

Cloud Accounting and Its Impact on the Present Accounting Profession in Bangladesh

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ARTICLE INFO

Keywords: Cloud accounting, Cloud technology, Accounting profession, Accounting software, Accounting professionals

RECEIVED

18 May 2024

ACCEPTED

19 August 2024

PUBLISHED

7 December 2024

DOI

<https://doi.org/10.5281/zenodo.14263181>

ABSTRACT

The cloud accounting technology can be considered as a revolutionary invention that has changed the accounting profession in different industries globally. It is delivering better accessibility, improved efficiency, increased security, and scalability. The study discusses the current effect of cloud accounting on accounting profession in Bangladesh as well as compares the features of the most popular cloud accounting companies in the world. To find out the impact of cloud accounting in the present accounting profession in Bangladesh both primary and secondary data have been used. Transformation to technological solutions of manual accounting methods has introduced convenience to accountants in Bangladesh, which is also showing positive correlation between recent accounting trends and accountant's knowledge of cloud accounting in Bangladesh. The rapid adoption of modern technologies in accounting has built a strong foundation for accounting professionals to meet the growing demands in the field. Since cloud accounting in Bangladesh is in the early stage, businesses need to consider the stronger benefits of cloud accounting in the accounting processes like enhanced accessibility, cost-effectiveness, and saving time.

1. INTRODUCTION

Cloud accounting has currently become the major accounting trend occurring in many of the countries. Unlike the traditional self-installed accounting software, cloud accounting runs on remote servers, which allows data to be crunched and then returned to the user from a cloud. Such development has really improved the efficiency of the accounting systems by quickly responding to the users need (Vagner, Sarakhman, & Shurpenkova, 2023). The accounting profession has experienced a series of evolving changes since the introduction of computers and other technological developments over the years. From the beginning, the changes have been from manual methods to more advanced ways. This development has helped the accounting processes to be more systematic and convenient to the users (Bogoslov& Alexandra-Gabriela, 2023). Cloud accounting provides real-time report throughout the enterprise, helping small and medium businesses in particular with accounting and financial services functions. Tasks can be performed off sit through cloud accounting, thus making it possible for users not to be tied to their own computers. Every time a new account method is added and innovation is made, the field of accounting is constantly being updated, which adds new problems, but also provides many benefits for the users of accounting.

2. OBJECTIVES

The study mainly aims to identify the effect of cloud accounting on the current accounting profession in Bangladesh with insights from accounting professionals. The secondary aim of the study includes a relative study of the cloud accounting services provided by leading cloud firms in the world.

3. LITERATURE REVIEW

Cloud accounting, which is another name for online accounting or web-based accounting, represents a condition when the accounting functions usually performed with on-premises accounting systems are completed with the help of the internet-based software (Ionescu, Ionescu, Bendovschi & Tudoran, 2013). With the evolution of cloud computing, cloud accounting platforms have emerged allowing companies to store accounting software and data over the internet (Khanom, 2017). There are numerous studies on the benefits of cloud accounting for businesses. One of the main advantages is the possibility to use this software remotely from any place that has an internet connection, for

