World Journal of Advanced Research and Reviews
eISSN: 2581-9615 CODEN (USA): WJARAI
Cross Ref DOI: 10.30574/wjarr
Journal homepage: https://wjarr.com/

(RESEARCH ARTICLE)

Check for updates

Cloud accounting adoption in MSMES: A toe framework approach

Anak Agung Widya Adi Iswari *, I Gst. Ngr A Suaryana, I Putu Sudana and Dodik Ariyanto

Department of Accounting, Faculty of Economics and Business, Udayana University, Bali, Indonesia.

World Journal of Advanced Research and Reviews, 2025, 25(02), 1630-1649

Publication history: Received on 30 December 2024; revised on 11 February 2025; accepted on 14 February 2025

Article DOI: https://doi.org/10.30574/wjarr.2025.25.2.0437

Abstract

The purpose of this study is to empirically test and explore the relationship between external TOE factors (Technology, Organization, and Environment) with cloud accounting adoption and the post-adoption impact on the performance of Micro, Small and Medium Enterprises (MSMEs) in Denpasar. This study uses PLS-SEM (Partial Least Squares-Structural Equation Modeling) and FsQCA (Fuzzy-set Qualitative Comparative Analysis) methods. The sampling technique used in this study was purposive sampling, with a sample size of 250 MSMEs calculated using the Hair et al formula and not limited to the industrial sector. The results showed that all aspects have a significant influence on the adoption of cloud accounting, in accordance with the referenced TOE model. The use of the FsQCA method shows that organizational readiness, complexity and competitive pressure are core factors in decision making related to cloud accounting adoption, while other aspects such as Relative Advantage, Compatibility, Security Concern, Top Management Support, Coercive pressure and Vendor Support serve as supporting factors. The model in this study proved to be statistically significant and able to explain most of the variations in the data collected.

Keywords: TOE Framework; Cloud Accounting; DOI; MSME; RBV

1. Introduction

Digitalization of accounting information systems has been integrated into a technology called cloud accounting, which allows organizations to manage accounting data reliably, securely, and efficiently (Christauskas & Miseviciene, 2012). The cloud is a web-based data storage system that can be accessed anytime and anywhere as long as there is an internet connection. Cloud accounting is a method for accessing and processing accounting data online using a web browser or application. Data is stored in the cloud or on a remote server that is not located at the company's location. Cloud accounting software can be accessed through the user's computer or other technological devices connected to the internet in contrast to traditional accounting practices.

Traditional accounting practices have the disadvantage that the time required to prepare financial reports is relatively long, because categorization, input, and data processing must be done manually. In contrast, the use of cloud accounting can speed up procedures, reduce maintenance costs, improve data functionality and accuracy, automatically update financial information, and provide real-time financial reports (Brandas et al., 2015; Alsmadi et al., 2019). However, the level of adoption of this technology is influenced by various factors that differ from country to country. Indonesia is in the early stages of adopting cloud innovation.

Based on the 2020 E-Government Development Index released by the United Nations, Indonesia ranks 88th out of 193 countries in the use of cloud computing including its use in the financial sector (Jakarta Post). Although large companies and government agencies in Indonesia have been using cloud-based accounting systems for some time, the application of these systems among MSMEs is still relatively slow and few. According to researchers, there are significant differences

* Corresponding author: Anak Agung Widya Adi Iswari

between companies in terms of cloud-based technology adoption based on skill and resource levels. For example, the adoption of cloud accounting by MSMEs is still hampered by various factors, such as resource limitations.

Resource limitations include small business size, limited number of resources, privacy and security concerns, satisfaction with existing traditional systems, high cost of software adoption, low computer proficiency, lack of digital skills and knowledge among owners and employees, and unreliable digital infrastructure. These factors are the main reasons for the slow adoption of cloud accounting technology among MSMEs in Indonesia. In addition, information regarding the number of end users utilizing cloud accounting is also still limited. This limitation indicates a gap that needs to be further researched, especially regarding the adoption of cloud accounting in Indonesia. Therefore, this study aims to fill this gap through a study of cloud accounting development in MSMEs in Denpasar City.

This study becomes increasingly important considering that Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in supporting social and economic growth, both globally and at the local level, including by contributing to productive business activities, financing options, and employment. According to data from the Ministry of Cooperatives and Small and Medium Enterprises (Kemenkop UKM), the number of MSMEs in Indonesia has reached 65.4 million units and managed to absorb a workforce of 114.7 million people, or around 56% of the total national workforce. This shows the importance of maintaining the sustainability of MSMEs in the face of global market competition. To be able to survive in the increasingly fierce competition, especially after the pandemic, as many as 83.8% of MSME players are reported to have turned to digitalization or utilized technology to support their business operations (MSME Empowerment Report, 2022). Various studies have been conducted on technology adoption in MSMEs, including the use of digital accounting software, e-commerce, e-government, social media, and various other areas.

This study also integrates the Diffusion of Innovations (DOI) theory with the Technology, Organization, and Environment (TOE) framework, thereby strengthening the ability of the conceptual model to explain the phenomenon studied. DOI theory has proven to be the most influential and representative approach in information systems or technology research, including cloud accounting. Through this approach, research can make a significant contribution to understanding the process of adoption and integration of cloud accounting in organizations, as described by Amir Hamzah (2023).

This research will use the FsQCA analysis method, which was first introduced by Ragin (1987). FsQCA is an analytical tool that can identify problems by calculating the conditions necessary to produce specific results (Ragin, 1987). FsQCA can handle problems that result in asymmetry, equifinality, and causal complexity (Zhang & Zhang, 2019). Some previous studies (Gligor & Bozkurt, 2020; Mei Chen, 2023; Guomin Chen, 2022; Lin Wang, 2021; Ge Zhang, 2021; Bourhim & Labti, 2022; Jie Zhao, 2020) used FsQCA so as to explore how antecedents factors fit together to produce multiple causal paths that can result in the adoption or rejection of cloud accounting adoption (causal asymmetry).

To achieve these objectives, this research will adopt several theoretical frameworks, namely Technology Organization Environment (TOE), Diffusion of Innovation (DOI), and Resource Based View (RBV). Researchers use the TOE framework to look at technology adoption from an organizational point of view, which is still under-researched in technology adoption research in Denpasar. Organizational adoption has significant differences with individual adoption, where scale, scope, security, level of support, and other factors are the reasons behind the adoption. Before making a decision, there will be a communication process among relevant users to consider adoption. This process will involve Diffusion of Innovation (DOI) theory to explain the factors involved in the process. In addition, organizations expect that the use of cloud accounting can contribute to the improvement of their performance, so this research adopts the Resource Based View (RBV) theory to explain the results received by the organization.

2. Literature Review and Hypothesis Development

When making decisions, companies weigh the advantages and disadvantages, as is the case when using cloud accounting. If management sees the benefits of implementing technology outweigh the costs, they will be more likely to implement it. The benefits offered over conventional accounting methods are not always related to costs, which can include better coordination and communication, easier access, savings in terms of investment in hardware and software infrastructure, and increased efficiency of business operations. By using cloud accounting technology, it is expected to improve business performance. Financial reports will be made faster, more efficient, and timelier if this technology is applied to the accounting process. So that the higher the level of relative advantage obtained by adopters or users of innovation, the faster the innovation is adopted.

- H1: Relative Advantage has a positive influence on the use of cloud accounting.

Apart from benefits and complexity, another factor considered is the compatibility or suitability of the new system with the old system used and the company's requirements according to the needs of business operations. In this era of digitalization, the speed and ease of accessing data from anywhere as well as the speed of updating data and its accuracy are very important. In addition to these technical elements, in RBV theory companies must consider organization-environment interactions when using resources. To meet these demands, cloud accounting is used. It is not only compatible with the old system, but also fits the demands of the current situation, where companies must be more responsible for the corporate environment. From this explanation, the complexity in implementing cloud accounting is easier if the innovation is more compatible in the operations required by the company.

- H2: Compatibility has a positive influence on the use of cloud accounting

The human factor as a user of technology also determines whether a company will implement it or not, the benefits of technology are not the only determining factor, but the system user is also a determinant. Technological complexity can be an obstacle to technology implementation. The Resource Based View theory says that user experience, judgment, intelligence, and insight are some of the company's important resources. Users will be able to easily use cloud accounting technology if it is not too complex. If human resources in the business can understand and take all the benefits offered by the technology, this will also affect the more flexible and efficient the process so that it will have a good impact on company performance. If the use of cloud accounting can be shown in the context of innovation acceptance, then this result supports the negative relationship between complexity and information system usage. Due to the explanation, complexity has a negative relationship when it comes to the adoption of new innovations, the lower the level of complexity, the more the innovation increases to be adopted.

- H3: Complexity has a negative influence on the use of cloud accounting

Companies must understand their service agreements with cloud providers and have a comprehensive security plan before applying cloud accounting. If MSMEs are very concerned about the security of cloud accounting data, the perceived utility may decrease. Cloud vendors must ensure proper data protection and provide customers with a clear understanding of the security measures used, this will allow companies to enjoy the flexibility and efficiency of cloud accounting. So that the benefits of cloud accounting can be increased, and MSMEs will have more confidence in this technology to manage company financial data. From the distribution above, security concerns can weigh on management decisions in making decisions to adopt cloud accounting.

- H4: Security Concern has a negative influence on the use of cloud accounting

This support creates an environment where MSMEs can be confident and highly motivated to adopt new technologies. Cloud accounting service providers must ensure that top management or owners support the business in terms of financial resources, the required infrastructure and the transformation process. So that with solid support from the owner and top management, the use of cloud accounting by MSMEs can have a major impact on the efficiency and productivity of their operations. The higher the level of support provided by the owner, the higher the tendency to adopt technology such as cloud accounting.

- H5: Top management support has a positive influence on the use of cloud accounting.

Organizational readiness shows the relationship between people, processes, systems, infrastructure, and performance measurement. This requires synchronization and coordination without which there is no successful implementation. If a company has sufficient funds, adequate human resources, and organizational readiness, as well as good IT competencies it can successfully adopt cloud accounting technology. Therefore, organizations must have systems, processes and human resources to coordinate efforts and implement changes. So that with this readiness, the use of cloud accounting by MSMEs can have a major impact on the efficiency and productivity of their operations.

- H6: Organizational readiness has a positive influence on the use of cloud accounting.

Market competitive pressure can affect cloud accounting adoption because competitive pressure encourages companies to use innovative technology so that companies can outperform their competitors by using new technology. Customers or suppliers who work with MSMEs can encourage them to use cloud accounting if the application has been carried out by their competitors and have benefited from increased productivity and better decision making. MSMEs are more likely to use cloud accounting as a solution if their business partners need real-time access to data. So that with competitive pressure, MSMEs will consider using cloud accounting as well.

