments that must be made to review standards, as it indicated that it affects five aspects:-

First/ Allow the audit offices to submit and expand their offers through a new services proposal.

Second/ Developing the quality of the review by analyzing all customer data.

Third/ Using digital transformation, references acquire new skills.

Fourth/ It helps to activate the culture of innovation within the audit offices.

Fifth/ Applying corporate governance more effectively.

The study (Ahmad, pp. 367: 2023) summarized the relationship of cloud artificial intelligence elements with the review process of the following:-

1- (Sensors based on cloud computing):-

The development of the sensors based on cloud computing, which possesses the capabilities of vision, detection, and identifying the sound and face, opened the way for a wide range of jobs that can be used in confirmation tasks.

The researcher explained that these jobs can be considered as a confirmation guide for the references on the performance of tasks or a secondary guide on the levels of performance achieved as well as flows, for example, it is possible to use the elements of the inventory based on the segments of determining the wireless frequency with the specified paths to obtain goods or manufacturing as well as the management of the supply chain and can be used Storing them as tracks to review the use of inventory, with the possibility of facial and sound recognition programs as a supportive guide for cybersecurity.

2- Rapid detection of phenomena:-

As the process of review based on cloud artificial intelligence techniques is able to discover abnormal cases, weak measurement and violation of cybersecurity.

3- Meta Controls/Meta Processes:-

As the cloud artificial intelligence technology provides the TPR feature, which enables the quality of measurements and activating the automatic measurement feature once any party performs a function as well as the possibility of rapid treatment using the best analytical methods, which leads to improving the ability to predict natural results and immediate verification that actual values correspond to Expectations and thus create a form of confirmation of the references.

3- Evidence integration:-

Where auditors will be able to benefit from text data from social networks, video recordings, captured images, sensor data, and combine features extracted from accounting and financial information, and thus these jobs enable the auditors to automate a number of tasks such as reviewing the source of documents analyzing group calls, emails, press data, news, and extracting descriptive data Including, which can all



be an additional supporting tool that serves the analysis of financial reports, and thus enables the references to survey and determine each account and balance and link these numbers to the relevant supportive evidence automatically, which enables it to discover violations.

#### 4-Deep Motiphate Data:-

Deep learning uses a nervous network of a number of hidden and deep layers, and auditors do not have a large volume of data such as those it provides (Facebook or Google). It also attends to disclose any secret information for the customer. There are no reasoning to determine the optimal size of data for deep education applications where it depends on (The nature of the data, quality and dimensions of data, implementation of the nerve network structure, techniques used in the experiment)

#### 5-The impact of cloud artificial intelligence on the auditor's report

In the study (Hamada, pp. 286: 2022), the auditor faces many problems when reviewing data for customers who depend on storing their data according to cloud computing technology, as these problems differ according to the type of cloud on which the customer relies on publishing his data.

Where (Halpert, 2011) sees that the review pattern will be different depending on the type of cloud (private, general, societal, mixed).

(Wahdan, 2013) believes that the main problem that affects the review process is the lack of sufficient training for auditors on modern technology, which affects the quality of the review process.

So (Karisen & Waiiberg, 2017) believes that the review in light of the digital environment is more influencing the tools of the auditors due to relying on evidence of non -paper proof as well as auditors must develop their skills in light of the constantly changing digital environment to improve the efficiency and quality of the review process, which increases customer confidence in the audit report the accounts.

One of the advantages provided by the use of cloud artificial intelligence is the following:-

- Ease of communication and obtaining information to save the time and effort to collect information.
- Due to the use of artificial intelligence and the transformation towards digitization, the adoption of the review profession on digital transformation to obtain information during the coming period is an expected event.

- The Association of Certified Accountants emphasizes the contributions of the current technological developments of the audit profession that shows the need for digital transformation in the review profession, especially in what information technology gives it a competitive advantage that pushes the audit offices to implement it in performing its work.