accounting tasks and financial data access (Thakker&Japee, 2023). It is flexibility that allows businesses to communicate closely with each other and adapt to the ever-changing business worlds. Furthermore, cloud accounting does away with the cost of hardware installation and software update thus reducing setup cost and maintenance cost (Thakker&Japee, 2023). For worldwide, the adoption of cloud accounting is rising as the demand for accounting applications that are flexible and scalable are getting bigger. Several researches have proved the positive outcome of cloud accounting with companies operating in different sectors worldwide. For instance, studies on cloud accounting software companies like Xero and Sage have shown how the use of the cloud increases revenue, efficiency and productivity (Marsintauli, Novianti, Situmorang, & Djoniputri, 2021). Cloud accounting offers several benefits for accountants. (Khanom, 2017) focused on how the subscription-based pricing model of cloud accounting software cuts out the need for initial investments in hardware or software thus letting small and medium-sized companies to have access to sophisticated accounting tools. The equalization of technology among all leads to competition on the market of accounting services (Taib, Awang, Shuhidan, Rashid, & Hasan, 2022). Cloud accounting also improves the collaboration among accountants and their clients. These cloud-based platforms are characterized by the fact that they allow users to access financial data in real time. This increases the transparency and knowledge sharing. This enhanced cooperation builds stronger ties between the accountants and clients resulting in better decision-making and client services (Imene & Imhanzenobe, 2020). The accounting professionals can make use of the cloud technology which can help them to enhance efficiency and collaboration and also reduce costs, which in turn leads to growth and innovation in the digital age (Efosa & Ojeaga, 2022). On the other hand, (Sharma, 2018) investigates the consequences of awareness on professionals' knowledge of cloud accounting through the survey among accounting experts. Based on their findings, they concluded that experts in cloud accounting platforms, who are knowledgeable about the latest accounting trends, including cloud-based technologies, had a strong positive association. Among the respondents, those who reported higher levels of awareness had a tendency to exhibit more progress in their learning and application of cloud accounting software. Although the theory predicts a positive relationship between awareness of latest accounting developments and knowledge of cloud accounting, there is evidence with dissimilar conclusion as (Bratianu, 2018), where significant association is not identified, which tells us that some factors that is beyond general level of awareness do affect acquisition of this knowledge. On the other hand, the adoption of cloud accounting in Bangladesh is not free of

challenges. (Sobhan, 2019) focused on the issues of data security and compliance, mostly related to sensitive financial information. Despite the strong security measures that the cloud accounting providers have implemented, they still need to increase the awareness and education of accounting professionals on data protection regulations and practices (Saha, Rahman, Das, Siddique & Uddin, 2020). In different, (Sarker and Islam, 2022) emphasized that the introduction of cloud accounting in Bangladesh can be the starting point for the growth of startups, innovation, employment opportunities, and better civic institutions. Cloud accounting not only helps firms but also enables accounting tasks for professionals in the field to be done more easily. It is necessary to review if the accounting professionals really obtain the perceived advantages when they start to use these cloud accounting.

4. RESEARCH GAP AND RATIONALE

The existing literature offers a wide range of knowledge on the advantages of cloud accounting most of which focus on its role in increasing efficiency and cutting costs as well as promoting collaboration between accountants and their clients. However, these studies mainly emphasize the benefits and effective implementation of cloud accounting in developed countries and with large organizations. Currently, there is a lack of knowledge about the cloud accounting and recent trend in accounting in the employees in developing countries and especially in Bangladesh where the use of cloud accounting is still limited. While some investigations more focusing on issues like data security and compliance, there are still research gaps in understanding whether or not the accounting professionals in this context are really benefiting out of the expected benefits of cloud accounting. Additionally, the mixed results on the correlation between awareness of recent trends in accounting and knowledge about cloud accounting call for us to consider other factors that may affect awareness and use of the technology in developing countries. The study provides useful information for practitioners and policymakers in understanding and encouraging the effective adoption of cloud accounting in developing economies. This research is important as it fills an existing knowledge gap and offers useful suggestions for improving the performance of cloud accounting in Bangladesh and comparable countries.

5. HYPOTHESIS

In this study we are unto two test one main hypothesis.

H_0 : There is no significant association between awareness of the recent trends in accounting and knowledge about cloud accounting.

H_1 : There is a significant association between awareness of the recent trends in accounting and knowledge about cloud accounting.