- H7: Competitive pressure has a positive influence on cloud accounting usage.

A company can adopt innovations if organizations that dominate resources, parent companies and business partners have implemented them, so companies will need cloud accounting as well in their company operations. Pressure from the government where MSMEs see cloud accounting as an opportunity to increase productivity and company performance through policies on the importance of financial statements, so that the authorities or regulators must

ensure that they have the necessary understanding and support for MSMEs as they face this change. So that with coercive pressure, MSMEs will take actions in accordance with what the organization, partner or regulator requires them to follow, and this relates to the application of cloud accounting.

- H8 : Coercive Support has a positive influence on the use of cloud accounting.

The absence of information about the provider party and uncertainty about the behavior or services provided will cause the company entering the relationship to expose itself to a certain degree of risk. This suggests that the reputation of the provider has an impact on adoption. The provider provides technical support for implementation and use as well as training elements of use. This gives them assurance, a thorough understanding, and access to the tools they need (Hamzah, 2020). Previous research found that vendor support has a positive influence on cloud accounting adoption (Lutfi et al., 2022; Khayer et al., 2020; Byungchan, 2020; Al-Sharafi, 2023; Mei Chen, 2023).

The likelihood of companies adopting new information system innovations increases if they get support from providers. MSMEs will find it easier to use cloud accounting if providers offer adequate technical support, training, and resources. When buyers make decisions about adopting cloud accounting, companies not only acquire the desired technology, but MSMEs must ensure that these adopted technology providers meet the service standards and requirements of the organization.

- H9: Vendor Support has a positive influence on the use of cloud accounting.

In the current study, RBV theory is used to show that there is a relationship between the use of cloud accounting and the impact it has. As a result, it is predicted that effective cloud accounting can lead to greater user satisfaction from the system and will contribute influence on the overall operation of the organization. This will have an increasing impact on performance influence over time. The more fully utilized, the adoption of cloud accounting, the more the performance of MSMEs will increase.

- H10: The use of cloud accounting has a positive influence on the variable use of company performance.

3. Methods

The research location will be conducted on 397 MSMEs in Denpasar City with a research time planning conducted for two months, starting in January 2024, and expected to be completed in March 2024. The scope of this research is a cloud-based accounting system by examining MSMEs that use it with questionnaire media. Data sources were obtained by distributing questionnaires to top management or owners and staff of cloud accounting users in MSMEs in Denpasar City who use cloud accounting. The population in this study are MSMEs in Denpasar Province that have adopted cloud accounting. The sample in this study were MSMEs in Denpasar City that have used cloud accounting. The sampling technique that will be applied in this study is nonprobability sampling. In this study, the questionnaire was distributed directly to MSMEs in Denpasar City.

Data analysis in this study used a combination of Partial Least Square (PLS) and Fuzzy-set Qualitative Comparative Analysis (fsQCA) approaches. PLS-SEM is considered a suitable approach for models that contain many constructs, indicators, and relationships. FsQCA identifies what conditions are necessary (or not necessary) for an outcome to occur, and which combinations of conditions are more (or less) important than others. PLS-SEM can explain the effect of each independent variable on the dependent variable, but it is difficult to explain the interdependence between independent variables. Whereas data analysis using FsQCA is a case study-oriented method, it is believed that the outcome occurs based on grouping multiple conditions together as configurations (conditions) associated with the outcome. Thus, it shows a combination of configurations that are not considered by regression analysis-based approaches that only record significant impacts. However, if only FsQCA is used, the data analysis results cannot identify the unique contribution of each variable to each solution. The researcher combined both analysis techniques to hopefully reveal more comprehensive findings.

4. Result and Discussion

4.1. Inner Model and Hypothesis Testing

Inner model testing is done by analyzing the relationship between exogenous and endogenous variables that have been explained in the theoretical framework. The structural model in PLS is evaluated using R2 for the dependent construct, the path coefficient value or t-values of each path for the significance test between constructs in the structural model. The R2 value is used to measure the level of variation in changes in the independent variable to the dependent variable.

The higher the R2 value, the better the prediction model of the proposed research model. The Inner Model in this study will be explained as follows:

4.2. Results of the determination coefficient test (R^2)

R-Square for the dependent construct can be used to determine the evaluation of the influence of predictors on each endogenous latent variable. The R2 results of 0.67, 0.33 and 0.19 for the endogenous latent variables in the structural model indicate that the model is good, moderate and weak. The R2 value is used to later calculate the Q-Square value which is a test of the goodness of fit of the model. The results of the R-Square test are presented in Table 1.

Table 1 Determination Coefficient

	R Square	R Square Adjusted
Y1 (CA Usage)	0.881	0.877
Y2 (UMKM Performance)	0.681	0.680

Secondary Data, 2024

Based on Table 1, the influence model of Relative Advantage (X1), Compatibility (X2), Complexity (X3), Security Concern (X4), Top Management Support (X5), Organizational Readiness (X6), Competitive Pressure (X7), Coercive pressure (X8), Vendor Support (X9), on CA Usage provides an R-square value of 0.881 which can be interpreted that the variability of the CA Usage variable can be explained by the variability of the variables Relative Advantage (X1), Compatibility (X2), Complexity (X3), Security Concern (X4), Top Management Support (X5), Organizational Readiness (X6), Competitive Pressure (X7), Coercive pressure (X8), Vendor Support (X9), by 88.1 percent, while 11.9 percent is explained by other variables outside those studied. Furthermore, the influence of CA Usage on UMKM Performance provides an R-square value of 0.681 which can be interpreted that the variability of the UMKM Performance variable can be explained by the variability of the CA Usage variable of 68.1 percent, while 31.9 percent is explained by other variables outside those studied.

4.3. Predictive Relevance with Cross-validated Redundancy (Q^2)

Predictive relevance is a test carried out to show how good the observation value and also the parameter estimate are produced using the blindfolding procedure by looking at the Q2 value. If Q2> 0 then it can be said to have good and accurate predictive relevance, while if the Q2 value <0 then the predictive relevance is stated to be not good or lacking (Sarstedt et al., 2017). The results of the Predictive Relevance test with Q2 are presented in Table 5.8 with the following explanation:

Table 2 Q Square

	SSO	SSE	Q^2 (=1-SSE/SSO)
X1 (RA)	1500.000	1500.000	0.000
X2 (CO)	1000.000	1000.000	0.000
X3 (CX)	500.000	500.000	0.000
X4 (SC)	500.000	500.000	0.000
X5 (OS)	750.000	750.000	0.000
X6 (OR)	1000.000	1000.000	0.000
X7 (CP)	750.000	750.000	0.000
X8 (COEP)	500.000	500.000	0.000
X9 (VS)	750.000	750.000	0.000
Y1 (CA)	750.000	266.236	0.645
Y2 (SP)	1250.000	622.550	0.502

Secondary Data, 2024

The Q2 value has a value with a range of 0 < Q2 < 1, where the closer to 1 means the better the model. The results of the calculation obtained a Q2 value of 0.645, so it can be concluded that the model has good predictive relevance. Showing a Q2 value> 0, which means that the model in this study has a relevant predictive value and the model used can explain the information in the research data. The same is true for the results of the Q2 calculation for MSME performance of 0.502 which shows a Q2 value> 0, so it can be concluded that the model has good predictive relevance.

4.4. Path Coefficients

Testing the direct influence between variables can be seen from the results of the path coefficient validation test on each path for direct influence in Table 3 below:

Table 3 Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Result
X1 (RA) -> Y1 (CA)	0.159	0.158	0.043	3.657	0.000	Accepted
X2 (CO) -> Y1 (CA)	0.126	0.122	0.041	3.037	0.002	Accepted
X3 (CX) -> Y1 (CA)	-0.263	-0.263	0.050	5.220	0.000	Accepted
X4 (SC) -> Y1 (CA)	-0.157	-0.158	0.048	3.277	0.001	Accepted
X5 (OS) -> Y1 (CA)	0.167	0.164	0.039	4.289	0.000	Accepted
X6 (OR) -> Y1 (CA)	0.201	0.199	0.030	6.795	0.000	Accepted
X7 (CP) -> Y1 (CA)	0.359	0.360	0.051	7.028	0.000	Accepted
X8 (COEP) -> Y1 (CA)	0.180	0.177	0.042	4.265	0.000	Accepted
X9 (VS) -> Y1 (CA)	0.057	0.058	0.026	2.248	0.025	Accepted
Y1 (CA) -> Y2 (SP)	0.825	0.826	0.024	34.373	0.000	Accepted

Secondary Data, 2024

This test can be done by looking at the value of the t-statistic using a significance level of 95% (=0.05 or 5%). While for the t-table with a significance level of 95% is 1.96. The criteria for rejection and acceptance of the hypothesis are Ha is accepted and Ho is rejected if the t-statistic> 1.96 and vice versa. The results of the path analysis test in Table 5.9 show that all variables have a significance value of less than 0.05 and also have t-statistic results of more than 1.96, so that all hypotheses are accepted and show significant positive results between the research variables.

4.5. Hypothesis Testing

This hypothesis testing uses the Partial Least Square (PLS) analysis approach to test the research hypothesis that has been previously stated. The results of the empirical research model analysis using Partial Least Square (PLS) analysis can be seen in Figure 1 below.

