


Examining the correlation between cloud technology, the improvement of IFRS development, and the efficiency of accounting functions

Ispitivanje korelacije između cloud tehnologije, unapređenje razvoja MSFI i efikasnosti računovodstvene funkcije

Maša Georgijev^a 

^a Academy of Professional Studies South Serbia, Department of Business School Leskovac, Serbia

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Abstract

Cloud technology has a significant impact on the accounting function, financial reporting, and the application of International Financial Reporting Standards (IFRS). This research aims to examine the correlation between the implementation of cloud technology, enhanced IFRS adoption, and the efficiency of the accounting function. Using a descriptive method and correlation coefficient, the study analyzes the relationships and degree of connection between these phenomena. The research involved 32 employees from financial operations in companies and accounting agencies in southeastern Serbia, primarily in the regions of Leskovac and Niš. The paper defines two hypotheses, presents the research findings, and draws conclusions based on them. The results indicate a modest relationship between the implementation of cloud technology and the increased efficiency of the accounting function, as evidenced by faster execution of accounting tasks, reduced overall costs, and the easier adoption of new systems. Additionally, the implementation of cloud technology has a slight positive impact on the improvement of IFRS application, through the use of specialized knowledge, the provision of reliable information, and the reduction of inconsistencies in IFRS application.

Keywords: cloud technology, accounting function, IFRS

Sažetak

Cloud tehnologija ima značajan uticaj na računovodstvenu funkciju, finansijsko izveštavanje kao i na Međunarodne standarde finansijskog izveštavanja (MSFI). Cilj istraživanja jeste da se ispita korelacija između primene cloud tehnologije, unapređenja primene MSFI i efikasnosti računovodstvene funkcije. Primenom deskriptivne metode i koeficijenta korelacije ispitana je zavisnost, kao i stepen povezanosti između posmatranih pojava. U sprovedenom istraživanju učestvovalo je 32 zaposlena na finansijskim poslovima u kompanijama i u računovodstvenim agencijama na jugoistoku Srbije, pretežno na teritoriji Leskovca i Niša. U radu su definisane dve hipoteze, prikazani rezultati istraživanja, kao i zaključci koji proizilaze iz toga. Rezultati istraživanja pokazuju da postoji neznatna veza između implementacije cloud tehnologije i povećanja efikasnosti računovodstvene funkcije kroz agilnije i brže obavljanje računovodstvenih aktivnosti, smanjenje ukupnih troškova i lakše usvajanje i korišćenje novih instalacija. Na dalje, primena cloud tehnologije neznatno pozitivno utiče na unapređenje primene MSFI kroz korišćenje specijalizovanih znanja, pružanje pouzdanih informacija, ublažavanja nedoslednosti u primeni MSFI.

Ključne reči: cloud tehnologija, računovodstvena funkcija, MSFI

1. Introduction

Cloud technology has a significant impact on the accounting function, financial reporting, and International Financial Reporting Standards (IFRS). By adopting cloud technology, companies can streamline the financial reporting process, enhance accuracy, and gain new

insights into financial performance. Cloud technology positively affects the efficiency of the accounting function by providing real-time access to financial data from any location, at any time, and on any device. This eliminates the need for local servers and enables accountants, managers, and decision-makers to access up-to-date financial information without the delays typically

*Corresponding author

E-mail address: kulic.masa@vpsle.edu.rs

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associated with traditional accounting software. With real-time data, accounting teams can produce more timely reports, ensure compliance, and reduce errors caused by delays in data processing.

Moreover, cloud technology positively impacts company management by offering the ability to instantly review, update, and analyze financial data, thus supporting more agile decision-making and improving forecasting and budgeting processes. Automated financial reporting and integration also enable smoother data flow between departments (e.g., sales, inventory, and finance), reducing the likelihood of errors and delays. This, in turn, enhances the consistency and quality of financial and operational information across the company. The benefits of cloud technology are numerous, and a substantial body of research confirms its positive impact on overall business performance.

This paper first reviews existing research in this field, defines cloud technology, and outlines its characteristics, models, and types of services, as well as the advantages and disadvantages it offers. The conclusion provides a summary of the findings and suggests guidelines for future research in this area.

2. Literature review

The literature review reveals several studies that investigate the impact of cloud technology on the quality of accounting information. One such study is by Kmaleh (2023), which explores both the theoretical and practical aspects, offering a holistic view of how cloud technology affects accounting practices. The research finds that the adoption of cloud technology positively influences the quality and credibility of accounting information. The contribution of this study is to highlight how the advantages of cloud technology can be utilized to improve accounting practices. The study also identifies inherent risks associated with cloud technology, such as security concerns, contractual challenges, and potential human errors. By emphasizing these risks, the study contributes to a better understanding of the challenges that must be addressed when adopting cloud technologies in accounting. The study by Helio & Abdullah (2023) examines the role of cloud technology in facilitating the implementation of International Financial Reporting Standards (IFRS) in private banks in Iraq. It highlights the challenges these banks face, including the lack of local knowledge and professional expertise, which complicates the adoption of IFRS. The study emphasizes the advantages of cloud technology, such as improved access to accounting information and enhanced efficiency in financial reporting. The authors recommend using cloud technology to overcome obstacles and improve the quality of accounting information in line with IFRS requirements. In their paper, Meiryani & Susanto (2018) highlight that information technology is a factor that can improve the quality of accounting information systems. This research was conducted to determine the results by examining the impact of information technologies on accounting information systems. The results of this study show that the issue in an unqualified accounting information system