6. METHODOLOGY

The study used both primary and secondary data. The primary data are collected through interview and questionnaire. The study used questionnaire that are distributed to the fifty-four (54) accounting professionals of different organizations in Bangladesh and interview provided an opportunity for interviewer to ask to follow up questions and help respondents to ask clarity if there are any ambiguities in the question. A snowball sampling technique is applied in the data collection process and 54 are large enough to be normally distributed. Secondary data have been obtained via a variety of sources, including newspapers, books, journals, and websites. The information gathered has been useful in comprehending ideas and their implications. After collecting, the data have been accumulated and presented using both qualitative and quantitative data analysis method from the data collection through questionnaire and interview and then analyze by chart to present research findings. A chi-square test was conducted to verify the hypothesis and a regression analysis is conducted to better understand the pattern of cloud accounting within the using and non-using groups.

7. ANALYSIS AND FINDINGS

7.1 An analysis of the services offered by the top 8 cloud accounting firms worldwide

The area of accounting has experienced an overhaul into cloud accounting due to the advent of technology. Worldwide, different countries are benefiting from cloud services. As per the data from (Grand View Research, 2023); the global cloud accounting market size was valued at USD 483.98 billion in 2022 and expected to grow at a compound annual growth rate (CAGR) of 14.1% from the 2023 to 2030. This significant exponential growth shows how important cloud services are to our modern society. Many organizations offer cloud accounting solutions today. (PCMag, 2024) is showing as per the service,

these companies are the top 8 firms offering cloud accounting services on the global platform, which are Fresh Books, Intuit Quick Books, Xero, Wave, Zoho Books, Sage, Patriot and Truly Small. All account software platforms have their own unique features and benefits which cater to a specific business. Let's discuss each briefly:

FreshBooks: FreshBooks is popular for its simple-to-use interface and comprehensive invoicing features. It is much used by freelancers and small businesses because of its simplicity and functions such as expense tracking, time tracking, and client management.

Intuit QuickBooks: QuickBooks that is probably the most well-known accounting software in the world provides different versions for the small businesses, freelancers, and large corporations. It offers complete functionality, such as accounts and invoices, payrolls, inventory management, and reporting.

Xero: Xero is cloud-based accounting software that is preferred by small to medium-sized businesses. It has features comparable to QuickBooks, but with a more modern and easier to use interface. Xero focuses on collaboration and therefore, it's easy for business owners, accountants, and bookkeepers to work together using real-time.

Wave: Wave is free accounting software designed for freelancers, consultants and small businesses. It offers accounting solutions without the subscription fees and includes invoicing, expense tracking, and financial reporting features. Nevertheless, even some of the extra functions may need paid add-ons.

Zoho Books: Zoho Books is part of the Zoho ecosystem of business software that covers the accounting needs and gives you options to integrate with other Zoho applications such as CRM and inventory. It is perfect for small and medium-sized organizations seeking a comprehensive package.

Sage: Sage provides variety of accounting software solutions made to businesses from the startups to large companies. It offers a solution which is customizable for different industries and has features like invoicing, payroll, inventory management and advanced reporting.

Patriot: Patriot software focuses on small businesses and has low-cost accounting and payroll software. It is well-known for its simplicity and clear

pricing, which are among the reasons it is preferred by startups and small companies.

Truly Small: Truly Small is the software solution in the cloud created by Deloitte, which is meant for small enterprises and startups. It provides basic accounting as well as access to Deloitte's consulting support with financial management.

Accounting software platforms are selected by businesses keeping in mind factors such as their needs, budget, scalability, ease of use, integrations with others' software and customer support. Each of these channels has its advantages and may be the best fit for different types of companies or fields.

Table 7.1.1 Displaying the range of services offered by the top eight cloud accounting firms