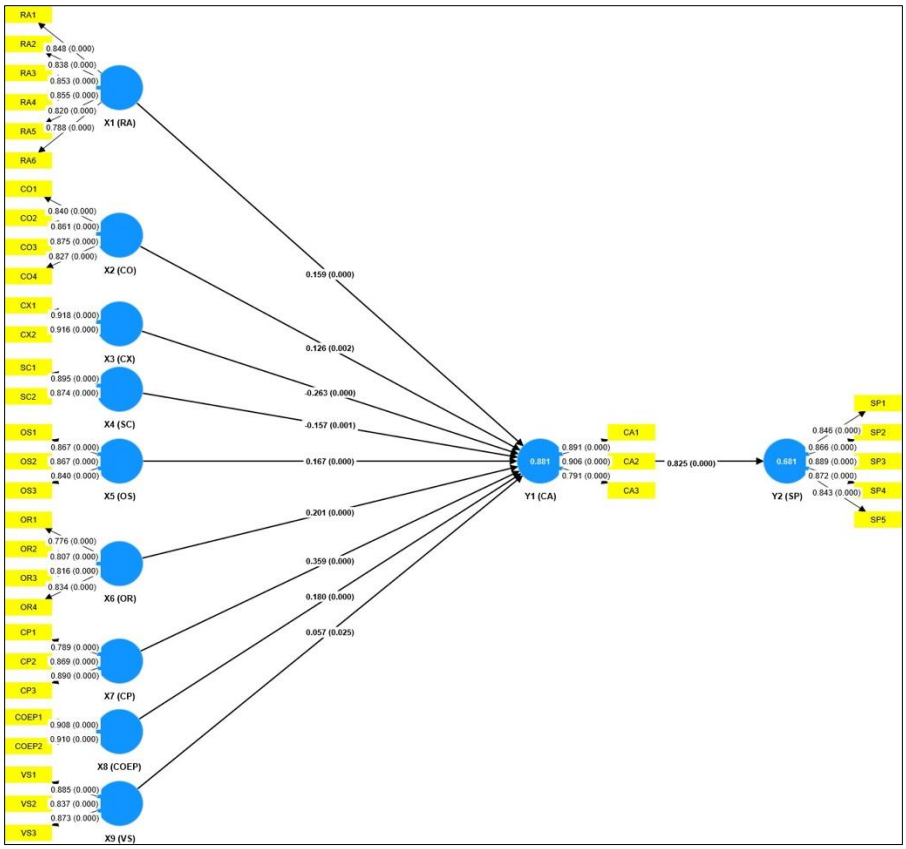


Figure 1 Bootstrapping Model

In Figure 1, it can be explained that Relative Advantage has a direct effect on CA Usage with a t value of 3.657. Compatibility has a direct effect on CA Usage with a t value of 3.037. Complexity has a direct effect on CA Usage with a t value of 5.220, Security Concern has a direct effect on CA Usage with a t value of 3.277. Top Management Support has a direct effect on CA Usage with a t value of 4.289, Organizational Readiness has a direct effect on CA Usage with a t value of 6.795, Competitive Pressure has a direct effect on CA Usage with a t value of 7.028. Coercive pressure has a direct effect on CA Usage with a t value of 4.265. Vendor Support has a direct effect on CA Usage with a t value of 2.248, and CA Usage has a direct effect on UMKM Performance with a t value of 34.373. Based on the results of the path coefficients in Table 3, the results of the hypothesis testing can be determined as described in the following description:

- Hypothesis testing on the effect of Relative Advantage on CA Usage produces a correlation coefficient value of 0.159, indicating a positive correlation. The t Statistics value obtained is 3.657> t-critical 1.96 and has a p value of 0.000<0.050, so the effect of Relative Advantage on CA Usage is significant. Thus, Relative Advantage has a positive and significant effect on CA Usage, so hypothesis 1 (H1) is accepted.
- Hypothesis testing on the effect of Compatibility on CA Usage produces a correlation coefficient value of 0.126, indicating a positive correlation. The t Statistics value obtained is 3.037> t-critical 1.96 and has a p value of 0.002<0.050, so the effect of Compatibility on CA Usage is significant. Thus, Compatibility has a positive and significant effect on CA Usage, so that hypothesis 2 (H2) is accepted.
- Hypothesis testing on the effect of Complexity on CA Usage produces a correlation coefficient value of -0.263, indicating a negative correlation. The t Statistics value obtained is 5.220> t-critical 1.96 and has a p value of 0.000<0.050, so the effect of Complexity on CA Usage is significant. Thus, Complexity has a negative and significant effect on CA Usage, so that hypothesis 3 (H3) is accepted.
- Hypothesis testing on the effect of Security Concern on CA Usage produces a correlation coefficient value of -0.157, indicating a negative correlation. The t Statistics value obtained is 3.277> t-critical 1.96 and has a p value of 0.001<0.050, so the effect of Security Concern on CA Usage is significant. Thus, Security Concern has a negative and significant effect on CA Usage, so that hypothesis 4 (H4) is accepted.
- Hypothesis testing on the effect of Top Management Support on CA Usage produces a correlation coefficient value of 0.167, which indicates a positive correlation. The t Statistics value obtained is 4.289> t-critical 1.96 and has a p value of 0.000<0.050, so the effect of Top Management Support on CA Usage is significant. Thus, Top Management Support has a positive and significant effect on CA Usage, so that hypothesis 5 (H5) is accepted.

- Hypothesis testing on the influence of Organizational Readiness on CA Usage produces a correlation coefficient value of 0.167, indicating a positive correlation. The t Statistics value obtained is 4.289> t-critical 1.96 and has a p value of 0.000<0.050, so the influence of Organizational Readiness on CA Usage is significant. Thus, Organizational Readiness has a positive and significant effect on CA Usage, so hypothesis 6 (H6) is accepted.
- Hypothesis testing on the influence of Competitive Pressure on CA Usage produces a correlation coefficient value of 0.359, indicating a positive correlation. The t Statistics value obtained is 7.028> t-critical 1.96 and has a p value of 0.000<0.050, so the influence of Competitive Pressure on CA Usage is significant. Thus, Competitive Pressure has a positive and significant effect on CA Usage, so hypothesis 7 (H7) is accepted.
- Hypothesis testing on the influence of Vendor Support on CA Usage produces a correlation coefficient value of 0.057, indicating a positive correlation. The t Statistics value obtained is 2.248> t-critical 1.96 and has a p value of 0.025 <0.050, so the influence of Vendor Support on CA Usage is significant. Thus, Vendor Support has a positive and significant effect on CA Usage, so hypothesis 8 (H8) is accepted.
- Hypothesis testing on the influence of CA Usage on MSME Performance produces a correlation coefficient value of 0.825, indicating a positive correlation. The t Statistics value obtained is 34.373> t-critical 1.96 and has a p value of 0.000 <0.050, so the influence of CA Usage on MSME Performance is significant. Thus, CA Usage has a significant positive effect on MSME Performance so that hypothesis 9 (H9) is accepted.

4.6. Fuzzy Set Qualitative Comparative Analysis (FsQCA) Analysis

To analyze the research model using the FsQCA method, the FsQCA Software 3.0 program tool method was used. Applying a qualitative comparative analysis of fuzzy sets (fsQCA) to study the effect of combinations of these factors and trying to understand how different combinations will impact the use of cloud accounting. The results of data analysis using the FsQCA method are described as follows:

4.7. Data Validity

All indicators in this study are declared valid, as indicated by the outer loading value of the variable indicator exceeding 0.70 and the Average Variance Extracted (AVE) value for all variables greater than 0.50. This shows that the research model has good quality.

The indicator is declared reliable if the composite reliability and Cronbach's alpha values of each variable are greater than 0.70. Based on the calculation results presented in Table 5.4, all variables have composite reliability and Cronbach's alpha values that exceed the threshold of 0.70. Thus, the data used in this study are declared valid and reliable.

4.8. Data calibration

In fsQCA we need to calibrate our variables to form fuzzy sets with their values ranging from 0 to 1 (Ragin, 2008b). Consider the fuzzy set as a group, then the value from 0 to 1 determines whether and in what amount the cases are included in this group. In this step, since the sampling data of this study is a 5-point Likert numeric type, it is necessary to convert the data to values between the 0 and 1 scale before being analyzed.

The direct method is recommended in this study, using percentiles to determine three break points for calibration, namely 0.95, 0.50, and 0.05 (Fiss, 2011). This can lead to a more rigorous study that is easier to repeat and confirm, because it is clearer about how the thresholds have been selected (Pappa & Woodside, 2021). An example of the results of the calibrated data can be seen in Figure 2.

CAL_ca	CAL_ra	CAL_co	CAL_cx	CAL_sc	CAL_os	CAL_or	CAL_cp	CAL_coep	CAL_vs
0.95	0.95	0.14	0.18	0.501	0.27	0.32	0.73	0.501	0.7
0.95	0.65	0.08	0.501	0.05	0.27	0.32	0.95	0.82	0.18
0.88	0.95	0.73	0.82	0.73	0.95	0.82	0.73	0.501	0.501
0.73	0.65	0.95	0.95	0.88	0.12	0.82	0.73	0.501	0.7
0.95	0.501	0.35	0.501	0.501	0.501	0.95	0.95	0.82	0.18
0.95	0.95	0.14	0.18	0.18	0.27	0.95	0.95	0.501	0.05
0.27	0.22	0.95	0.95	0.88	0.05	0.18	0.27	0.501	0.93
0.88	0.92	0.88	0.82	0.88	0.73	0.9	0.88	0.95	0.18
0.95	0.95	0.05	0.05	0.05	0.95	0.95	0.95	0.95	0.05
0.73	0.501	0.95	0.95	0.88	0.501	0.68	0.73	0.501	0.501
0.88	0.77	0.35	0.501	0.501	0.27	0.9	0.88	0.501	0.18
0.95	0.95	0.73	0.82	0.73	0.95	0.95	0.95	0.501	0.05
0.88	0.65	0.95	0.95	0.88	0.73	0.82	0.88	0.95	0.501
0.501	0.39	0.95	0.99	0.95	0.27	0.501	0.501	0.05	0.7
0.95	0.95	0.14	0.18	0.18	0.95	0.95	0.95	0.82	0.05
0.88	0.77	0.501	0.501	0.73	0.501	0.9	0.88	0.501	0.18
0.88	0.65	0.95	0.95	0.88	0.501	0.68	0.88	0.05	0.18
0.95	0.95	0.05	0.05	0.05	0.95	0.9	0.95	0.95	0.05
0.73	0.22	0.73	0.82	0.73	0.501	0.68	0.73	0.18	0.7
0.501	0.39	0.95	0.95	0.88	0.27	0.501	0.501	0.05	0.7
0.73	0.65	0.35	0.501	0.501	0.501	0.82	0.73	0.501	0.501
0.95	0.92	0.05	0.05	0.05	0.73	0.95	0.95	0.95	0.05
0.501	0.501	0.95	0.95	0.88	0.12	0.68	0.501	0.05	0.7
0.95	0.95	0.35	0.501	0.501	0.73	0.95	0.95	0.501	0.05
0.501	0.39	0.73	0.82	0.73	0.12	0.68	0.501	0.18	0.7
0.501	0.39	0.35	0.501	0.501	0.501	0.501	0.501	0.501	0.7
0.501	0.39	0.501	0.82	0.501	0.501	0.501	0.501	0.18	0.7

Figure 2 Dataset After Calibration

4.9. Adequacy analysis (Truth Table)

A truth table enumerates all possible configurations (or combinations) that may occur with k representing the number of outcome predictors, and each row representing each possible combination.

