

# Barriers and Motivations for Cloud-Based Accounting Adoption Among Micro, Small, and Medium Enterprises (MSMEs) in Jaen, Nueva Ecija, Philippines

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**Abstract** — The adoption of cloud-based accounting solutions at Jaen, Nueva Ecija by Micro, Small, and Medium-Sized Enterprises (MSMEs) is examined in this study, which reveals important motivators and obstacles affecting their choices. The results show that although some MSME respondents use simple online tools like Google Sheets for financial management, 50% of them are not familiar with cloud accounting software. Automatic data backup, remote data access, and accountant cooperation are the main drivers behind cloud accounting adoption. However, widespread adoption is hampered by issues with competence, data security, and change aversion. Remarkably, only a few respondents acknowledged the value of two-factor authentication as a security precaution. The way that MSME attitudes on cloud technologies are shaped is greatly influenced by accountant advice and peer recommendations. All things considered, the study shows that MSMEs are often reluctant to embrace cloud accounting, indicating the need for focused training and assistance to speed up adoption in this industry.

**Keywords**— Adoption, Barriers, Cloud-Based Accounting, Jaen, Nueva Ecija, MSMEs

## I. INTRODUCTION

Micro, Small, and Medium-sized Enterprises (MSMEs) that use manual accounting are businesses that record and maintain their financial transactions using paper-based or manual methods, such as ledger books and handwritten journals. This means that they do not use computer-based accounting systems, but instead rely on manual calculations and physical documents to manage their financial records. MSMEs that use manual accounting may do so for a variety of reasons, such as lack of access to or familiarity with computer systems, cost constraints, or preference for traditional methods. However, manual accounting is generally considered to be a more time-consuming and error-prone process than computer-based accounting, and it may not be suitable for larger or more complex businesses.

For six to ten years, the majority of MSMEs have been utilizing their accounting system. The computerized accounting system performs differently from the manual accounting system. The common issue in either of these two systems is human error (Arcega, C. K., Datinguino, E., Guerra, J., Guno, C., Mayuga, H. J., Villamena, E., & Manongsong, J. L. 2015).

The use of technology has become increasingly important in the modern business world, and micro, small, and medium-sized enterprises (MSMEs) are no exception. In recent years, the adoption of cloud-based accounting systems has become more prevalent among MSMEs, offering a range of benefits such as improved efficiency, reduced costs, and enhanced security. New business owners need a precise focus to stay on top of everything. The work comes with a lot of strain, from servicing clients to

managing a team to growing the firm. Furthermore, businesses must maintain track of major operations, including cash. While account settlement is required, it may take a significant period. However, no company can escape accounting work, no matter how painful it is. As a result, owners must look for ways to boost profitability while carefully managing cash flow.

Accounting information is used by businesses every day to evaluate their financial condition, make wise decisions, analyze their financial situation in light of results, make plans, and manage the entire business. According to Gartner, 51% of IT investment in the application software, infrastructure software, business process services, and system infrastructure industries will transfer to the public cloud by 2025. This includes cloud accounting solutions in the accounting business (Gartner, 2022).

MSMEs (Micro, Small, and Medium-sized Enterprises) account for 99.51% of Philippine businesses and are the backbone of the Philippine economy. However, the epidemic led 73.1% to close, highlighting the need for firms to change to survive – particularly through digitalization. Recognizing the significance of cloud adoption in company digital transformation, the Philippine government updated its "cloud-first" laws, which were first established in 2017, opening the way for MSMEs to take the digital leap and become more competitive and resilient (Dulce, 2021).

Cloud accounting software is identical to traditional on-premises or self-install accounting software, with the exception that it is hosted on remote servers, similar to the software as a service (SaaS) business model. Data is sent to "the cloud," where it is processed and returned to the user.

## II. METHODOLOGY

The study on cloud-based accounting in Jaen used a quantitative research technique, with a particular focus on Micro, Small, and Medium-Sized Enterprises (MSMEs). In order to implement this strategy, a sample of 30 MSMEs from 179 local industries with small and medium sizes were given a standardized survey questionnaire. Careful consideration went into choosing the 30 MSMEs for the survey sample in order to guarantee that they represented a range of business sizes and industries.

In order to collect precise and quantifiable information on MSMEs' usage of cloud-based accounting systems, a systematic survey questionnaire was created. The questionnaire included several types of questions aimed at determining the respondents' present accounting procedures, their familiarity with cloud-based accounting solutions, how they saw the advantages and difficulties of using such solutions, and the variables affecting their choice of not using cloud-based systems.