<i>Company Name / Parameter</i>	<i>Fresh Books</i>	<i>Intuit Quick Books</i>	<i>Xero</i>	<i>Wave</i>	<i>Zoho Books</i>	<i>Sage</i>	<i>Patriot</i>	<i>Truly Small</i>
<i>Double Entry</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>All Major A/R, A/P Forms</i>	✗	✓	✓	✗	✓	✓	✗	✗
<i>Mobile Access</i>	✓	✓	✓	✓	✓	✓	✓	✓
<i>Time Tracking</i>	✓	✓	✓	✗	✓	✓	✗	✗
<i>Payroll</i>	✓	✓	✓	✓	✓	✓	✓	✗
<i>Customer/Vendor Portals</i>	✓	✗	✓	✗	✓	✗	✗	✗
<i>Tracks Inventory</i>	✓	✓	✓	✗	✓	✓	✗	✗
<i>Training Available</i>	✓	✓	✓	✓	✓	✓	✓	✗
<i>Document Management</i>	✗	✓	✓	✗	✓	✗	✓	✗
<i>CRM Integration</i>	✓	✓	✓	✓	✓	✓	✗	✗
<i>Multi-Currency</i>	✓	✓	✓	✓	✓	✓	✗	✓
<i>Live Support</i>	✓	✓	✗	✓	✓	✓	✓	✓
	10	11	11	07	12	10	06	04

Source: PCMag. (2024)

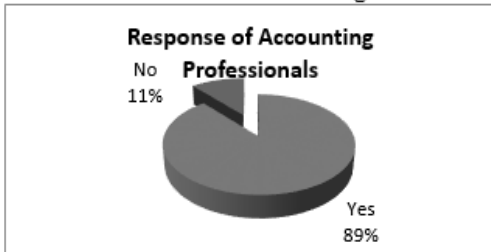
The largest numbers of services (12/12) are offered to SMEs by Zoho Books. The fewest services (4/12) are offered to SMEs by Truly Small. Double Entry and Mobile access are the two services which are provided by all the 8

companies. Customer/Vendor Portals is one service which 5 out of 8 companies fail to provide.

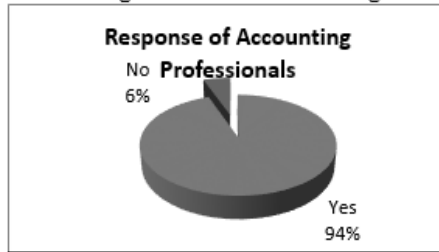
7.2 Impact of cloud accounting in the present accounting profession in Bangladesh

The following findings were obtained from a survey of 54 accounting experts to find out how cloud accounting is affecting the current state of the accounting industry in Bangladesh:

1. Awareness of current accounting trends.



2. Knowledge about cloud accounting.



Figures 7.2.1 and 7.2.2 from the survey show that 89% of accounting professionals are aware of current accounting trends and 94% have familiarity of cloud accounting.

3. Users of cloud accounting

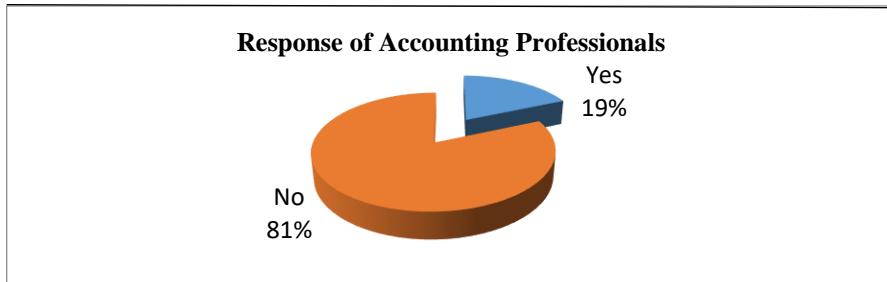
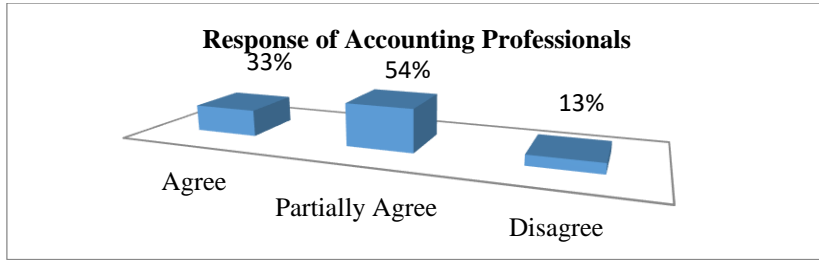


Figure 7.2.3 demonstrates that while 19% of accounting professionals use cloud accounting, 81% of them do not.