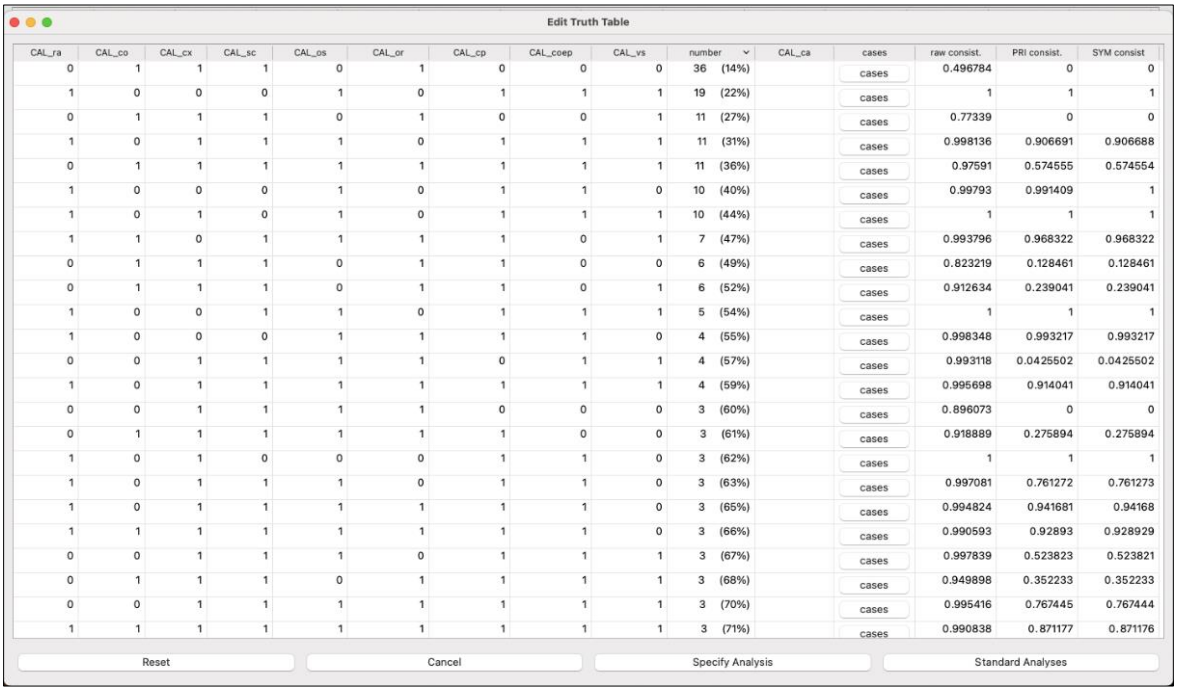
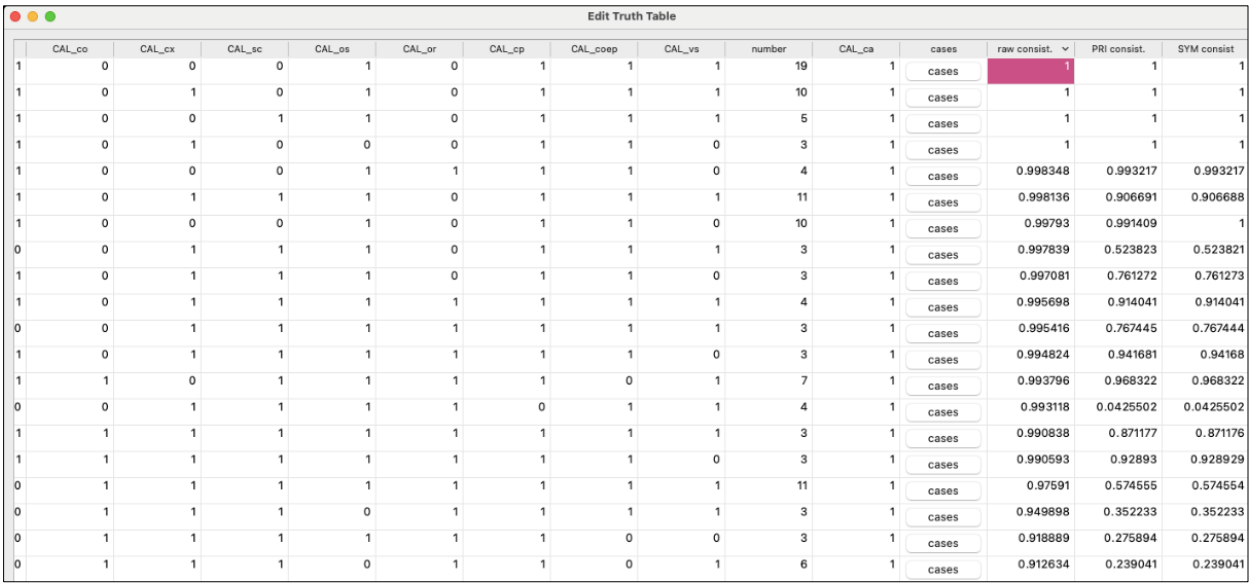


Figure 3 Truth Table FsQCA

In Figure 3, in the process of calculating all possible configurations, the frequencies are presented as the number of observations for each resulting combination. Some rows have zero frequencies, indicating that there are no cases in the sample explained by that configuration. The more variables used, the greater the likelihood of a combination with zero frequency. The resulting truth table after removing low-frequency configurations is presented in Figure 4.



Edit Truth Table

	CAL_co	CAL_cx	CAL_sc	CAL_os	CAL_or	CAL_cp	CAL_coep	CAL_vs	number	CAL_ca	cases	raw consist.	PRI consist.	SYM consist
1	0	0	0	1	0	1	1	1	19	1	cases	1	1	1
1	0	1	0	1	0	1	1	1	10	1	cases	1	1	1
1	0	0	1	1	0	1	1	1	5	1	cases	1	1	1
1	0	1	0	0	0	1	1	0	3	1	cases	1	1	1
1	0	0	0	1	1	1	1	0	4	1	cases	0.998348	0.993217	0.993217
1	0	1	1	1	0	1	1	1	11	1	cases	0.998136	0.906691	0.906688
1	0	0	0	1	0	1	1	0	10	1	cases	0.99793	0.991409	1
0	0	1	1	1	0	1	1	1	3	1	cases	0.997839	0.523823	0.523821
1	0	1	1	1	0	1	1	0	3	1	cases	0.997081	0.761272	0.761273
1	0	1	1	1	1	1	1	1	4	1	cases	0.995698	0.914041	0.914041
0	0	1	1	1	1	1	1	1	3	1	cases	0.995416	0.767445	0.767444
1	0	1	1	1	1	1	1	0	3	1	cases	0.994824	0.941681	0.94168
1	1	0	1	1	1	1	0	1	7	1	cases	0.993796	0.968322	0.968322
0	0	1	1	1	1	0	1	1	4	1	cases	0.993118	0.0425502	0.0425502
1	1	1	1	1	1	1	1	1	3	1	cases	0.990838	0.871177	0.871176
1	1	1	1	1	1	1	1	0	3	1	cases	0.990593	0.92893	0.928929
0	1	1	1	1	1	1	1	1	11	1	cases	0.97591	0.574555	0.574554
0	1	1	1	0	1	1	1	1	3	1	cases	0.949898	0.352233	0.352233
0	1	1	1	1	1	1	0	0	3	1	cases	0.918889	0.275894	0.275894
0	1	1	1	0	1	1	0	1	6	1	cases	0.912634	0.239041	0.239041

Figure 4 Based on raw consistency after removing combinations with low frequency

Figure 4 shows the truth table results after removing configurations with frequencies below 1, which are then sorted based on "raw consistency". At this stage, it is necessary to set a consistency threshold, with a recommended minimum value of 0.8 (Rihoux & Ragin, 2009). After that, a decision step is carried out to determine whether each combination can explain the results (with a value of 1) or not (with a value of 0). The result reflects the selection of the "Present" status to obtain the appropriate configuration.

4.10. Obtaining configurations or solutions

FsQCA calculates three types of solutions, namely complex solutions, parsimonious solutions, and intermediate solutions. In this context, "solution" refers to a combination of configurations supported by many cases, where the rule "combination produces results" is consistent. The combination of parsimonious and intermediate solutions presents all core conditions (i.e. strong causal relationships with outcomes) and peripheral conditions (i.e. weak relationships with outcomes), thus providing a more comprehensive interpretation of the findings (Fiss, 2007; Pappas, Papavlasopoulou, Mikalef, & Giannakos, 2020).

Table 4 FsQCA Solution

	Solution					
	1	**2**	**3**	**4**	**5**	**6**
Relative Advantage		•	•			•
Compatibility	•	•		•	•	
Top Management support	•			•		•
Organization Readiness	●		●	●	●	●
Competitive Pressure		●	●		●	●
Coercive Pressure	•	•	•		•	
Vendor Support					•	•
Complexity				⊗		⊗

Security Concern				•	•	•
Raw Coverage	0,331	0,421	0,618	0,327	0,298	0,262
Unique Coverage	0,018	0,021	0,223	0,031	0,003	0,032
Consistency	0,880	0,972	0,986	0,832	0,983	0,978
Solution Consistency	0,789					
Solution Coverage	0,888					

Note: Black circles (●) indicate the presence of a condition, and circles with "x" (⊗) indicate its absence. Large circle for core condition, small circles for peripheral condition and blank space for don't care condition.

The FsQCA results shown in Table 5.10 show that there are six configurations (grouped into three types of core conditions, namely organizational readiness, competitive pressure and (~) complexity) of conditions that will result in high cloud accounting adoption (CCA). Where this shows equivalence and supports proposition 1.

Seen in Table 5.10, the total solution consists of 0.789 and the solution coverage is 0.888 where each is greater than 0.75 and 0.25 as recommended by Ragin (2008). The solution coverage approach, similar to R2 in regression-based methods (Woodside, 2013), presents six solutions, which account for 88.8% of the sample related to high cloud accounting adoption. In addition, the consistency of each solution is more than 0.8 indicating that all solutions are sufficient. The coverage of each solution is greater than zero, indicating that they are empirically relevant (Ragin, 2008).

Among these solutions, Solution 3 shows a high level of consistency (0.986) and explains a large number of cases (raw coverage = 0.618), thus representing the best solution for high cloud accounting adoption. This suggests that the presence of all core conditions (organization readiness, competitive pressure and (~) complexity) combined with the presence of other peripheral conditions (relative advantage, compatibility, top management support, coercive pressure, vendor support and security concerns) will lead to high cloud accounting adoption. Based on the results of FsQCA, the results of the configuration and solutions in this study can be determined, which are presented in the following description:

- In configuration 1, organization readiness as a core condition combined with the presence of peripheral conditions, namely compatibility, top management support and coercive pressure will cause high adoption of cloud accounting even though they do not care about the conditions of relative advantage, competitive pressure, vendor support and security concerns.
- Combination of solution 2, shows that several MSMEs in this study that adopted cloud accounting only saw the competitive pressure condition as the core condition that was considered, with additional conditions such as in the aspects of relative advantage, compatibility and coercive pressure even though they did not care about the conditions of top management support, organization readiness, security concerns, complexity problems and did not care about support from vendors.
- Combination of solution 3, produces MSMEs that see the conditions of organization readiness and competitive pressure from the need to adopt cloud accounting as their core conditions and as a configuration that does not care about the aspects of top management support, vendor support, complexity problems and security concerns. Combined with the presence of peripheral conditions, namely relative advantage and coercive pressure, it will be a high consideration condition in adopting cloud accounting.
- Solution 4, produces MSMEs that see core conditions that are almost the same as solution 1, but the difference is in the combination of peripherals where the presence of top management support, organization readiness and security concern issues will be additional consideration conditions in adopting cloud accounting even though there are no aspects of relative advantage, competitive pressure and support from vendors in consideration. In this solution, MSMEs that adopt cloud accounting consider the absence or absence of complexity, where this condition strengthens them in using cloud accounting.