arises because information technologies are not as effective as expected. Shivarajappa (2024) paper makes several significant contributions to understanding how cloud technology impacts financial accounting, with a focus on accounting firms. One of the key contributions mentioned is that the implementation of cloud technology leads to a transformation of business operations. The paper emphasizes the shift from traditional accounting practices to cloud-based solutions, demonstrating the transformative nature of this technology in the financial sector. In short, this paper serves as a comprehensive review of the impact of cloud technology on financial accounting, offering valuable insights into its benefits and challenges, while providing a roadmap for accounting firms seeking to adopt cloud technology. The study by Wahhab et al. (2024) highlights that the implementation of cloud accounting can significantly improve the quality of financial reporting. This is crucial for organizations, particularly in developing markets such as Iraq, where the study was conducted, as it leads to more reliable and accurate financial statements, which are essential for decision-making by investors and creditors. The practical implications of this study suggest that adopting cloud accounting can lead to significant improvements in financial reporting quality, cost-efficiency, and overall organizational performance, especially in developing markets like Iraq.

The characteristics of cloud technology stem from its most widely accepted definition, proposed by the National Institute of Standards and Technology (NIST). This definition is typically used as the foundation for subsequent studies on cloud technology (Hoberg et al., 2012). According to NIST, cloud technology is defined as "... a model that enables ubiquitous, convenient network access to shared computing resources (e.g., networks, servers, storage, applications, and services), which can be rapidly provisioned to users or terminated at the user's request, with minimal interaction with the service provider" (Mell & Grance, 2011, p.145).

Cloud technology services can be classified in several ways. Generally, cloud services are divided into three groups or layers, which are hierarchically structured such that each layer provides a service to the layer above it (Zhang et al., 2010). Therefore, "the architecture of cloud technology is modular in nature. Each layer is interconnected with the layers above and below it, while ensuring that each layer operates independently. This modularity allows cloud technology to support a wide range of application requirements while reducing management and maintenance costs" (Christauskas & Miseviciene, 2012).

IaaS – Infrastructure as a Service is the lowest level of service, where the user pays for the services, they actually rent and use (e.g., processing power, disk storage space, operating systems). PaaS – Platform as a Service is a higher level of service, allowing users to install their own applications using the provider's platform. PaaS occupies the middle layer in the cloud service architecture. This layer provides services such as operating system support and software development frameworks (Zhang et al.,

2010). SaaS – Software as a Service is the highest level of service, where applications are hosted by a service provider and made available to users over a network, most commonly the Internet (Christauskas & Miseviciene, 2012). Users choose a cloud service model based on their technical, business, and operational requirements. Therefore, a distinction can be made between private cloud, community cloud, public cloud, and hybrid cloud (Mell & Grance, 2012; Zhang et al., 2010).

Cloud technology, as a new paradigm in the information technology sector, provides scalable, adaptable, and economically sustainable solutions for businesses, impacting all business functions within an organization. Thus, the implementation of cloud technology directly affects the accounting function and the financial reporting process itself. Specifically, the application of cloud technology in accounting provides flexible access to financial information in real-time on any device with an internet connection. Information is created in real-time and does not require software updates, as it is automatically updated and archived (Spasić et al., 2024). Cloud platforms facilitate immediate access to financial data, reducing the likelihood of errors associated with manual data entry (Novichenko et al., 2024). The nature of digital accounting systems, including cloud accounting, is characterized by easily accessible data due to the use of integrated systems, real-time reporting, and continuous development. New technologies in digital accounting are designed to meet the immense pressure of "on-demand data." Smartphones, applications, and social media are the primary carriers of this process. Continuous progress allows financial professionals to spend more time advising clients and assisting in strategy development rather than merely generating financial reports (Vićentijević, 2021). Cloud solutions enable multiple users to access and collaborate on financial reports simultaneously, enhancing teamwork and efficiency (Esawi et al., 2024).

From the perspective of accounting coverage, the application of cloud technology carries significant challenges, especially in relation to accounting standards. Implementing cloud technology requires a revision of conventional accounting standards to address challenges related to cost distribution associated with cloud technology and compliance with regulations. On the other hand, cloud technology provides improved financial management and greater efficiency in accounting functions through advanced data analysis and the ability to produce real-time financial reports. Formulating standard accounting frameworks for cloud technology can help businesses efficiently manage these challenges and exploit the benefits of cloud technology. Cloud systems help maintain compliance with regulations by automating updates and ensuring that financial reports adhere to legal standards (Albaz & Metwaly, 2023).