4. The idea of cloud accounting causes a firm to employ fewer people



According to figure 7.2.4, 33% of accounting professionals fully agree, 54% partially agree, and 13% disagree that using cloud accounting results in fewer people being hired.

5. The idea of cloud accounting reduces the accounting manipulation

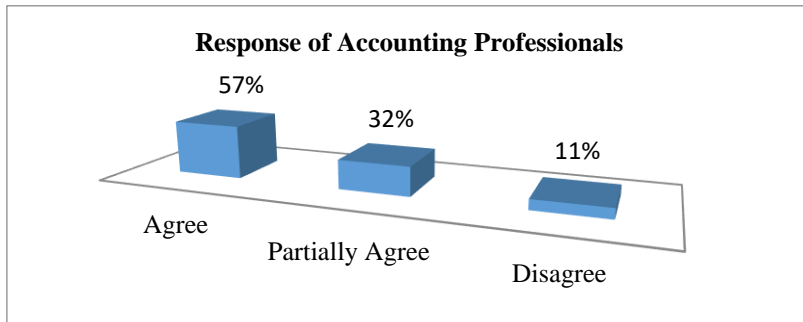
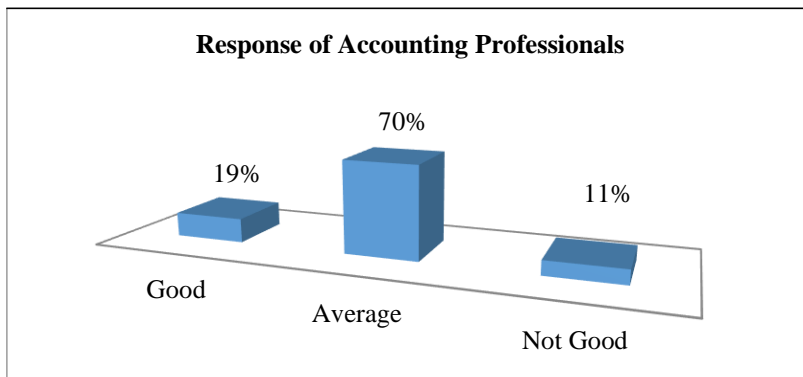


Figure 7.2.5 illustrates that while 11% of accounting experts disagree, 57% agree and 32% partially agree that cloud accounting reduces manipulations.

6. The sensitive financial information protected by cloud accounting.



According to figure 7.2.6, 70% of accounting professionals think that cloudaccounting's security of sensitive financial information is average,19% think it's good, and 11% think it's not good.

7. Compared to the previous alternatives, cloud accounting offers superior financial data analysis.

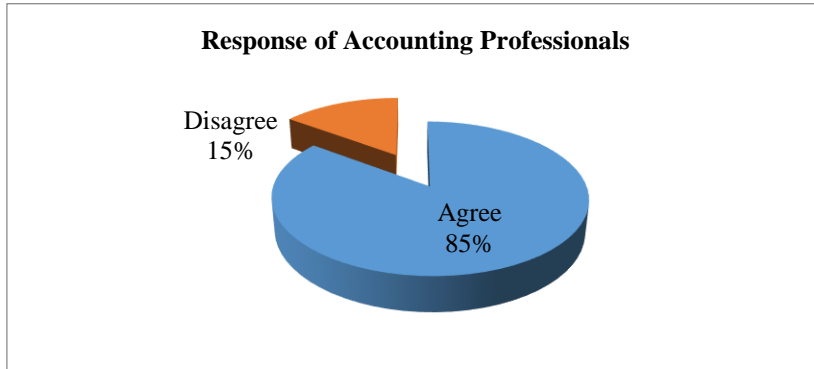


Figure 7.2.7 illustrates that a majority of accounting professionals—85%—agree that cloud accounting's financial data analysis surpasses previous alternatives, while 15% disagree.