## III. RESULTS AND DISCUSSION

The findings on how aware Micro, Small and Medium-sized Enterprises (MSMEs) are of the use of cloud-based accounting systems point to a major topic of interest and concern in the business world. The information gathered offers insightful information on how well-informed MSMEs are at the moment about this cutting-edge accounting technology. This section clarifies the current knowledge levels, perspectives, and potential obstacles that MSMEs have while adopting cloud-based accounting systems through a thorough examination of the survey data.

Familiarity with cloud-based accounting software

28 responses

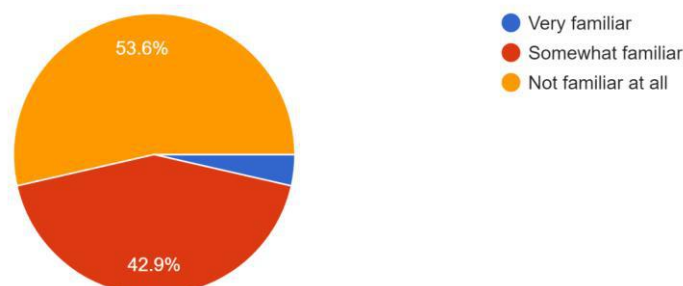


Figure 1.

It shows in this result that half of the respondents were not familiar with cloud-based accounting software. A small percent are only aware of the application.

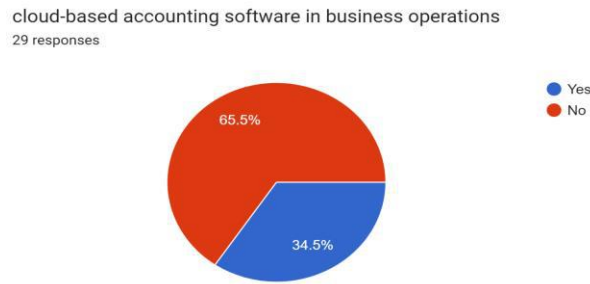


Figure 2.

After mentioning cloud-based accounting, the result shows that some of them are using it in their business. In Figure 2, we can see that most of the respondents have their cloud-based accounting system implemented but mostly use the basic, Google Sheet or Cloud-based MS Excel to track their sales and expenses.

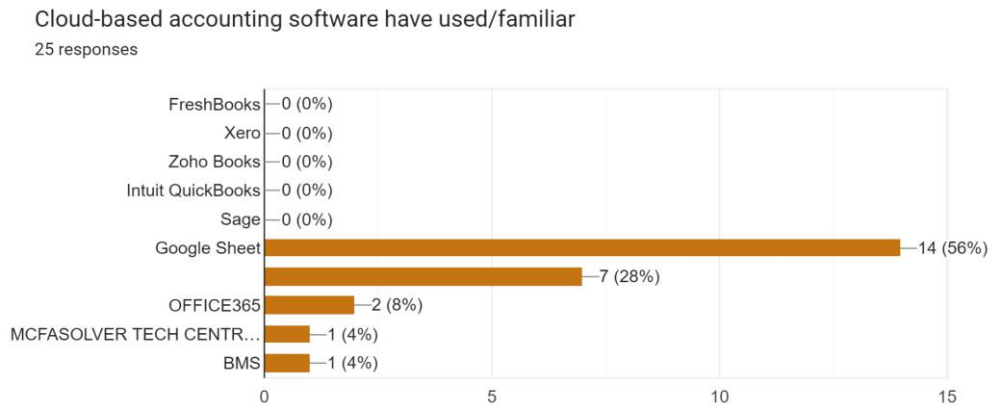


Figure 3.

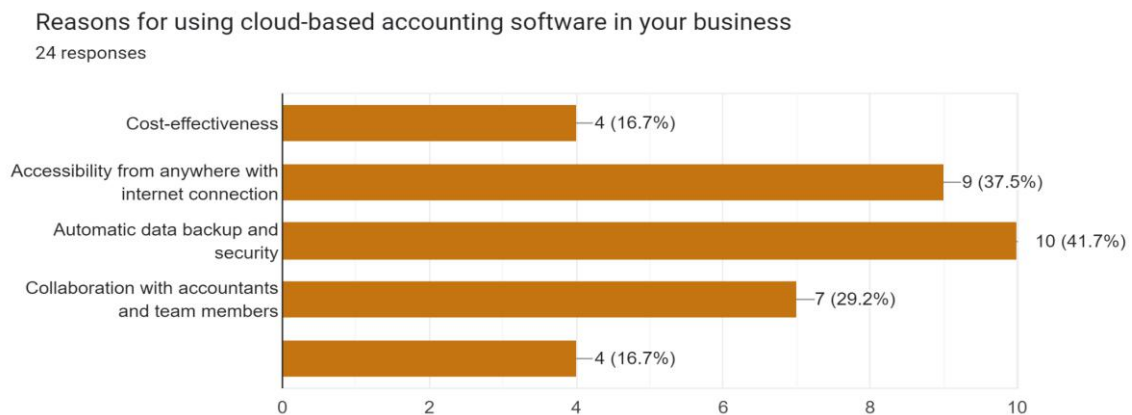


Figure 4.