The integration of cloud technology in the application of International Financial Reporting Standards (IFRS) is a step forward in enhancing the quality and efficiency of accounting information systems. Cloud technology offers a versatile, scalable, and economically sustainable

platform that can improve the application of IFRS by enhancing data accessibility, processing capabilities, and data storage solutions. This integration can bring improvements in the accuracy, speed, and objectivity of financial reporting, which are essential for maintaining the integrity and reliability of financial information. The emergence of cloud technology simplifies the implementation of IFRS by allowing the preparation, storage, and retrieval of accounting data from any location with internet connectivity. This accessibility promotes qualitative characteristics of accounting information, such as relevance and reliability, ensuring that data remains timely and easily accessible for informed decision-making (Helio & Abdullah, 2023).

Some of the benefits of applying cloud technology in financial reporting include improved quality of accounting information, as the inclusion of cloud technology in accounting systems significantly enhances the quality of financial information by enabling faster and more accurate data processing. This improvement is achieved through the cloud's ability to efficiently manage large datasets, which is crucial for maintaining the accuracy of financial reports (Helio & Abdullah, 2023). Cloud technology provides a cost-effective solution for storing and processing financial data. By utilizing cloud services, organizations can reduce the need for local infrastructure, resulting in significant cost savings. Furthermore, cloud platforms offer scalable resources that can be adjusted to meet the organization's requirements. This feature is particularly useful for managing variable workloads, ensuring that financial systems can respond to fluctuations in data volume without sacrificing performance (Wang et al., 2012). Cloud technology platforms are designed to deliver robust security protocols necessary to protect sensitive financial information. Moreover, these systems ensure high reliability and availability, guaranteeing that financial data is accessible and adequately protected (Helio & Abdullah, 2023). In addition to all the aforementioned benefits of applying cloud computing to IFRS, there are several challenges that need to be considered, such as regulatory frameworks and compliance issues. Although cloud technology provides numerous advantages, challenges related to regulatory compliance and data security also arise. Organizations must ensure that their cloud service providers adhere to relevant financial regulations and standards to maintain the integrity of their financial reports (Smith et al., 2014). Furthermore, one of the risks that can occur in the implementation of cloud computing is the complexity of implementation. Transitioning to cloud-based financial systems can be complicated, requiring careful planning and execution. Organizations must consider factors such as data migration, system integration, and user training to ensure a seamless transition and optimize the benefits of cloud technology (Helio & Abdullah, 2023).

3. Methodology

While cloud technology offers a potentially beneficial route to enhancing the implementation of International Financial Reporting Standards (IFRS) and improving the

quality of accounting information, it also requires careful management of regulatory, security, and implementation challenges. By effectively addressing these barriers, organizations can leverage cloud technology to achieve more efficient and reliable financial reporting. However, before proceeding, it is essential to understand the nature of the relationship between cloud technology, IFRS, and the accounting function. This research aims to examine the impact of cloud technology implementation on the development of IFRS application and the efficiency of the accounting function. The primary hypotheses in this paper are as follows:

- The implementation of cloud technology has a positive correlation with the improvement of IFRS implementation;
- Cloud technology applications have a positive correlation with the efficiency of the accounting function.

The purpose of this research is to explore the relationship between cloud technology implementation and IFRS, as well as the effect of cloud technology on the quality of accounting information and the overall efficiency of the accounting function. The study also aims to investigate whether cloud technology influences the development of guidelines and recommendations to improve IFRS application, ensuring that modern financial reporting meets the demands of current technology while adhering to regulatory, implementation, and security protocols.

Previous studies on this topic have generally focused on the application of cloud technology in accounting and its impact on the accounting function. However, this research, in addition to exploring this relationship, also addresses the impact of cloud technology on the application of IFRS. The studies on which the hypotheses in this paper are based include the study by Mustafa et al. (2023), which examines the impact of cloud technology implementation on IFRS in private banks in Iraq, as well as the study by Kmaleh (2023). This study seeks to examine the impact of cloud computing on the quality of accounting information and its alignment with international financial reporting standards.

For this research, primary data was collected through a survey using Google Forms. The collected data were then analyzed using the Statistical Package for Social Sciences (SPSS) software, employing correlation analysis as the statistical method. The statistical sample includes random companies and accounting agencies located in Serbia, primarily concentrated in the southeast region.

In addition to these applied methods, both deductive and inductive approaches were used, along with the descriptive method, which involves analyzing previous studies and research on this topic. To assess the correlation between cloud technology, improved IFRS implementation, and accounting function efficiency, a questionnaire was used, based on a survey previously employed by Mustafa et al. (2023). This questionnaire was modified by the authors of this paper. In addition to key questions, the questionnaire also included sociodemographic questions. The online questionnaire

was distributed via social media and email to the target group. It includes questions on the relationship between cloud technology implementation, IFRS improvement, and accounting function efficiency, such as queries about increasing accounting professionals' productivity, enhancing the accuracy and reliability of accounting information, facilitating seamless access to data, reducing costs, etc., as well as sociodemographic questions regarding gender, age, education, and work experience.