8. Cloud billing is a more efficient than the previous options

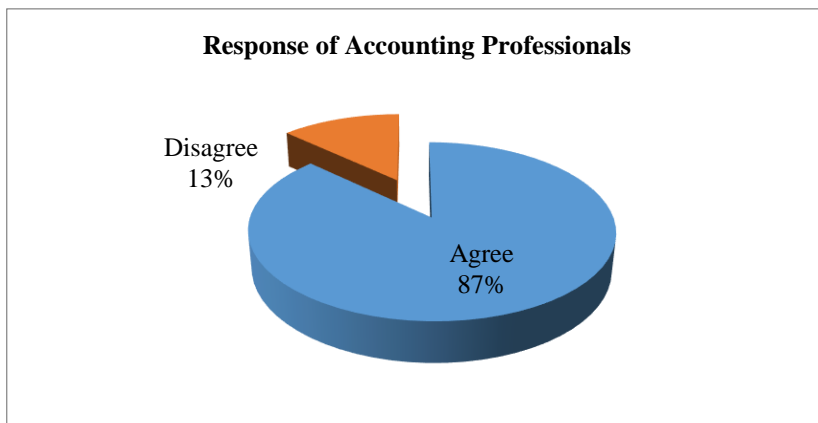


Figure 7.2.8 demonstrates that while 13% of accounting experts disagree, 87% of them think that cloud billing is more efficient than the previous options.

9. Thoughts on how effective cloud accounting is at spotting fraud

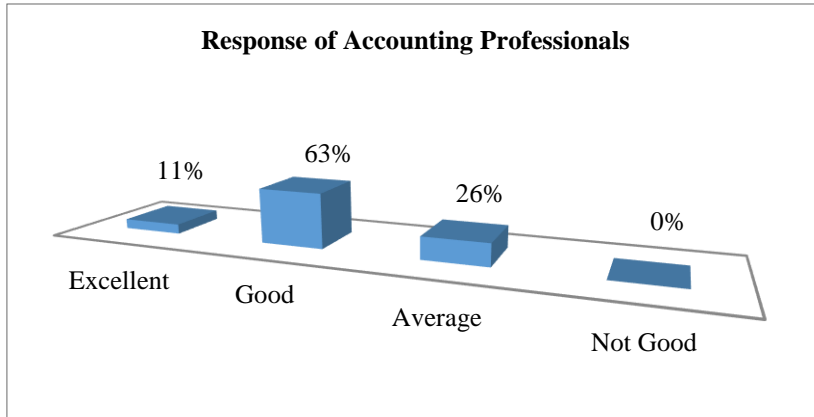


Figure 7.2.9 demonstrates that 63% of accounting professionals believe cloud accounting is effective in detecting fraud, 26% believe it is average, and 11% believe it is Excellent.

10. The use of cloud accounting to determine a company's real financial position

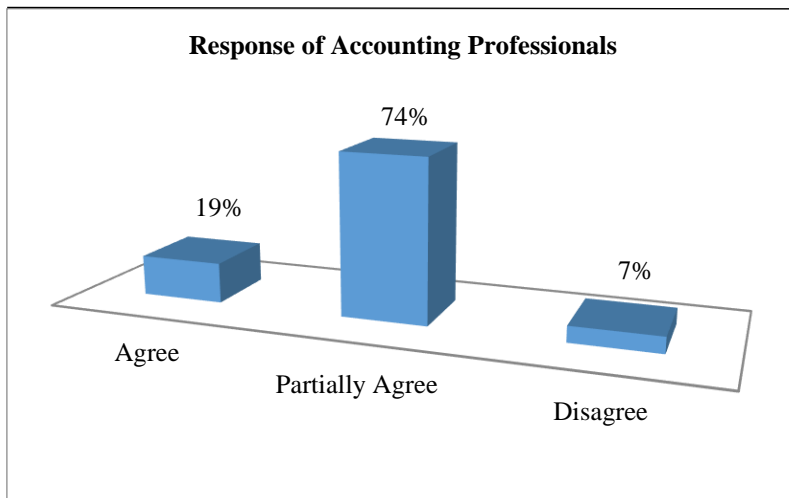


Figure 7.2.10 demonstrates that 74% of accounting professionals somewhat agree, 19% agree, and 7% disagree that using cloud accounting to determine a company's real financial position is competent.