Solution 5, is shown the same as configuration 3 that the core conditions, namely organization readiness and competitive pressure as the core conditions considered, with additional conditions such as in the aspect of compatibility, coercive pressure and support obtained from vendors, and security concerns when using the application. In this condition, several conditions such as relative advantage, top management support, and complexity issues are not considered. 6) Configuration 6, to achieve high adoption intention can be achieved either with organization readiness and competitive pressure as core conditions as well as conditions 3 and 5, regardless of the compatibility aspect and coercive pressure that will be obtained by the MSMEs. Combined with the presence of peripheral conditions, namely

relative advantage, top management support and support from vendors. Similar to configuration or solution 4 where in this solution, MSMEs that adopt cloud accounting consider the absence or absence of complexity, where this condition strengthens them in using cloud accounting.

5. Conclusion

Relative Advantage has a positive and significant influence and becomes a peripheral condition in three configurations in high cloud accounting adoption. This means that the higher the relative advantage obtained by adopters or users of innovation, the more interested MSMEs in Denpasar City are in using the technology. Changes in the benefits that are felt to be given when adopting innovation indicate the potential for improvement or enhancement that can be adopted from an innovation to improve the work results of cloud accounting users.

Compatibility has a positive and significant influence and becomes a peripheral condition in three configurations in cloud accounting adoption. This means that in implementing cloud accounting it is easier if the innovation is more compatible or appropriate in the operations needed by the business, so that MSMEs in Denpasar City adopt cloud accounting to adjust business needs and improve work results.

Complexity has a negative and significant influence and becomes the main condition that must be absent in two configurations for the use of cloud accounting. This means that if the complexity in implementing cloud accounting is easier to operate, it will become an aspect in adopting CA. And because some conditions in the fsQca results are not considered, which means that in the business the workforce already has a background in using accounting system technology in the operations needed by the business or already has accounting processing capabilities, so that the complexity of a technology can be ignored. The conclusion is that MSMEs in Denpasar City do not find it difficult to apply cloud accounting to their businesses and this is what increases interest in adopting the technology.

Security Concern has a negative and significant effect and is a peripheral condition in three configurations for the use of cloud accounting. This means that security concerns can burden management decisions in making decisions to adopt cloud accounting. MSMEs in Denpasar City mostly do not feel that there are any problems caused using cloud accounting in their businesses, even from the results of FsQca, three security concern conditions are ignored, which is convinced that some businesses do not feel that security problems will occur because the cloud accounting vendor they use is trusted.

Top management support has a positive and significant effect and is a peripheral condition in three configurations for the use of cloud accounting. MSMEs in Denpasar City receive support from top management and owners in terms of financial resources, necessary infrastructure, and transformation processes. With strong support from owners and top management, the use of cloud accounting can have a major impact on the efficiency and productivity of their operations. So the more support given by the owner, the more likely they are to use technology such as cloud accounting.

Organizational Readiness has a positive and significant effect and is supported by being a core condition in five configurations for the use of cloud accounting. This shows that MSMEs in Denpasar City are ready in several areas such as sufficient funds, adequate human resources, and organizational readiness, as well as good IT competencies to be able to successfully adopt cloud accounting technology. This Organizational Readiness shows efforts in implementing changes that will have a major impact on the efficiency and productivity of their operations.

Competitive pressure has a positive and significant effect and is supported by being a core condition in four configurations for the use of cloud accounting. This means that the competitive pressure felt by MSMEs in Denpasar City encourages their businesses to use new technologies to outperform their competitors. If their competitors use cloud accounting, MSME customers or suppliers can encourage them to use it too and have benefited from increased productivity and better decision making. Two neglected results on FsQca show that some conditions of MSMEs that use cloud accounting are not due to competitive pressure, and adopt the system based on other reasons such as its benefits and the needs of the business.

Coercive Support has a positive and significant effect and is a peripheral condition in four configurations on the use of cloud accounting. This indicates that MSMEs in Denpasar City feel that pressure from the government, parent companies and business partners is an opportunity to improve productivity and company performance through important financial reporting policies and in the use of cloud accounting.

Vendor Support has a positive and significant effect and is a peripheral condition in two of the six configurations on the use of cloud accounting. This means that MSMEs in Denpasar City find it easier to use cloud accounting if the provider

or vendor offers technical support, training, and adequate resource provision. When MSMEs decide to adopt cloud accounting, the company not only obtains the desired technology, but ensures that the provider meets the service standards and what their business requires. When viewed from the FsQca results, four configurations of several MSMEs in Denpasar ignore the vendor support aspect, which indicates that it is not a core and most important aspect in the decision to adopt cloud accounting.

The use of cloud accounting has a positive and significant effect on company performance. This means that MSMEs in Denpasar City feel that the adoption of cloud accounting will increase the performance of MSMEs (SME's Performance). MSMEs believe that adopting cloud accounting can help MSMEs in their performance such as increasing efficiency, minimizing uncertainty in decision making, supporting business growth, improving services and improving other performance.

The results of fsQCA confirm that organizational readiness, competitive pressure, and complexity are core conditions in six configurations for cloud accounting adoption (CAA) which provide additional support for the hypothesis and results of PLS-SEM.

Relative advantage, compatibility, top management support, coercive support, security concerns and vendor support as peripheral conditions, combined with other core conditions, are sufficient as aspects of cloud accounting adoption decision making. These findings complement the PLS-SEM analysis and indicate the existence of causal asymmetry in a complex context.

This study shows that the relationship between technology and organization has a strong interplay. Cloud accounting must be fully supported by the owner or top management by conducting good planning, providing adequate infrastructure and conducting consistent training, so that the development and implementation of cloud accounting will be successful and support the achievement of MSME goals and the relationship between humans and technology has a strong mutual influence. Users believe that performance will improve with the use of the system if the system is easy to use and has a complete user guide.

5.1. Managerial Implication

First, the contribution to the DOI Model (Diffusion of innovation theory), this study contributes to deepening the understanding of the factors that influence technology acceptance at the organizational level. Investigating the extent to which DOI dimensions, such as Relative Adventage, Compatibility, Complexity and other factors, play a role in the evaluation of information systems. According to this theory, MSMEs adopt innovations such as cloud accounting in stages. The process of information dissemination, the process of consideration, and finally the decision to use the technology are all part of this stage. This theory emphasizes that effective communication and education are essential to accelerate the adoption of innovation. In cloud accounting for MSMEs, clear communication about the benefits, adequate training, and post-implementation support can increase adoption.

Second, the application of TOE (The Technology-Organization-Environment framework), the results of the study indicate that TOE can be an effective framework in evaluating the suitability of information systems to the needs of the organization in its external scope. The theoretical implications lie in the validity and relevance of technology characteristics such as relative advantage, complexity, and compatibility, resource capacity, vendor availability, implementation costs, and technology security in the context of information systems evaluation, expanding the scope of concepts that can be used to measure implementation success. MSME organizational capabilities, such as the level of human resource expertise and management support for change, will play a key role in the technology adoption process. Research can explore how these internal capabilities influence cloud accounting adoption readiness and success. Research can evaluate how environmental elements such as government regulations, business association support, and market trends and industry competition, can provide challenges or opportunities that will affect cloud accounting adoption by MSMEs. Research can identify these factors to understand the context in which MSMEs make decisions to adopt technology. In addition, this theory emphasizes the importance of the interaction between environmental, organizational, and technological aspects. For example, how cloud accounting technology characteristics interact with organizational and environmental regulations affect MSME adoption.

Third, the application of RBV (Resource Based View Theory), the results of the study show that the use of cloud accounting by MSMEs can provide a deeper picture of how internal capabilities and resources influence MSMEs' strategic decisions to adopt new technologies, as well as how it impacts their business performance and their competitive advantage.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed.

References

[1] Abbasi, G. A., Sandran, T., Ganesan, Y., & Iranmanesh, M. (2022). Go cashless! Determinants of continuance intention to use E-wallet apps: A hybrid approach using PLS-SEM and fsQCA. *Technology in Society*, *68*. https://doi.org/10.1016/j.techsoc.2022.101937

[2] Abed, S. S. (2020). Social commerce adoption using TOE framework: An empirical investigation of Saudi Arabian SMEs. *International Journal of Information Management*, *53*. https://doi.org/10.1016/j.ijinfomgt.2020.102118

[3] Adjei, J. K., Adams, S., & Mamattah, L. (2021). Cloud computing adoption in Ghana; accounting for institutional factors. *Technology in Society*, *65*. https://doi.org/10.1016/j.techsoc.2021.101583

[4] Afonso, C., Silva, G. M., Gonçalves, H. M., & Duarte, M. (2018). The role of motivations and involvement in wine tourists' intention to return: SEM and fsQCA findings. *Journal of Business Research*, *89*. https://doi.org/10.1016/j.jbusres.2017.11.042

[5] Ahn, B., & Ahn, H. (2020). Factors affecting intention to adopt cloud-based ERP from a comprehensive approach. *Sustainability (Switzerland)*, *12*(16). https://doi.org/10.3390/SU12166426

[6] Aini, Q., Anoesyirwan, A., & Ana, Y. (2019). Effect of Cloud Accounting as income statement on Accountant Performance. *Aptisi Transactions on Management (ATM)*, *4*(1). https://doi.org/10.33050/atm.v4i1.920

[7] Akhlas, Adrian Wail. (2020). *Government pushes for digital transformation to boost efficiency*. *The Jakarta Post* [*Online*]. Tersedia: https://www.thejakartapost.com/news/2020/08/13/government-pushes-for-digital-transformation-to-boost-efficiency.html. [11 Oktober 2023]

[8] Al-Khasawneh, A. L., Eyadat, H. M., Alrawad, M., Almaiah, M., & Lutfi, A. A. (2022). The Impact of Organizational Training Operations Management on Job Performance: An Empirical Study on Jordanian Government Institutions. *Global Business Review*. https://doi.org/10.1177/09721509221133514