The questionnaire consists of three sections: sociodemographic questions; the correlation between cloud technology implementation and accounting function efficiency; and the correlation between cloud technology and improved IFRS implementation. Answers were provided on a scale from 1 ("strongly disagree") to 5 ("strongly agree"). If respondents scored 3 or higher, it was interpreted as complete agreement with the statement; scores between 2 and 3 reflected partial agreement, while scores below 2 indicated complete disagreement.

Data were collected from a relevant sample of individuals employed in companies and accounting agencies in southeast Serbia, primarily in the cities of Leskovac and Niš. The total sample consists of 32 respondents, 7 of whom are men and 25 of whom are women, making up 78.1% women. The average age of the respondents is 42.31 years, with three-quarters of the respondents being under 40 years old. The average length of work experience in the same or similar positions is 14.25 years. 25% of the respondents have more than 24 years of work experience, while nearly 60% have less than 12 years of work experience. In terms of education, 37.5% of respondents hold a basic academic degree, 31.3% have completed college, and only 1% have a master's degree. Regarding job positions, most respondents work in accounting-related roles: 50% are accountants, 15.6% are administrative workers in accounting, 6.3% are bookkeeper-entrepreneurs, 3.1% are head accountants, 18.8% are finance and accounting officers, and 6.3% are financial directors.

4. Research results and discussion

In Table 1, the author wanted to show the impact of cloud technology on the efficiency of the accounting function. The results of the descriptive statistical analysis are in Table 1. Observing all the given statements about the impact of cloud technology implementation on the efficiency of the accounting function, the respondents rated the impact of cloud technology through easier adoption of new applications compared to traditional ones as the most significant for increasing the efficiency of the accounting function ($M=3.94$; $Me=4$; $Mo=4$). Following this, the impact of cloud technology on improving the efficiency of the accounting function through faster and more agile performance of accounting activities ($M=3.78$; $Me=4$; $Mo=4$) was noted. The same results were obtained regarding the statement that the implementation of cloud technology reduces overall costs. The value of the standard deviation indicates that the respondents generally agree with the given ratings ($\sigma \approx 1$). Based on the median and mode of these statements, we conclude that half of the

respondents believe that cloud technology has an impact on the efficiency of the accounting function, which reflects their overall stance, somewhat in line with the results obtained through correlation analysis, which will be presented later in the paper.

Based on the correlation analysis, a weak correlation was identified between the use of cloud technology and the

efficiency of the accounting function, as well as between the use of cloud technology and the improvement of IFRS implementation. The values obtained from the correlation analysis—first for the relationship between the use of cloud technology and the efficiency of the accounting function—are presented in Table 2.

Table 2. Descriptive statistics - the correlation between cloud technology implementation and accounting function efficiency

Statements	N	Min	Max	M	SD	Med.	Mod.
I apply cloud technology in performing accounting functions.	32	1	5	3.72	0.958	4	4
The implementation of cloud technology increases the efficiency of performing the accounting function through faster and more agile performance of accounting activities.	32	2	5	3.78	0.792	4	4
The implementation of cloud technology increases the efficiency of performing the accounting function by reducing total costs.	32	3	5	3.78	0.706	4	4
The implementation of cloud technology increases the efficiency of performing the accounting function by enabling easier adoption and use of new applications compared to traditional installations.	32	1	5	3.94	0.878	4	4

Source: Author's analysis using SPSS 20.0

Table 2. Correlation analysis between cloud technology implementation and accounting function efficiency

Spearman's rho/Statements	I apply cloud technology in performing accounting functions	
	Correlation coefficient	N
The implementation of cloud technology increases the efficiency of performing the accounting function through faster and more agile performance of accounting activities.	0.498**	32
The implementation of cloud technology increases the efficiency of performing the accounting function by reducing total costs.	0.471**	32
The implementation of cloud technology increases the efficiency of performing the accounting function by enabling easier adoption and use of new applications compared to traditional installations.	0.407*	32

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's analysis using SPSS 20.0

The data does not follow a normal distribution, so the Spearman correlation coefficient was used. By analyzing the Spearman coefficient, we examined the degree of agreement between individual statements related to the positive impact of cloud technology implementation on the efficiency of the accounting function.

The implementation of cloud technology has a slightly positive impact on the efficiency of performing accounting functions through faster and more agile execution of accounting activities, as the correlation coefficient obtained is 0.498, indicating a slight direct correlation. The results obtained relate to all respondents, meaning the combination of both theoretical and practical experiences of the respondents, including those who use and those who do not use cloud technology in performing accounting functions. A study conducted by Kmaleh (2023) showed significant positive effects of cloud technology on accounting functions, particularly on faster and more agile performance of accounting activities, which contradicts the results obtained in this study.