It was stated in the study of (Mookerjee, 2021), (Yassein, et al, 2022), (ANTunes, et al, 2022) that the main advantages of using artificial intelligence in cloud computing are the following:-

-Improving the decision -making process while reducing costs and obtaining better outputs, as the combination of artificial intelligence and cloud computing aims to reduce the total costs when using the cloud. There are no requirements for the separate data center. It can also reduce the costs of capital by reducing spending on equipment, infrastructure and solutions it provides Automatic education.

- Using automatic education and artificial intelligence algorithms based on the cloud, patterns can be determined and valuable information is extracted from data collections, which enables the company to use these ideas and information to enhance their growth and make right decisions.

- Cloud security automation, the cloud based on artificial intelligence can store data and update it regularly while extracting useful information from it, which helps to process information related to cloud infrastructure and detect inconsistencies, which contributes to increasing cloud security, solving problems of delay in accessing data and enabling the cloud to solve potential problems in advance .

- Generational development, as it promotes the rapid development of solutions, which guarantees operational efficiencies and reduces error rates, which satisfies corporate management and customer desires. The process of synchronization between artificial intelligence tools and programs and cloud computing also enables data analysis and as a way to save time, effort and cost.

- The cloud artificial intelligence offers a combination of functions derived from many customizations and applications that can lead to the integration of the functions of the audit process, which increases the efficiency and effectiveness of the auditor's confirmatory services. Jobs that outweigh some of the advantages of human intelligence, for example (the size of databases, the accuracy of retrieving structured data, the speed of



perception of reaction, the ability to complete calculations accurately and quickly), and then auditing companies can outsource the management of the IT infrastructure of the electronic cloud To provide the required information technology and human resource costs.

- It enables the management of intensive data with increased information security, which makes it possible to deal with huge amounts of data in a programmed way to analyze it properly and thus allows the benefit of the information that has been excavated and classified.

-It allows the transfer of data between local and cloud environments, which enables the company to manage and control data in an easy way, and the possibility of enabling smart automation, thus making it more specific and analytical.

- It works to set industry standards and drive innovation for companies by maximizing their assets while supporting large data volumes.

- The cloud allows full sharing of data between sectors, which helps teams in performing their assigned tasks and facilitates the exchange of information.

Despite the advantages associated with digital transformation, there are many challenges facing this transformation, including (Young, et al, 2021):-

- Data collection and review is still a challenge facing some professions, especially accounting and auditing.

- Relying on modern technology faces many challenges, the most important of which is the need for qualified auditors who have high skills and are sufficiently and effectively trained to deal with these modern technological tools in order to face the results of collecting and operating large data and the required understanding of that technology.

-The necessity of providing the necessary capabilities of computers and networks, and the costs that this entails.

-Connectivity Concerns Cloud AI requires a stable internet connection and poor internet access can hamper the benefits of peer-based machine learning resources.

-Data privacy, as companies use sensitive information that can be targeted for data breaches by hackers, so companies need to create privacy policies and secure all data.

-Identity theft as a result of using learning techniques and algorithms to create a fictitious avatar in the virtual world.

- The risks of integration between artificial intelligence and cloud computing, as companies need to move their applications and technologies to the cloud completely before adding the layer of artificial intelligence to the cloud.

**6-Field study:**

The researcher used the field study to test the research hypotheses through the statistical analysis of the data that he collected by distributing the survey lists to the targeted study sample, which includes (external auditors in audit offices and faculty members in accounting departments in Iraqi universities) using the statistical program. (SPSS), where the survey form was designed on the basis of the five-point Likert scale in order to determine the answers of the research sample members, and the following weights were given to the items:

Strongly Disagree	Not agree	neutral	Agree	Strongly Agree
1	2	3	4	5

**6-1 The research sample:**

The research sample, to which the survey form will be directed, was selected from a group of external auditors in auditing offices and faculty members in accounting departments in Iraqi universities.