7.3 Statistical Analysis

7.3.1 Chi-Square Test

Table 7.3.1.1: Cross tabulation of the categorical variables under consideration.

Aware of the recent trends in Accounting * Knowledge about Cloud Accounting				
Count		Do you know about Cloud Accounting?		Total
		No	Yes	
Are you aware of the recent trends in accounting?	No	3	3	6
	Yes	0	48	48
Total		3	51	54

	Value	df	Asymp. Sig. (2-sided)
Pearson Chi-Square	25.4120 ^a	1	.0000

From the chi-square p-value it can be conclude that null hypothesis is rejected at 5% level of significance. This indicates that there exist an association between awareness of the recent trends in accounting and knowledge about cloud accounting.

7.3.2 Regression

A Binary logistic regression was considered for the dependent variable. Do you use cloud accounting? For such type of dichotomous output, the results are shown below.

Table 7.3.2.1: Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	10.321 ^a	.536	.869

The Nagelkerke R Square value equal to 0.869 indicates the 86% variations in the dependent variable can be explained by the model.

Table 7.3.2.2: Logistic Regression Output

<i>Variables in the Equation</i>	<i>Exp(B)</i>	<i>Sig.</i>
The idea of cloud accounting causes a firm to employ fewer people.	1.732	0.000
The idea of cloud accounting reduces the accounting manipulation.	2.171	0.000
The sensitive financial information protected by cloud accounting.	1.624	0.000
Compared to the previous alternatives, cloud accounting offers superior financial data analysis.	1.846	0.000
Cloud billing is a more efficient than the previous options.	1.749	0.001
Thoughts on how effective cloud accounting is at spotting fraud.	2.445	0.000
The use of cloud accounting to determine a company's real financial position.	2.761	0.000
Constant	1.235	0.002

From the regression output all considered variable are highly significant at 5% level of significance. The likelihood of using cloud accounting greatly rises with the favorable views of its advantages that comprise lower need for human resources, better security, ability to detect frauds, improved financial data analysis, and its capacity to minimize manipulation in accounting and arrive at the true financial state of an organization. More precisely, every single increase in these positive beliefs on Likert scale translates into increased probabilities for adopting cloud accounting by a factor between 1.624 and 2.761 times.

8. CONCLUSION AND RECOMMENDATIONS

In Bangladesh, it is evident that the link between cloud accounting and keeping pace with latest trends in accounting is strong. Those who are informed of recent accounting trends are likely to be knowledgeable in cloud accounting. This analysis uncovers that the accounting professionals' positive attitudes regarding different aspects of cloud accounting such as less manpower utilization, lower chances of manipulating accounting information, and more protected data. The country entrepreneurs are gradually migrating from the traditional accounting systems to the cloud accounting as the result brings the vital information to their grab in seconds, hence, allowing them to have a quick and accurate decision-making. The recent trends of cloud accounting bring along different impacts for different industries and business firms in Bangladesh as accounting professionals are interested to grab this digital technology. Cloud accounting is likely to play a significant role in the development of SMEs in Bangladesh. Its multiple advantages including less manpower utilization,