According to the opinions of those who use and those who do not use cloud technology in performing accounting

functions, but possess theoretical knowledge, the implementation of cloud technology also slightly increases the efficiency of accounting functions through reduced overall costs, as the correlation coefficient obtained is 0.471, showing a slight direct correlation.

A study conducted by Kmaleh (2023) showed significant positive effects of cloud technology on cost efficiency, which again contradicts the results obtained in this study. The reduction in overall costs should also be a result of increased efficiency in performing the accounting function through faster and more agile execution of accounting activities. However, since the previous question yielded results that contradicted those obtained in previous studies, the participants' responses here also yielded different claims.

Furthermore, the opinions of all respondents also show that the implementation of cloud technology slightly increases the efficiency of accounting functions through easier adoption and use of new applications compared to traditional installations, as the correlation coefficient obtained is 0.407, showing a slight direct correlation. All of these issues are interrelated and should demonstrate

that each of these factors individually, and in synergy, positively affects the efficiency of the accounting function, as suggested by studies on which this research is based. However, this study does not conclusively prove this.

In Table 3, the correlation analysis is presented between the implementation of cloud technology for those respondents who actually apply it in performing the accounting function and the efficiency of the accounting function. Out of 32 respondents, 22 use cloud technology in performing accounting functions.

Table 3. Correlation analysis between the implementation of cloud technology for respondents who apply cloud technology in performing the accounting function and the efficiency of the accounting function

Spearman's rho/Statements	I apply cloud technology in performing accounting functions	
	Correlation coefficient	N
The implementation of cloud technology increases the efficiency of performing the accounting function through faster and more agile performance of accounting activities.	0.525*	22
The implementation of cloud technology increases the efficiency of performing the accounting function by reducing total costs.	0.524*	22
The implementation of cloud technology increases the efficiency of performing the accounting function by enabling easier adoption and use of new applications compared to traditional installations.	0.425*	22

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's analysis using SPSS 20.0

Analyzing the responses of respondents who use cloud technology in performing accounting functions led to the conclusion that the implementation of cloud technology also slightly, but to a greater extent than those who don't use, improves the efficiency of performing accounting functions through faster and more agile execution of accounting activities, as the correlation coefficient obtained is 0.525, which is a more relevant indicator, as they can have a more realistic insight due to practical experience.

Analyzing the responses of only those respondents who use cloud technology in performing accounting functions led to the conclusion that the implementation of cloud technology in accounting functions also slightly increases the efficiency through cost reduction, as the correlation coefficient obtained is 0.524, showing a slight direct correlation, but still higher than the results obtained from those who do not use cloud technology, but who answered based only on theoretical knowledge. This suggests that practical experience in applying cloud technology is of great importance for fully exploiting the benefits of cloud technology.

Respondents who use cloud technology in performing accounting functions gave similar answers to those who do not apply cloud technology. Correlation coefficient of 0.425 shows a slightly higher direct correlation.

Based on the previously obtained results, we observe that the correlation values are low, leading to the conclusion that the implementation of cloud technology slightly positively affects the efficiency of accounting functions, thus rejecting the first hypothesis. These results are not entirely in line with the findings of previous research and theoretical claims. The reason for this might be insufficient awareness and understanding among employees in accounting rules regarding the benefits of cloud technology, and the relatively short duration of work experience in these roles (almost 60% of respondents have less than 12 years of work experience).

In Table 4, the author wanted to show the impact of cloud technology on the efficiency of the improvement of IFRS implementation. The results of the descriptive statistical analysis are as follows.

Table 4. Descriptive statistics - the impact of cloud technology on the efficiency of the improvement of IFRS implementation

Statements	N	Min	Max	M	SD	Med.	Mod.
I apply IFRS in financial reporting.	32	2	5	3.94	0.669	4.00	4
The implementation of cloud technology results in increased productivity of accounting professionals through the use of specialized knowledge provided by entities adhering to IFRS.	32	3	5	3.84	0.628	4.00	4
The primary goal of implementing International Financial Reporting Standards is to provide accurate and reliable information for the benefit of all stakeholders, and this is precisely the advantage offered by cloud technology.	32	1	5	3.78	0.878	4.00	4
Cloud technology improves the implementation of International Financial Reporting Standards by enabling users to accurately and efficiently translate components of financial reports into multiple languages, while also leveraging the benefits of electronically distributed financial reports.	32	2	5	3.88	0.707	4.00	4

Table 4. Continued

Statements	N	Min	Max	M	SD	Med.	Mod.
Cloud technology facilitates companies' adherence to International Financial Reporting Standards by providing relevant information related to financial reports and integrating this data with additional knowledge, resulting in cohesive information.	32	3	5	3.84	0.628	4.00	4
Cloud technology mitigates the challenges associated with inconsistencies in the application of International Financial Reporting Standards among companies, thereby facilitating seamless access to data by regulatory authorities at any time and from any location.	32	2	5	3.78	0.751	4.00	4