Figure 4 outlines the primary motivations for adopting cloud-based accounting systems over manual ledger methods for recording daily sales and expenses. The top reasons cited include the ability to access data from anywhere, collaborate effectively with accountants, and ensure automatic backup of important data.

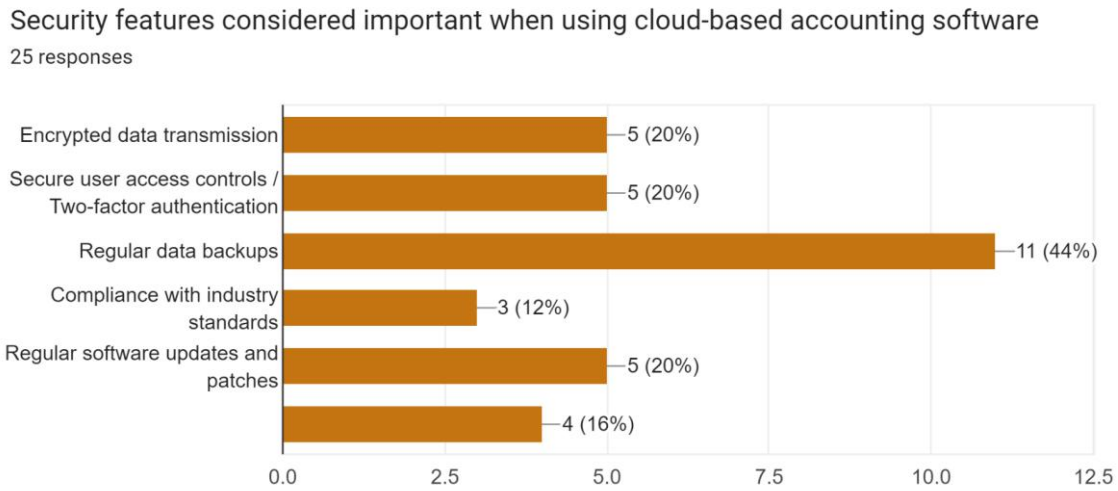


Figure 5.

In this section, the importance of data backup is one of the reasons needed for using any cloud-based system for the business. Five of the respondents were aware of the use of Two-factor authentication as a security feature.

The findings presented in the following figures, provide a basis for understanding the readiness of MSMEs to adopt innovative accounting technologies and offer implications for future strategies aimed at enhancing awareness and promoting adoption in this industry.

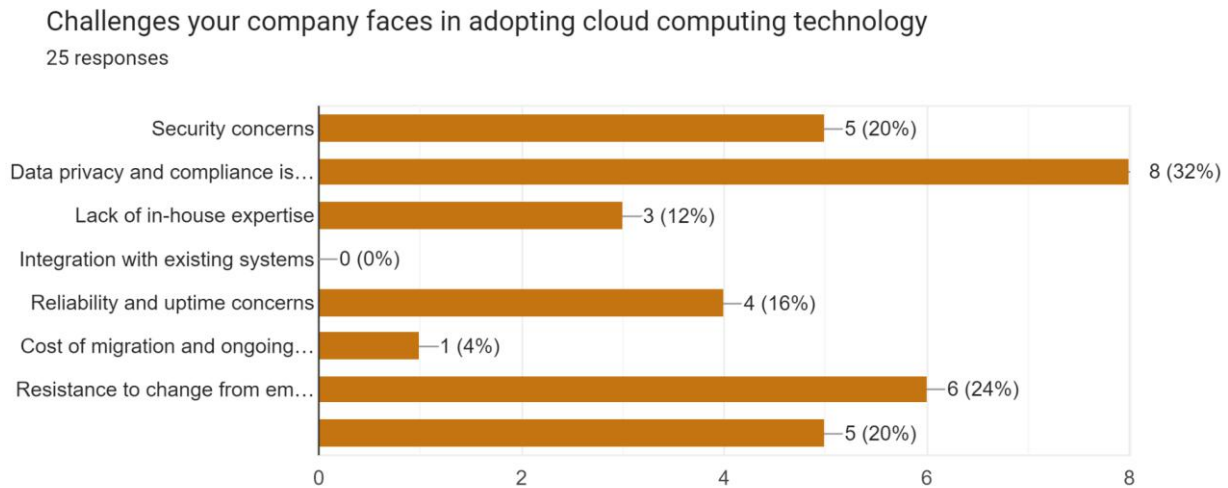


Figure 6.