security and user-friendliness prove that the cloud accounting system to be the most suitable option in a market where businesses of all sizes are trying hard to outperform their competitors. Its efficiency and affordability turn it into a very favorable choice for companies in Bangladesh which wish to simplify their operations and financial management functions. Bangladesh is a country where many firms now give more importance to data-driven decision-making, therefore, cloud accounting can be a tool through which information will be systematized and will be used as a key factor for the development of the business. People in accounting area of the country should be at the forefront of the continuous education to keep them informed about the new trends in accounting and cloud technology and thus become skilled in the application of the cloud accounting solutions. The cloud accounting platforms continues to ease the collaboration and communication between diverse stakeholders, bringing down the geographical boundaries and increasing productivity. This is especially fruitful in the context of the diverse stakeholders and the distributed nature of the operations that is a common feature of the business ecosystem in Bangladesh. Apart from this, as a number of companies in Bangladesh tend to choose remote work arrangements, cloud-based accounting systems can provide the required infrastructure to support virtual collaboration and data sharing. The organization will also be benefited from the operational flexibility with the ability to fill vacant positions with the best candidates in the competitive market. Nonetheless, cloud accounting can transform the accounting profession in Bangladesh by improving transparency, efficiency and collaboration. Technologies such as artificial intelligence and machine learning that are transformative can be seen as an opportunity for organizations to grow sustainably and to compete successfully in an increasingly dynamic commercial environment.

REFERENCES

- Bogoslov, A., & Alexandra-Gabriela, M. (2023). The accounting profession under the influence of digitalization -premises of the intelligent future. 10.56043/revco-2023-0033.
- Bratianu, C. (2018). Factors Affecting Knowledge Acquisition. 10.4018/978-1-4666-8318-1.ch010.
- Efosa, E., & Ojeaga, J. (2022). Cloud-based Accounting Technologies: Preparing Future-Ready Professional Accountants. *International Journal of Innovative Science & Technology*. 7(2). 879-889.

- Grand View Research. (2023). Cloud computing market size, share & growth report, 2030 [Industry Analysis]. Retrieved from <https://www.grandviewresearch.com/industry-analysis/cloud-computing-industry>
- Imene, F., & Imhanzenobe, J. (2020). Information technology and the accountant today: What has really changed? 12. 48-60.
- Ionescu, B., Ionescu, I., Bendovschi, A., & Tudoran, L. (2013). Traditional Accounting vs. Cloud Accounting. 10.13140/2.1.2092.8961.
- Khanom, M. T. (2017). Cloud Accounting: A Theoretical Overview. IOSR Journal of Business and Management (IOSR-JBM), 19(6), 31-38.
- Marsintauli, F., Novianti, E., Situmorang, R., & Djoniputri, F. (2021). An analysis on the implementation of cloud accounting to the accounting process. Accounting. 747-754.
- PCMag. (2024). The Best Accounting Software for Small Businesses in 2024. PCMag. Retrieved from <https://www.pcmag.com/smb-accounting>
- Saha, T., Rahman, M., Das, S. K., Siddique, F., & Uddin, M. (2020). Prospects and Challenges of Implementing Cloud Accounting in Bangladesh. The Journal of Asian Finance, Economics and Business, 7, 275-282.
- Sarker, J., & Islam, M. S. (2022). Cloud Accounting Adoption in Bangladeshi Enterprises: A Theoretical Review, 2, 20-28.
- Sharma, P. (2018). An Empirical Study on Measuring Awareness of Cloud Accounting. International Journal of Science and Research (IJSR), 7, 1393.
- Sobhan, R. (2019). The Concept of Cloud Accounting and its Adoption in Bangladesh, 3, 1261-1267.
- Taib, A., Awang, Y., Shuhidan, S., Rashid, N., & Hasan, M. (2022). Digitalization in Accounting: Technology Knowledge and Readiness of Future Accountants. Universal Journal of Accounting and Finance, 10, 348-357.
- Thakker, P., & Japee, G. (2023). Cloud-Based Accounting Technologies: Revolutionizing Financial Management. International Journal of Science, Engineering and Management, 10, 20-26.
- Vagner, I., Sarakhman, O., & Shurpenkova, R. (2023). Analysis of the development of cloud technologies in accounting. Technology audit and production reserves. 5. 21-26.\