Source: Author's analysis using SPSS 20.0

Observing all the given statements about the impact of cloud technology implementation on the improvement of IFRS development, the respondents confirmed that the majority apply IFRS in their work (M=3.94; Me=4; Mo=4). Furthermore, they rated the positive impact of cloud technology on improving IFRS development, through accurate and efficient translation of financial statement components, as the most significant (M=3.88; Me=4; Mo=4). Similarly, the impact of cloud technology on utilizing the specialized knowledge offered by business entities that apply IFRS in their work was rated as the next most significant (M=3.84; Me=4; Mo=4). The same results were obtained for the statement that the implementation of cloud technology impacts the improvement of IFRS development by providing relevant information related to financial statements and integrating this data with additional insights, resulting in cohesive information.

The questions related to the impact of cloud technology on providing accurate and reliable information to all stakeholders, as the primary goal of applying IFRS, and the impact of cloud technology on alleviating challenges associated with irregularities in IFRS application, were rated less positively by the respondents (M=3.78; Me=4; Mo=4). The standard deviation value indicates that respondents mostly agree with the given ratings ($\sigma \approx 1$). Based on the median and mode of these statements, we conclude that half of the respondents believe that cloud technology has an impact on improving the development of IFRS application, which is also shown by the correlation analysis presented later in the paper.

In Table 5, we examined the strength of the correlation between the use of cloud technology and improved IFRS implementation. By analyzing the Spearman coefficient, we came to the following results.

Table 5. Analysis of the correlation between the implementation of cloud technology and the improvement of IFRS implementation

Spearman's rho/Statements	I apply cloud technology in performing accounting functions	
	Correlation coefficient	N
I apply IFRS in financial reporting.	0.202	32
The implementation of cloud technology results in increased productivity of accounting professionals through the use of specialized knowledge provided by entities adhering to IFRS.	0.445**	32
The primary goal of implementing International Financial Reporting Standards is to provide accurate and reliable information for the benefit of all stakeholders, and this is precisely the advantage offered by cloud technology.	0.594**	32
Cloud technology improves the implementation of International Financial Reporting Standards by enabling users to accurately and efficiently translate components of financial reports into multiple languages, while also leveraging the benefits of electronically distributed financial reports.	0.245	32
Cloud technology facilitates companies' adherence to International Financial Reporting Standards by providing relevant information related to financial reports and integrating this data with additional knowledge, resulting in cohesive information.	0.414*	32
Cloud technology mitigates the challenges associated with inconsistencies in the application of International Financial Reporting Standards among companies, thereby facilitating seamless access to data by regulatory authorities at any time and from any location.	0.522**	32

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's analysis using SPSS 20.0

In the third part of the research, by analyzing the Spearman correlation coefficient, we examined the degree of agreement between individual statements regarding the

positive impact of the implementation of cloud technology on improving IFRS implementation.

The application of cloud technology has a slightly positive effect on increasing the productivity of accounting professionals, as indicated by the value of the obtained correlation coefficient of 0.445. In the study conducted by Helio and Abdullah (2023), as many as 78% of respondents gave a positive answer to this question, while 22% disagreed with this statement, which, again, is contrary to the results obtained in this study (Helio & Abdullah, 2023).

Analyzing the obtained responses to this statement, we arrive at a correlation coefficient value of 0.594, which shows a slight direct correlation, but again higher than in the previous question. In the study conducted by Helio and Abdullah (2023), 95% of respondents agreed with this statement, that the application of cloud technology helps in providing accurate and reliable information to all stakeholders, which significantly deviates from the results obtained in our research (Helio & Abdullah, 2023).

The obtained correlation coefficient of 0.414 shows a higher, but still slight, direct correlation compared to the previous statements, indicating the relationship between companies adhering to IFRS by providing relevant information related to financial statements and integrating this data with additional insights, resulting in cohesive information and cloud technology. The obtained result also deviates from the study conducted by Helio and

Abdullah (2023), where 72% of respondents positively answered this statement (Helio & Abdullah, 2023).

The results obtained from the analysis of respondents' answers to the last statement do not differ significantly from the previously obtained results. These results were obtained by analyzing the responses of all respondents, where those respondents who do not apply cloud technology in performing the accounting function based their answers on theoretical knowledge. The obtained correlation coefficient of 0.522 shows a slight direct correlation between cloud technology and mitigating inconsistencies in the application of IFRS. Therefore, respondents did not notice a significant connection between the application of cloud technology and alleviating inconsistencies in the application of IFRS, just as they do not believe that cloud technology helps them with other financial reporting objectives. As many as 76% of respondents agreed with this statement in the study conducted by Helio and Abdullah (2023). For the remaining questions, the significance level is greater than 0.05, indicating that the correlation is not identified.