[9] Al-Sharafi, M. A., Iranmanesh, M., Al-Emran, M., Alzahrani, A. I., Herzallah, F., & Jamil, N. (2023). Determinants of cloud computing integration and its impact on sustainable performance in SMEs: An empirical investigation using the SEM-ANN approach. *Heliyon*, *9*(5). https://doi.org/10.1016/j.heliyon.2023.e16299

[10] AL-Shboul, M. A. (2019). Towards better understanding of determinants logistical factors in SMEs for cloud ERP adoption in developing economies. *Business Process Management Journal*, *25*(5). https://doi.org/10.1108/BPMJ-01-2018-0004

[11] AlBar, A. M., & Hoque, M. R. (2019). Factors affecting the adoption of information and communication technology in small and medium enterprises: a perspective from rural Saudi Arabia. *Information Technology for Development*, *25*(4). https://doi.org/10.1080/02681102.2017.1390437

[12] Ali, M., Seny Kan, K. A., & Sarstedt, M. (2016). Direct and configurational paths of absorptive capacity and organizational innovation to successful organizational performance. *Journal of Business Research*, *69*(11). https://doi.org/10.1016/j.jbusres.2016.04.131

[13] Almaiah, M. A., Al-Otaibi, S., Lutfi, A., Almomani, O., Awajan, A., Alsaaidah, A., Alrawad, M., & Awad, A. B. (2022). Employing the TAM Model to Investigate the Readiness of M-Learning System Usage Using SEM Technique. *Electronics (Switzerland)*, *11*(8). https://doi.org/10.3390/electronics11081259

[14] Almaiah, M. A., Hajjej, F., Shishakly, R., Lutfi, A., Amin, A., & Awad, A. B. (2022). The Role of Quality Measurements in Enhancing the Usability of Mobile Learning Applications during COVID-19. *Electronics (Switzerland)*, *11*(13). https://doi.org/10.3390/electronics11131951

[15] Alrawad, M., Lutfi, A., Almaiah, M. A., Alsyouf, A., Al-Khasawneh, A. L., Arafa, H. M., Ahmed, N. A., AboAlkhair, A. M., & Tork, M. (2023). Managers' Perception and Attitude toward Financial Risks Associated with SMEs: Analytic Hierarchy Process Approach. *Journal of Risk and Financial Management*, *16*(2). https://doi.org/10.3390/jrfm16020086

[16] Alsmadi, A. A., Sha'ban, M., & Al-Ibbini, O. A. (2019). The relationship between E-banking services and bank profit in Jordan for the period of 2010-2015. *ACM International Conference Proceeding Series*. https://doi.org/10.1145/3317614.3317638

[17] Alsmadi, A. A., Sha'ban, M., & Al-Ibbini, O. A. (2019). *The relationship between E-banking services and bank profit in Jordan for the period of 2010-2015*. *ACM International Conference Proceeding Series*. https://doi.org/10.1145/3317614.3317638

[18] Alsyouf, A., Masa'deh, R., Albugami, M., Al-Bsheish, M., Lutfi, A., & Alsubahi, N. (2021). Risk of fear and anxiety in utilising health app surveillance due to covid-19: Gender differences analysis. *Risks*, *9*(10). https://doi.org/10.3390/risks9100179

[19] Amir Hamzah, Dadang Suhendar, & Agus Zainul Arifin. (2023). Factors Affecting Cloud Accounting Adoption In SMEs. *Jurnal Akuntansi*, *27*(3). https://doi.org/10.24912/ja.v27i3.1520

[20] Apriyanti, H. W., & Yuvitasari, E. (2021). The Role of Digital Utilization in Accounting to Enhance MSMEs' Performance During COVID-19 Pandemic: Case Study in Semarang, Central Java, Indonesia. *Lecture Notes in Networks and Systems*, *278*. https://doi.org/10.1007/978-3-030-79725-6_49

[21] Asiaei, A., & Nor, N. Z. (2019). A multifaceted framework for adoption of cloud computing in Malaysian SMEs. *Journal of Science and Technology Policy Management*, *10*(3). https://doi.org/10.1108/JSTPM-05-2018-0053

[22] Awa, H. O., Ukoha, O., & Igwe, S. R. (2017). Revisiting technology-organization-environment (T-O-E) theory for enriched applicability. *Bottom Line*, *30*(1). https://doi.org/10.1108/BL-12-2016-0044

[23] Benbasat, I., & Moore, G. C. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. In *Information Systems Research* (Vol. 2, Issue 3).

[24] Bigerna, S., Bollino, C. A., & Micheli, S. (2016). Italian youngsters' perceptions of alternative fuel vehicles: A fuzzy-set approach. *Journal of Business Research*, *69*(11). https://doi.org/10.1016/j.jbusres.2016.04.149

[25] Bourhim, E. M., & Labti, O. (2022). Understanding the Complex Adoption Behavior of Augmented Reality in Education Based on Complexity Theory: A Fuzzy Set Qualitative Comparative Analysis (fsQCA). *2022 13th International Conference on Computing Communication and Networking Technologies, ICCCNT 2022*. https://doi.org/10.1109/ICCCNT54827.2022.9984487

[26] Brandas, C., Megan, O., & Didraga, O. (2015). Global Perspectives on Accounting Information Systems: Mobile and Cloud Approach. *Procedia Economics and Finance*, *20*. https://doi.org/10.1016/s2212-5671(15)00051-9

[27] Chatterjee, S., Sarker, S., Lee, M. J., Xiao, X., & Elbanna, A. (2021). A possible conceptualization of the information systems (IS) artifact: A general systems theory perspective1. *Information Systems Journal*, *31*(4). https://doi.org/10.1111/isj.12320

[28] Chau, N. T., Deng, H., & Tay, R. (2021). A perception-based model for mobile commerce adoption in Vietnamese small and medium-sized enterprises. *Journal of Global Information Management*, *29*(1). https://doi.org/10.4018/JGIM.2021010103

[29] Chen, G., Chen, P., Wang, Y., & Zhu, N. (2023). Research on the development of an effective mechanism of using public online education resource platform: TOE model combined with FS-QCA. *Interactive Learning Environments*. https://doi.org/10.1080/10494820.2023.2251038

[30] Chen, M., Wang, H., Liang, Y., & Zhang, G. (2023). Net and configurational effects of determinants on cloud computing adoption by SMEs under cloud promotion policy using PLS-SEM and fsQCA. *Journal of Innovation and Knowledge*, *8*(3). https://doi.org/10.1016/j.jik.2023.100388

[31] Christauskas, C., & Miseviciene, R. (2012). Cloud–Computing Based Accounting for Small to Medium Sized Business. *Engineering Economics*, *23*(1). https://doi.org/10.5755/j01.ee.23.1.1220

[32] DePietro, R., Wiarda, E., & Fleischer, M. (1990). The context for change: Organization, technology and environment. In *The Processes of Technological Innovation*.

[33] DiMaggio, P. J., & Powell, W. W. (1983). The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields. *American Sociological Review*, *48*(2). https://doi.org/10.2307/2095101

[34] Duarte, P., & Pinho, J. C. (2019). A mixed methods UTAUT2-based approach to assess mobile health adoption. *Journal of Business Research*, *102*. https://doi.org/10.1016/j.jbusres.2019.05.022

[35] Duarte, P., & Pinho, J. C. (2019). A mixed methods UTAUT2-based approach to assess mobile health adoption. *Journal of Business Research*, *102*. https://doi.org/10.1016/j.jbusres.2019.05.022

[36] Effendi, M. I., Sugandini, D., & Istanto, Y. (2020). Social Media Adoption in SMEs Impacted by COVID-19: The TOE Model*. *Journal of Asian Finance, Economics and Business*, *7*(11). https://doi.org/10.13106/jafeb.2020.vol7.no11.915

[37] El-Haddadeh, R., Osmani, M., Hindi, N., & Fadlalla, A. (2021). Value creation for realising the sustainable development goals: Fostering organisational adoption of big data analytics. *Journal of Business Research*, *131*. https://doi.org/10.1016/j.jbusres.2020.10.066

[38] Eldalabeeh, A. R., Al-Shbail, M. O., Almuiet, M. Z., Baker, M. B., & E'Leimat, D. (2021). Cloud-Based Accounting Adoption in Jordanian Financial Sector. *Journal of Asian Finance, Economics and Business*, *8*(2). https://doi.org/10.13106/jafeb.2021.vol8.no2.0833

[39] Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, *54*(2). https://doi.org/10.5465/AMJ.2011.60263120

[40] Ghozali, I., & Latan, H. (2015). Partial Least Squares: Konsep, Teknik dan Aplikasi Menggunakan Program SmartPLS 3.0. Semarang: Badan Penerbit Universitas Diponegoro

[41] Gligor, D., & Bozkurt, S. (2020). FsQCA versus regression: The context of customer engagement. *Journal of Retailing and Consumer Services*, *52*. https://doi.org/10.1016/j.jretconser.2019.101929

[42] Hameed, M. A., & Arachchilage, N. A. G. (2019). *A Conceptual Model for the Organizational Adoption of Information System Security Innovations*. https://doi.org/10.4018/978-1-5225-9742-1.ch014

[43] Hamid, R. S., & Anwar, S. M. (2019). Structural Equation Modeling (SEM) Berbasis Varian. In *Jurnal Penelitian Pendidikan Guru Sekolah Dasar* (Vol. 6, Issue August).

[44] Hamundu, F. M., Husin, M. H., Baharudin, A. S., & Khaleel, M. (2020). *Intention to Adopt Cloud Accounting: A Conceptual Model from Indonesian MSMEs Perspectives*. *Journal of Asian Finance, Economics and Business*, *7*(12). https://doi.org/10.13106/JAFEB.2020.VOL7.NO12.749

[45] Handayani, E., Adrianto, Z., & Ritchi, H. (2021). Examining User Intention Toward Cloud-Based Accounting Information System Adoption. *Journal of Accounting Auditing and Business*, *4*(2).