Keeping your business sales and expense record is vital in operation as this will be the basis of most of your decisions in making actions for the business. Some were hesitant in the adoption of cloud-based accounting due to house expertise, security concerns, data privacy, and resistance to change from employees from manual to digital.

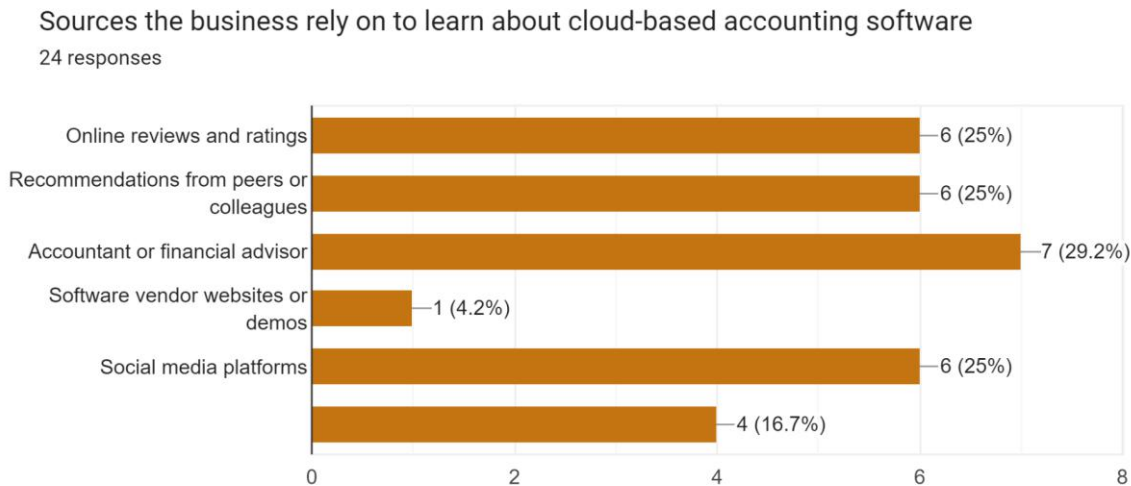


Figure 7.

Figure 7 Online resources and the recommendations from peers and accountants were the basis for them to consider adopting the cloud-based accounting system.

Likely to consider adopting cloud-based accounting software in the next 6-12 months  
26 responses

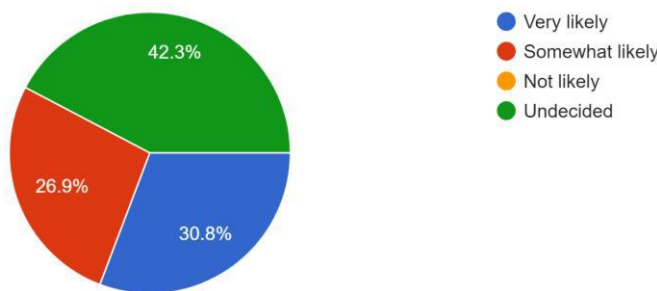


Figure 8.

More than half of the respondents clearly show hesitance in adopting cloud-based accounting as seen in Figure 8.

#### IV. CONCLUSIONS

Based on the findings of this study, the following are concluded:

1. The findings indicate that 50% of MSME respondents lack familiarity with cloud-based accounting software.
2. Despite the lack of awareness, a portion of MSMEs is utilizing basic cloud-based tools, such as Google Sheets or Cloud-based MS Excel, to manage their financial records.

3. The primary motivations for adopting cloud accounting among MSMEs include remote data access, effective collaboration with accountants, and automatic data backup.
4. Data backup emerged as a critical concern, with only five respondents recognizing the importance of two-factor authentication.
5. The survey reveals that many MSMEs are hesitant to adopt cloud accounting due to concerns over expertise, security, data privacy, and resistance to change from traditional methods.

6. Recommendations from peers and accountants play a crucial role in influencing MSMEs' decisions to consider cloud accounting systems, as highlighted by the survey results.

7. Overall, the findings highlight a widespread hesitance among MSMEs regarding the adoption of cloud-based accounting solutions.

### RECOMMENDATION

Training should be put in place to increase awareness and comprehension of cloud-based accounting software to close the large knowledge gap among MSMEs. Since many MSMEs currently use Google Sheets and other basic cloud technologies, training programs can expand on this by showcasing the sophisticated features and advantages of specialized cloud accounting solutions. Furthermore, highlighting the significance of security features like data privacy protocols and two-factor authentication may assist in alleviating worries that impede adoption. Finally, using peer and accountant recommendations can be a strong incentive for MSMEs to upgrade to more advanced cloud accounting systems, giving them more confidence in their leanings and decision-making (Subia, et al., 2019).

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