In Table 6, the correlation analysis is presented between the implementation of cloud technology for those respondents who actually apply it in performing the accounting function and the improvement of IFRS implementation. Out of 32 respondents, 22 use cloud technology in performing accounting functions.

Table 6. Correlation analysis between the implementation of cloud technology for respondents who apply cloud technology in performing the accounting function and the improvement of IFRS implementation

Spearman's rho/Statements	I apply cloud technology in performing accounting functions	
	Correlation coefficient	N
I apply IFRS in financial reporting.	1.000	22
The implementation of cloud technology results in increased productivity of accounting professionals through the use of specialized knowledge provided by entities adhering to IFRS.	0.384	22
The primary goal of implementing International Financial Reporting Standards is to provide accurate and reliable information for the benefit of all stakeholders, and this is precisely the advantage offered by cloud technology.	0.599*	22
Cloud technology improves the implementation of International Financial Reporting Standards by enabling users to accurately and efficiently translate components of financial reports into multiple languages, while also leveraging the benefits of electronically distributed financial reports.	0.203	22
Cloud technology facilitates companies' adherence to International Financial Reporting Standards by providing relevant information related to financial reports and integrating this data with additional knowledge, resulting in cohesive information.	0.384	22
Cloud technology mitigates the challenges associated with inconsistencies in the application of International Financial Reporting Standards among companies, thereby facilitating seamless access to data by regulatory authorities at any time and from any location.	0.326	22

** Correlation is significant at the 0.01 level (2-tailed)

* Correlation is significant at the 0.05 level (2-tailed)

Source: Author's analysis using SPSS 20.0

A similar value, for question number three, as in the previous table, is obtained for those respondents who use cloud technology in performing the accounting function, where the correlation coefficient of 0.599 shows a slightly higher direct correlation.

For the remaining questions, the significance level is greater than 0.05, indicating that the correlation is not identified, thus rejecting the second hypothesis.

5. Conclusion

This paper analyzes the existence of a correlation between the use of cloud technology, the efficiency of the accounting function, and the improvement of IFRS implementation. The sample consists of employees in the financial sector within companies and accounting agencies in southeastern Serbia, primarily in the cities of Leskovac and Niš. The research results aim to provide answers to two defined hypotheses. The study concludes that there is a slight direct correlation between the improvement of accounting function efficiency and the application of cloud technology. The same conclusion was reached for the second hypothesis, which examines the correlation between the use of cloud technology and the improvement of IFRS implementation. Results from those who use cloud technology in performing accounting functions were specifically highlighted and analyzed. Additionally, the overall results were analyzed, taking into account that those who do not use cloud technology in performing accounting functions have theoretical knowledge due to their employment in the financial sector within companies and accounting agencies, and their views are considered relevant.

In the first step, data were analyzed using descriptive statistics, which showed that the majority of respondents were female, with most having work experience of less than 12 years. In the second step, the degree of dependence between cloud technology, accounting function efficiency, and the improvement of IFRS implementation was determined using the linear correlation coefficient. As already mentioned, the research results showed a slight direct correlation. This contradicts the results of the research on which this study is based. All the questions in the questionnaire are theoretically and practically interrelated, so a negative response to one question consequently leads to a slight correlation with other statements, and the synergistic effect results in the rejection of both hypotheses. The reason for this, in the author's opinion, may be insufficient education on the application of cloud technology, and thus the inability to fully utilize all of its benefits. In this regard, the author's suggestion would be to enrich the curriculum at the level of vocational high schools, as well as at the academic level, with literature on this field.

Based on the empirical research method used in this study, certain limitations were identified. The sample of respondents is small, so the results derived from its analysis cannot be generalized to all companies and accounting agencies. Additionally, the questionnaire is brief and does not contain enough items to fully examine employee attitudes, and a significant number of respondents indicated that they do not apply IFRS in performing financial tasks, which is a significant limitation for this study.

To overcome these limitations, future research should be based on a larger sample, expand the number of questions in each section of the questionnaire, and target

respondents who are more familiar with the subject matter, as they apply IFRS in their work.