[46] Hanum, S., al Adawiyah, R., Sensuse, D. I., Lusa, J. S., Arief, A., & Prima, P. (2020). Factors Influencing E-Government Adoption (A Case Study of Information System Adoption in PPATK). *Jurnal IPTEK-KOM*. https://doi.org/10.17933/iptekkom.22.1.2020.19-30

[47] Hoti, E. (2015). The technological, organizational and environmental framework of IS innovation adaption in small and medium enterprises. Evidence from research over the last 10 years. *International Journal of Business and Management*, *III*(4). https://doi.org/10.20472/bm.2015.3.4.001

[48] Hsu, P. F., Kraemer, K. L., & Dunkle, D. (2006). Determinants of e-business use in U.S. firms. In *International Journal of Electronic Commerce* (Vol. 10, Issue 4). https://doi.org/10.2753/JEC1086-4415100401

[49] Jitpaiboon, T., & Kalaian, S. A. (2005). Analyzing The Effect Of Top Management Support On Information System (IS) Performance Across Organizations And Industries Using Hierarchical. *Journal of International Technology and Information Management*, *14*(1). https://doi.org/10.58729/1941-6679.1150

[50] Karmawan, I. G. M. (2014). Dampak Peningkatan Kepuasan Pelanggan dalam Proses Bisnis E-Commerce pada Perusahaan Amazon.Com*. ComTech: Computer, Mathematics and Engineering Applications, 5(2).* https://doi.org/10.21512/comtech.v5i2.2237

[51] Khayer, A., Talukder, M. S., Bao, Y., & Hossain, M. N. (2020). Cloud computing adoption and its impact on SMEs' performance for cloud supported operations: A dual-stage analytical approach. *Technology in Society*, *60*. https://doi.org/10.1016/j.techsoc.2019.101225

[52] Kourouthanassis, P. E., Mikalef, P., Pappas, I. O., & Kostagiolas, P. (2017). Explaining travellers online information satisfaction: A complexity theory approach on information needs, barriers, sources and personal characteristics. *Information and Management*, *54*(6). https://doi.org/10.1016/j.im.2017.03.004

[53] Kulkarni, G., Gambhir, J., Patil, T., & Dongare, A. (2012). A *security aspects in cloud computing. ICSESS 2012 - Proceedings of 2012 IEEE 3rd International Conference on Software Engineering and Service Science.* https://doi.org/10.1109/ICSESS.2012.6269525

[54] Kumar, D., & Samalia, H. V. (2017). Investigating Factors Affecting Cloud Computing Adoption by SMEs in Himachal Pradesh. *Proceedings - 2016 IEEE International Conference on Cloud Computing in Emerging Markets, CCEM 2016*. https://doi.org/10.1109/CCEM.2016.012

[55] Lakhwani, Monika & Dastane, Omkar & Mohd Satar, Nurhizam & Johari, Zainudin. (2020). The Impact of Technology Adoption on Organizational Productivity. Journal of Industrial Distribution & Business. 11. 7-18. 10.13106/jidb.2020.vol11.no4.7.

[56] Li, G., Liang, Y., Wang, H., Chen, J., & Chang, X. (2022). Factors Influencing Users' Willingness to Adopt Connected and Autonomous Vehicles: Net and Configurational Effects Analysis Using PLS-SEM and FsQCA. *Journal of Advanced Transportation*, *2022*. https://doi.org/10.1155/2022/7489897

[57] Li, L., & Wang, X. (2018). M-commerce adoption in SMEs of China: The effect of institutional pressures and the mediating role of top management. *Journal of Electronic Commerce in Organizations*, *16*(2). https://doi.org/10.4018/JECO.2018040103

[58] Liang, Y., Zhang, G., Xu, F., & Wang, W. (2020). User Acceptance of Internet of Vehicles Services: Empirical Findings of Partial Least Square Structural Equation Modeling (PLS-SEM) and Fuzzy Sets Qualitative Comparative Analysis (fsQCA). *Mobile Information Systems*. https://doi.org/10.1155/2020/6630906

[59] Light, D. W., Berger, P. L., & Luckmann, T. (1967). The Social Construction of Reality: A Treatise in the Sociology of Knowledge. *Sociological Analysis*, *28*(1). https://doi.org/10.2307/3710424

[60] Lutfi, A. (2022). Understanding the Intention to Adopt Cloud-based Accounting Information System in Jordanian SMEs. *International Journal of Digital Accounting Research*, *22*. https://doi.org/10.4192/1577-8517-v22_2

[61] Lutfi, A., Al-Khasawneh, A. L., Almaiah, M. A., Alshira'h, A. F., Alshirah, M. H., Alsyouf, A., Alrawad, M., Al-Khasawneh, A., Saad, M., & Ali, R. al. (2022). Antecedents of Big Data Analytic Adoption and Impacts on Performance: Contingent Effect. *Sustainability (Switzerland)*, *14*(23). https://doi.org/10.3390/su142315516

[62] Lutfi, A., Al-Okaily, M., Alsyouf, A., Alsaad, A., & Taamneh, A. (2020). The Impact of AIS Usage on AIS Effectiveness Among Jordanian SMEs: A Multi-group Analysis of the Role of Firm Size. *Global Business Review*. https://doi.org/10.1177/0972150920965079

[63] Lutfi, A., Alkelani, S. N., Al-Khasawneh, M. A., Alshira'h, A. F., Alshirah, M. H., Almaiah, M. A., Alrawad, M., Alsyouf, A., Saad, M., & Ibrahim, N. (2022). *Influence of Digital Accounting System Usage on SMEs Performance: The Moderating Effect of COVID-19. Sustainability (Switzerland)*, *14*(22). https://doi.org/10.3390/su142215048

[64] Lutfi, A., Alshira'h, A. F., Alshirah, M. H., Al-Okaily, M., Alqudah, H., Saad, M., Ibrahim, N., & Abdelmaksoud, O. (2022). Antecedents and Impacts of Enterprise Resource Planning System Adoption among Jordanian SMEs. *Sustainability (Switzerland)*, *14*(6). https://doi.org/10.3390/su14063508

[65] Lyytinen, Kalle & Damsgaard, Jan. (2001). What's Wrong with the diffusion of innovation theory? The case of a complex and networked technology.

[66] Maelah, Ruhanita & Lami, Mohammed & Ghassan, Gheyath. (2021). Usefulness of Management Accounting Information in Decision Making Among SMEs: The Moderating Role of Cloud Computing. Asia-Pacific Management Accounting Journal. 16. 59-92. 10.24191/APMAJ.V16i1-04.

[67] Malik, S., Chadhar, M., Vatanasakdakul, S., & Chetty, M. (2021). Factors affecting the organizational adoption of blockchain technology: Extending the technology–organization– environment (TOE) framework in the Australian context. *Sustainability (Switzerland)*, *13*(16). https://doi.org/10.3390/su13169404

[68] Mangula, I. S., van de Weerd, I., & Brinkkemper, S. (2012). Adoption of the cloud business model in Indonesia: Triggers, benefits, and challenges. *ACM International Conference Proceeding Series*. https://doi.org/10.1145/2428736.2428749

[69] Maroufkhani, P., Iranmanesh, M., & Ghobakhloo, M. (2022). Determinants of big data analytics adoption in small and medium-sized enterprises (SMEs). *Industrial Management and Data Systems*. https://doi.org/10.1108/IMDS-11-2021-0695

[70] Mazumder, S., & Garg, S. (2021). Decoding digital transformational outsourcing: The role of service providers' capabilities. *International Journal of Information Management*, *58*. https://doi.org/10.1016/j.ijinfomgt.2020.102295

[71] Misangyi, V. F., Greckhamer, T., Furnari, S., Fiss, P. C., Crilly, D., & Aguilera, R. (2017). Embracing Causal Complexity: The Emergence of a Neo-Configurational Perspective. Journal of Management, 43(1). https://doi.org/10.1177/0149206316679252

[72] Nayyar, A. (2019) Handbook of Cloud Computing: Basic to Advanced Research on the Concepts and Design of Cloud Computing. BPB Publications, Noida.

[73] Nguyen, T. H., Le, X. C., & Vu, T. H. L. (2022). An Extended Technology-Organization-Environment (TOE) Framework for Online Retailing Utilization in Digital Transformation: Empirical Evidence from Vietnam. *Journal of Open Innovation: Technology, Market, and Complexity*, *8*(4). https://doi.org/10.3390/joitmc8040200

[74] Njenga, M., Kirimi, M., Koech., G., Otieno, E., and Sola, P., (2019). *Training of Trainers (ToT) on sustainable Prosopis Juliflora woodfuel production and utilization in Baringo County, Kenya.* Bogor, Indonesia: Center for International Forestry Research (CIFOR).

[75] Noor, J. (2017). *Metodologi Penelitian: Skripsi, Tesis, Disertasi & Karya Ilmiah*. Jakarta: Kencana.

[76] Oliveira, T., & Martins, M. F. (2010). Understanding e-business adoption across industries in European countries. *Industrial Management and Data Systems*, *110*(9). https://doi.org/10.1108/02635571011087428

[77] Oliveira, T., Martins, M. F., & Lisboa, U. N. de. (2011). Literature Review of Information Technology Adoption Models at Firm Level. *Review of Economics Studies*, *14*(1).

[78] Oliveira, T., Martins, R., Sarker, S., Thomas, M., & Popovič, A. (2019). Understanding SaaS adoption: The moderating impact of the environment context. *International Journal of Information Management*, *49*. https://doi.org/10.1016/j.ijinfomgt.2019.02.009

[79] Pappas, I. O., & Woodside, A. G. (2021). Fuzzy-set Qualitative Comparative Analysis (fsQCA): Guidelines for research practice in Information Systems and marketing. *International Journal of Information Management*, *58*. https://doi.org/10.1016/j.ijinfomgt.2021.102310

[80] Park, S. C., & Ryoo, S. Y. (2013). An empirical investigation of end-users' switching toward cloud computing: A two factor theory perspective. *Computers in Human Behavior*, *29*(1). https://doi.org/10.1016/j.chb.2012.07.032

[81] Penrose. (1959). Penrose's The Theory of the Growth of the Firm. *Production and Operations Management*, *25*(10).

[82] Peraturan Pemerintah Nomor 7 Tahun 2021 Tentang Kemudahan, Perlindungan dan Pemberdayaan Koperasi dan Usaha Mikro, Kecil dan Menengah. (2021). Indonesia

[83] Phung, M. T., Ly, P. T. M., Nguyen, T. T., & Nguyen-Thanh, N. (2020). An FsQCA Investigation of eWOM and Social Influence on Product Adoption Intention. *Journal of Promotion Management*, *26*(5). https://doi.org/10.1080/10496491.2020.1729318

[84] Pradesa, E., Syahrani, T., & Sakti, R. E. (2023). Transformasi Digital Adopsi Software as a Service Layanan Cloud Accounting Oleh UMKM. *Jurnal Ekombis Review*, *11*(2).

[85] Priyadarshinee, P., Raut, R. D., Jha, M. K., & Gardas, B. B. (2017). Understanding and predicting the determinants of cloud computing adoption: A two staged hybrid SEM - Neural networks approach. *Computers in Human Behavior*, *76*. https://doi.org/10.1016/j.chb.2017.07.027

[86] Purnomo, R. (2011). Resource-Based View dan Keunggulan Bersaing Berkelanjutan: Sebuah Telaah Kritis Terhadap Pemikiran Jay Barney (1991). *Sustainable Competetive Advantage-1*.