Where (100) survey forms were distributed, (90) forms were received, the number of correct survey lists reached (80), and (10) lists were excluded because they were not valid.

**6-2Testing the stability and validity of the survey list:**

Statistical package for social sciences (SPSS) programs were used to perform the Statistical package for social sciences to apply the Cronbach's Alpha test on the survey list to show the homogeneity of the items of the variables used in the measurement. It was found that the stability coefficient was (0.88) and the validity of the content was equal to (0.92), which indicates that the internal consistency of the phrases used in the research is strong and highly acceptable.

**6-3- Testing the first hypothesis**, which states, "There is a relationship of cloud artificial intelligence with the auditing profession." Table No. (1) shows the results.

Table No. (1)



No.	Statement	Strongly Agree	Agree	Neutral	Not Agree	Strongly Disagree	Percentage	Ranking
1	Cloud artificial intelligence is one of the technological developments received	44	16	20			4,3	2
2	The application of cloud artificial intelligence in audit offices means relying on modern technology to provide service	6	8	25	28	13	1,325	9
3	Cloud artificial intelligence applications help in planning and implementing the review process	35	20	15	9	1	3,987	5
4	Using cloud artificial intelligence supports the competitiveness of audit offices	39	20	10	11		4,087	4
5	Cloud artificial intelligence techniques need trained and qualified auditors and have experience dealing with modern technology	39	24	12	5		4,212	3
6	Current review standards are suitable for the use of cloud artificial intelligence	4	15	6	55		2,6	8
7	Preparing the cloud review program accurately helps to simplify review procedures in light of the application of cloud artificial intelligence	32	21	12	12	3	3,837	6
8	The speed in which the auditors are completed for the review process which is reflected in the speed of preparing the report and submitting it at the appropriate time	54	26	0	0	0	4,675	1
9	Increasing the fame of the audit offices through making the cloud review	22	15	25	10	8	3,412	7



	<b>which is reflected the increase in i customers</b>								
<b>10</b>	<b>The cloud artificial intelligence application is met with auditor offices, acceptance b auditors</b>	29	25	8	18	0	3,812	76	6
<b>Total</b>							<b>3,62</b>	<b>%72</b>	

It appears from Table No. (1) that the first three ranks (first, second, third) were obtained by phrases with sequences (8), (1) (5), respectively, with relative importance of (93), (86), (84) on Average, and an average of (4,675), (4,3), (4,212), respectively, while the last three ranks (seventh, eighth, ninth) were the share of phrases with serials (9), (6), (2), respectively, of importance The percentage of (68), (52), (26), respectively, and an average of (3,412), (2,6), (1,325), respectively, and it becomes clear from the previous analysis there is a relationship of cloud artificial intelligence with the

review profession and with a relative importance of (72%) With an average (3,62), this means proving the first hypothesis with a relationship of cloud artificial intelligence with the review profession.

**6-4- The second hypothesis test,** which stipulates "the application of cloud artificial intelligence is an important role in improving the quality of the audit auditor's report" and Table (2) shows the results.

Table No. (2)

<b>No.</b>	<b>ferries</b>	<b>Strongly Agree</b>	<b>Agree</b>	<b>Neutral</b>	<b>Not agree</b>	<b>Strongly disagree</b>	<b>Average</b>	<b>Percentage</b>	<b>Ranking</b>
1	The use of cloud artificial intelligence in audit firm affects the auditor's report	57	10	8	5	0	4,487	89	3
2	The use of cloud provides information at the right time	57	15	8	0	0	4,612	92	1
3	The use of cloud artificial intelligence contributes increasing customer confidence in the references report	57	10	13	0	0	4,55	91	2
4	Using modern technology helps review the discovery of cheating	29	33	7	6	5	3,937	78	5
5	The most important cloud artificial intelligence helping the observer show the opinion	47	22	11	0	0	4,45	89	3
6	The use of artificial intelligence has resulted some challenges related human resources and the availability of sufficient expertise and skills	35	30	12	3	0	4,212	84	4
7	The digital transformation	35	32	5	8	0	4,175	84	4