References

- Albaz, M., Alazmi, K., & Metwaly, Z. (2023). Adopting Cloud Computing and Accounting Practices: A Review of Artificial Intelligence Perspective. *International Journal of Accounting and Management Sciences*, 2(2), 193-206. <https://doi.org/10.56830/ijams04202302>
- Anderson, D., Sweeney, D., Williams, T., Freeman, J., & Shoemaker, E. (2010). *Statistics for business and economics*. South-Western Cengage Learning.
- Christauskas, C., & Miseviciene, R. (2012). Cloud-computing based accounting for small to medium sized business. *Engineering Economics*, 23(1), 14-21. <https://doi.org/10.5755/j01.ee.23.1.1220>
- Cloud computing. (2010). Hrvatska akademska i istraživačka mreža
- Cyr, S., & Choo, C. W. (2010). The Individual and Social Dynamics of Knowledge Sharing: An Exploratory Study. *Journal of Documentation*, 66(6), 824-846. <https://doi.org/10.1108/00220411011087832>
- Esawi, K. A. M., Shehab, L. S., & Benzerrouk, Z. S. (2025). The Impact of Cloud Computing on Achieving the Quality of Financial Reports. A Case Study of Egypt Bank. *WSEAS Transactions on Business and Economics*, 22, 48-57. <https://doi.org/10.37394/23207.2025.22.5>
- Helio M.M., & Abdullah B.N., (2023). The Effect of Cloud Computing in Facing the Challenges of Applying IFRSs in Iraqi Private Banks. *International Journal of Research in Social Sciences and Humanities*, 13(2), 184-195. <http://doi.org/10.37648/ijrssh.v13i02.015>
- Hoberg, G., Phillips, G. M., & Prabhala, N. R. (2012). Product Market Threats, Payouts, and Financial Flexibility. *The Journal of Finance*, 69(1), 1-47. <https://doi.org/10.2139/ssrn.1787315>
- Kmaleh, A. I. M. (2023). The Impact of Using the Cloud Computing Upon the Quality of Accounting Information and its Reflection Upon the Development of the World Standards of Financial Reports in Jordanian Corporations. *International Journal of Professional Business Review: Int. J. Prof. Bus. Rev.*, 8(9), 23. <https://doi.org/10.26668/businessreview/2023.v8i9.3771>
- Klovienė, L., & Gimzauskienė, E. (2015). The effect of information technology on accounting system's conformity with business environment: A case study in banking sector company. *Procedia Economics and Finance*, 32, 1707-1712. [https://doi.org/10.1016/S2212-5671\(15\)01476-8](https://doi.org/10.1016/S2212-5671(15)01476-8)
- M. M. Mustafa Mohamed Halyo & A. D. Bushra Najm Abdullah Al-Mashhadani (2023). Reflection application of IFRSs within the framework of cloud computing technology on improving the quality of accounting information in the Iraqi environment. *Al Kut Journal of Economics and Administrative Sciences*, 15(47), 529-552. <https://doi.org/10.29124/kjeas.1547.24>
- Meiryani, & Susanto, A. (2018, June). The influence of information technology on the quality of accounting information system. In *Proceedings of the 2018 2nd High Performance Computing and Cluster Technologies Conference* (pp. 109-115). <https://doi.org/10.1145/3234664.3234671>
- Mell, P., & Grance, T. (2011). The NIST Definition of Cloud Computing. *NIST Special Publication*, 800(145).
- Mell, P., & Grance, T. (2012). The NIST Definition of Cloud Computing: Recommendations of the National Institute

- of Standards and Technology. *NIST Special Publication*, 800(145).
- Novichenko, L., Koverninska, Y., & Shysh, A. (2024). On the implementation of digital technologies in accounting and financial analysis. *Economics Finances Law*, 5, 53-58. <https://doi.org/10.37634/efp.2024.5.10>
- Samčović, A. (2013). Bezbednosni aspekti cloud computing okruženja u mogućim vojnim primenama. *Vojnotehnički Glasnik*, 61(1), 242-259.
- Sharma, K. (2018). *Business statistics*. Vikas Publishing House.
- Shivarajappa, M. (2024). The impact of cloud computing on financial accounting - evaluating the impact of cloud computing on accounting firms. *ShodhKosh Journal of Visual and Performing Arts*, 5(3), 992-998 <https://doi.org/10.29121/shodhkosh.v5.i3.2024.3566>
- Smith, A., Bhogal, J., & Sharma, M. (2014, August). Cloud computing: adoption considerations for business and education. In *2014 international conference on future internet of things and cloud* (pp. 302-307). IEEE. <https://doi.org/10.1109/FiCloud.2014.54>
- Spasić, K., Novičević Čečević, B., & Antić, L. (2024). The impact of digitization of the cost accounting system on organizational efficiency and effectiveness in the healthcare sector of the Republic of Serbia. *BizInfo Blace*, 15(2), 39-47. <https://doi.org/10.5937/bizinfo2402039S>
- Vićentijević, K. (2021). Challenges of accounting in the modern digital environment. *REVIZOR Časopis za upravljanje organizacijama, finansije i reviziju*, 24(93), 27-36. <https://doi.org/10.5937/Rev2193027V>
- Wahhab, A. M. A., Alkhafaji, B. K., & Raji, S. M. (2024). The significance of cloud accounting implementing and its influence on enhancing the quality of financial reporting: evidence from emerging markets. *Finansovo-Kreditna Diđ'nist': Problemi Teorij Ta Praktiki*, 1(54), 146-159. <https://doi.org/10.55643/fcaptop.1.54.2024.4293>
- Zhang, Q., Cheng, L., & Boutaba, R. (2010). Cloud computing: state-of-the-art and research challenges. *Journal of internet services and applications*, 1, 7-18. <https://doi.org/10.1007/s13174-010-0007-6>