[87] Qalati, S. A., Yuan, L. W., Khan, M. A. S., & Anwar, F. (2021). A Mediated Model On The Adoption Of Social Media And Smes' Performance In Developing Countries. Technology In Society, 64(July 2020), 101513. Https://Doi.Org/10.1016/J.Techsoc.2020.101513

[88] Ragin, C. (1987). The comparative method: Moving beyond qualitative and quantitative methods. In *Berkeley: University of California*.

[89] Ragin, C. C. (2008). Redesigning social inquiry : fuzzy sets and beyond / Charles C. Ragin. In *University of Chicago Press*.

[90] Rawashdeh, A & Rawashdeh, B. (2023). *The effect cloud accounting adoption on organizational performance in SMEs. International Journal of Data and Network Science, 7(1), 411-424.*

[91] Razak, N. A., & Ismail, K. (2022). Factors Influencing the Adoption of Robotic Process Automation among Accounting Personnel in Malaysia. *Management and Accounting Review*, *21*(3). https://doi.org/10.24191/MAR.V21i03-08

[92] Religia, Y., Ekhsan, M., Huda, M., & Fitriyanto, A. D. (2023). TOE Framework for E-Commerce Adoption by MSMEs during The covid-19 Pandemic: Can Trust Moderate? *Applied Information System and Management (AISM)*, *6*(1). https://doi.org/10.15408/aism.v6i1.30954

[93] Ria, R. (2023). Adoption Of Cloud-Based Accounting To Achieve Sustainable Development In Banking Industry: A Case Of Indonesia. *Journal of Law and Sustainable Development*, *11*(6). https://doi.org/10.55908/sdgs.v11i6.881

[94] Rihoux, B., & Ragin, C. (2012). Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques. In *Configurational Comparative Methods: Qualitative Comparative Analysis (QCA) and Related Techniques*. https://doi.org/10.4135/9781452226569

[95] Rogers, E. M. (2010). Diffusion of innovations. New York: Free Press

[96] Roig-Tierno, N., Gonzalez-Cruz, T. F., & Llopis-Martinez, J. (2017). An overview of qualitative comparative analysis: A bibliometric analysis. *Journal of Innovation and Knowledge*, *2*(1). https://doi.org/10.1016/j.jik.2016.12.002

[97] Romero-Castro, N., López-Cabarcos, M. Á., & Piñeiro-Chousa, J. (2022). Uncovering complexity in the economic assessment of derogations from the European industrial emissions directive. *Journal of Innovation and Knowledge*, *7*(1). https://doi.org/10.1016/j.jik.2021.11.001

[98] Sahin, I. (2006) Detailed Review of Rogers' Diffusion of Innovations Theory and Educational Technology-Related Studies Based on Rogers' Theory. The Turkish Online Journal of Educational Technology, 5, 14-23

[99] Sari, R. P., & Santoso, D. T. (2019). Pengembangan Model Kesiapan UMKM di Era Revolusi Industri 4.0. *Jurnal Media Teknik & Sistem Industri*, *3*(1).

[100] Sastararuji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2022). Cloud accounting adoption in Thai SMEs amid the Covid-19 pandemic: an explanatory case study. *Journal of Innovation and Entrepreneurship*, *11*(1). https://doi.org/10.1186/s13731-022-00234-3

[101] Sastararuji, D., Hoonsopon, D., Pitchayadol, P., & Chiwamit, P. (2021). Cloud Accounting Adoption in Small and Medium Enterprises: An Integrated Conceptual Framework: Five factors of determinant were identified by integrated Technology-Organization-Environment (TOE) framework, Diffusion of Innovation (DOI), Institutional Theory (INT) and extended factors. *ACM International Conference Proceeding Series*. https://doi.org/10.1145/3447432.3447439

[102] Skafi, M., Yunis, M. M., & Zekri, A. (2020). Factors influencing SMEs' adoption of cloud computing services in Lebanon: An empirical analysis using TOE and contextual theory. *IEEE Access*, *8*. https://doi.org/10.1109/ACCESS.2020.2987331

[103] Somohano-Rodríguez, F. M., & Madrid-Guijarro, A. (2022). Do industry 4.0 technologies improve Cantabrian manufacturing smes performance? The role played by industry competition. *Technology in Society*, *70*. https://doi.org/10.1016/j.techsoc.2022.102019

[104] Somohano-Rodríguez, F. M., & Madrid-Guijarro, A. (2022). Do industry 4.0 technologies improve Cantabrian manufacturing smes performance? The role played by industry competition. *Technology in Society*, *70*. https://doi.org/10.1016/j.techsoc.2022.102019

[105] Subashini, S., & Kavitha, V. (2011). A survey on security issues in service delivery models of cloud computing. In *Journal of Network and Computer Applications* (Vol. 34, Issue 1). https://doi.org/10.1016/j.jnca.2010.07.006

[106] Sugiyono, P. D. (2019). Metode Penelitian Bisnis: Pendekatan Kuantitatif, Kualitatif, dan R&D. Bandung : Alphabet.

[107] Sun, S., Hall, D. J., & Cegielski, C. G. (2020). Organizational intention to adopt big data in the B2B context: An integrated view. *Industrial Marketing Management*, *86*. https://doi.org/10.1016/j.indmarman.2019.09.003

[108] Susanto, A. (2017). Sistem Informasi Manajemen. In *Nuevos sistemas de comunicación e información*.

[109] Syah, M. A. F., Putra, P., Oktadini, N. R., Meiriza, A., & Sevtiyuni, P. E. (2023). Penerapan Metode Design Thinking Dalam Rancangan Design Interface Aplikasi Himbauan Tirta Musi Palembang. *Information System For Educators And Professionals : Journal of Information System*, *8*(1). https://doi.org/10.51211/isbi.v8i1.2398

[110] Tajudeen, F. P., Jaafar, N. I., & Ainin, S. (2018). Understanding the impact of social media usage among organizations. Information and Management, 55(3). https://doi.org/10.1016/j.im.2017.08.004

[111] Thuan, P. Q., Khuong, N. V., Anh, N. D. C., Hanh, N. T. X., Thi, V. H. A., Tram, T. N. B., & Han, C. G. (2022). The Determinants of the Usage of Accounting Information Systems toward Operational Efficiency in Industrial Revolution 4.0: Evidence from an Emerging Economy. Economies, 10(4). https://doi.org/10.3390/economies10040083

[112] Tornatzky, L. G., Eveland, J. D., & Fleischer, M. (1990). Technological Innovation as a Process. The Processes of Technological Innovation.

[113] Trawnih, A., Yaseen, H., Al-Adwan, A. S., Alsoud, A. R., & Jaber, O. A. (2021). Factors Influencing Social Media Adoption Among SMES During Covid-19 CRISIS. Journal of Management Information and Decision Sciences, 24(6).

[114] Undang - Undang Nomor 11 Tahun 2020 Tentang Cipta Kerja. (2020). Indonesia

[115] Undang - Undang Nomor 20 Tahun 2008 Tentang Usaha Mikro, Kecil dan Menengah. (2008). Indonesia

[116] Usman, U. M. Z., Ahmad, M. N., & Zakaria, N. H. (2019). The determinants of adoption of cloud-based ERP of Nigerian's SMEs manufacturing sector using TOE framework and DOI theory. International Journal of Enterprise Information Systems, 15(3). https://doi.org/10.4018/IJEIS.2019070102

[117] van de Weerd, I., Mangula, I. S., & Brinkkemper, S. (2016). Adoption of software as a service in Indonesia: Examining the influence of organizational factors. Information and Management, 53(7). https://doi.org/10.1016/j.im.2016.05.008

[118] Wang, L., Wang, Z., Wang, X., & Zhao, Y. (2021). Explaining consumer implementation intentions in mobile shopping with SEM and fsQCA: Roles of visual and technical perceptions. Electronic Commerce Research and Applications, 49. https://doi.org/10.1016/j.elerap.2021.101080

[119] Wang, Z., Wang, N., Su, X., & Ge, S. (2020). An empirical study on business analytics affordances enhancing the management of cloud computing data security. International Journal of Information Management, 50. https://doi.org/10.1016/j.ijinfomgt.2019.09.002

[120] Wardana, Wisnu (2020) Analisis Determinan Minat Untuk Terus Menggunakan Aplikasi Berbasis Cloud Accounting Dengan Modifikasi Kerangka Technology Acceptance Model (TAM) Studi Kasus Pada UKM Di Kota Semarang. Other thesis, Unika Soegijapranata Semarang.

[121] Widanengsih, E. (2021). Penerapan Unified Theory Of Acceptance And Use Of Technology Model Untuk Mengukur Perilaku Pengguna Aplikasi Akuntansi Pada Usaha Kecil Dan Menengah Euis Widanengsih Journal Of Industrial Engineering & Management Research. Journal Of Industrial Engineering & Management, 2(3), 146–160.

[122] Woodside, A. G. (2016). Embrace Complexity Theory, Perform Contrarian Case Analysis, and Model Multiple Realities. In Bad to Good. https://doi.org/10.1108/978-1-78635-334-420161003

[123] Wulansari, Oktavia Nurindah. (2023). Anteseden Adopsi E-Accounting dan Konsekuensinya terhadap Kinerja UMKM: Pendekatan Technology, Organizational, and Environment (TOE) Framework. UM Magelang Conference Series 6th Prosiding Business and Economics Conference In Utilizing of Modern Technology 2023. https://journal.unimma.ac.id/index.php/conference/issue/view/467

[124] Yau-Yeung, D., Yigitbasioglu, O., & Green, P. (2020). Cloud accounting risks and mitigation strategies: evidence from Australia. Accounting Forum. https://doi.org/10.1080/01559982.2020.1783047

[125] Zhang, G., Wang, W., & Liang, Y. (2021). Understanding The Complex Adoption Behavior Of Cloud Services By SMEs Based On Complexity Theory: A fuzzy sets qualitative comparative analysis (fsqca). Complexity, 2021. https://doi.org/10.1155/2021/5591446

[126] Zhang, H., & Zhang, Y. (2019). Comparing fsQCA with PLS-SEM: Predicting Intended Car Use By National Park Tourists. Tourism Geographies, 21(4). https://doi.org/10.1080/14616688.2018.1540652

[127] Zhao, J., & Yan, C. (2020). User Acceptance Of Information Feed Advertising: A Hybrid Method Based On SEM and QCA. Future Internet, 12(12). https://doi.org/10.3390/fi12120209.