	is considered a change the methodology of work in the audit offices, which results in a radical change in work procedures and policies to ensure the speedy completion of the audit report.									
8	Cloud artificial intelligence contributes to detecting defects and weaknesses and automatically indicating the auditor report	47	25	5	3	0	4,45	89	3	
9	The application of cloud artificial intelligence makes the auditor able to support the principles of disclosure, transparency and accountability in his report and present them to the stakeholders	56	15	9	0	0	4,587	91	2	
10	The auditor's report is affected by the size of the application of modern technology techniques as a result of the increase in the volume and diversity of available data	32	15	23	10	0	3,575	71	6	
							<b>Total</b>	<b>4,301</b>	<b>%85</b>	

It appears from Table No. (2) that the first ranks (first, second) were obtained by phrases with sequences (2), (1), respectively, with a relative importance of (92), (91), respectively, and an average of (4,612), (4, 55) respectively, while the sequences (5), (8) shared the third rank with a relative importance of (89) and an average of (4.45) for both expressions, while the last three ranks (fourth, fifth, sixth) belong to ranks (4), (7), (10) respectively, with a relative importance of (78), (84), (71), respectively, and an average of (3,937), (4,175), and (3,575), respectively.

The previous analysis indicates that the application of cloud artificial intelligence plays an important role in improving the quality of the auditor's report, with a relative importance of (85%) and an average of (4,301), which means that the second hypothesis is accepted.

## 7- CONCLUSIONS

A- The use of cloud artificial intelligence in the audit process has a positive impact on increasing audit efficiency.

B- The need for the current auditing standards to be amended for the purpose of adapting to the new reality and what it contains of modern technological techniques.

C- The use of cloud artificial intelligence improves audit evidence sources by providing huge data to auditors, enabling them to conduct in-depth analysis to obtain information that supports audit evidence.

d- Auditors need for training and continuous education to increase their experience and skills in line with development processes and enable them to use modern technology techniques.

E- The use of cloud artificial intelligence leads to the speedy completion of the review process by the reviewers, which is reflected in the speed of preparing the report and submitting it at the appropriate time for the decision makers.





F- The use of cloud artificial intelligence leads to the immediate detection and control of errors and fraud in the presence of auditors trained in the use of modern technological techniques.

### **8- RECOMMENDATIONS**

A- Working on updating the current auditing standards in line with cloud auditing for the purpose of being approved by the auditors.

B- Continuous training by the auditors so that they are fully aware of the developments, cloud storage methods, and appropriate auditing methods for each type.

C- Developing school curricula to include modern technological developments and concepts of cloud auditing.

D- Urging academics and researchers to conduct more scientific research and shed light on the importance of using cloud artificial intelligence in auditing offices and explaining its impact on the auditing profession.

E- Organizations and bodies concerned with the auditing profession urge auditing offices to hold developmental and qualifying courses for their employees in order to keep pace with technological developments.

F- The auditor's confirmation of the adequacy of data protection measures stored in the cloud, with the application of a set of tests that enable him to obtain reasonable evidence to evaluate the effectiveness and efficiency of cloud artificial intelligence.

### **ARABIC SOURCES**

1-Dr. Rasha Muhammad Hamdi Al-Haddad, "The Impact of the Application of Digital Transformation in Auditing Facilities on the Quality of the Auditing Process: A Field Study on the Professional Environment in Egypt," Department of Accounting, College of Business Administration, Al-Ahram Canadian University, Scientific Journal of Financial and Administrative Studies and Research, Volume Thirteen, Number Two, 2022

2- Dr. Shadi Ahmed Zaki Owais, "The Impact of Digital Transformation Technologies on the Performance of the Audit Process in Egypt, A Field Study," Faculty of Commerce, Damietta University, Volume Four, Issue Two, Part Two, 2023

3-Dr. Ahmed Saeed Abdel-Azim Ahmed, "The Impact of Cloud Artificial Intelligence Techniques on Improving the Quality of Audit Evidence in Light of Related Auditing Standards – A Field Evidence from the Egyptian Stock Exchange," for the Scientific

Journal of Financial and Commercial Studies and Research, Vol.

4-Dr. Maged Ezzat Hussein Hamada, "The effect of the relationship between the experience and size of the audit office and its awareness of the opportunities and challenges of the audit process in light of cloud computing technology and its reflection on the procedures for planning the audit process - an experimental study", Faculty of Commerce, Beni Suef University, Volume XIII, 2022

5- Dr. Muhammad Ali Wahdan, "Contemporary Challenges to the Auditing Profession in Egypt and Methods of Confronting Them: A Field Study", Journal of Commerce and Finance, Faculty of Commerce, Tanta University, (1) 689-734

### **FOREIGN SOURCES: -**

1. Deloitte. (2018). The Fourth Industrial Revolution is here—are you ready? Retrieved from Deloitte Insights. Available at: <https://www.deloitte.com>.
2. Tarek, M., Mohamed, E. K., Hussain, M. M., & Basuony, M. A. (2017). The implication of information technology on the audit profession in developing country. *International Journal of Accounting & Information Management*. 25 (2), pp. 237-255.
3. Henry, H., & Rafique, M. (2021). Impact of Artificial Intelligence (AI) on Auditors: A Thematic Analysis. *IOSR Journal of Business and Management*.
4. Taha, A. A., Ramo, W., & Alkhaffaf, H. H. K. (2021). Impact of external auditor– cloud specialist engagement on cloud auditing challenges. *Journal of Accounting & Organizational Change*, 17(3), 309-331.
5. Kefeng, F. A. N., Fei, L. I., Haiyang, Y. U., & Zhen, Y. A. N. G. (2021). A Blockchain-Based Flexible Data Auditing Scheme for the Cloud Service. *Chinese Journal of Electronics*, 30(6), 1159-1166.
6. Halpert, Ben. 2011. *Auditing Cloud Computing A Security and Privacy Guide*. John Wiley & Sons, Inc. Hoboken, New Jersey. Canada.
7. Karlsen A. & Wallberg M. (2017). The effects of digitalization on auditors' tools and working methods: A study of the audit profession. Available at: <http://www.divaportal.org/smash/get/diva2:1115922/FULLTEXT01.pdf>
8. Tarek, M., Mohamed, E. K., Hussain, M. M., & Basuony, M. A. (2017). The implication of



information technology on the audit profession in developing country. *International Journal of Accounting & Information Management*. 25 (2), pp. 237-255.

9. Yassein, M. B., Hmeidi, I., Alomari, O., Mardini, W., AlZoubi, O., & Krstic, D. (2022). Blockchain Technology in Cloud Computing: Challenges and Open Issues. In *Digital Transformation Technology* (81-98). Springer, Singapore.
10. Mookerjee, J. (2021). A Review of the Robotic Process Automation's Impact as a Disruptive Innovation in Accounting and Audit. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 12(12), 3675-3682.
11. Antunes, M., Maximiano, M., & Gomes, R. (2022). A Customizable Web Platform to Manage Standards Compliance of Information Security and Cybersecurity Auditing. *Procedia Computer Science*, 196, 36-43.
12. Young, J. J., Kyoung, S. H., Park, M., & Shin, Y. (2021, January). Cloud computing transformation: Considering adoption of mixed security. In *2021 21st ACIS International Winter Conference on Software Engineering, Artificial Intelligence, Networking and Parallel/Distributed Computing (SNPD-Winter)* (90-95). IEEE.