

Analysis of the Use of Digital Accounting in Micro, Small, and Medium Enterprises (MSMEs) in Medan, Indonesia

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ABSTRACT

This study aims to test and analyze the influence of technology, organization, and the environment on digital accounting micro, small, and medium enterprises (MSMEs) in Medan using digital literacy as a moderation variable.

The study was conducted by collecting data by distributing questionnaires to MSME actors registered with the Department of Cooperatives, Small and Medium Enterprises in Medan City. The sampling technique used was purposive sampling, producing a sample of 95 MSMEs. The data obtained were analyzed using SEM-PLS.

The results showed that technology, organization, and the environment significantly affected the use of digital accounting. Digital literacy can moderate the relationship between technology and digital accounting. However, digital accounting cannot moderate the relationship between organizations and the environment.

Keywords: digital accounting, MSME, technology, organization, environment, Toe, digital literacy

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are business sectors that support regional and national economies. The significant role of the MSME sector,

according to Bappenas (Abidin, 2020), is the first MSME to contribute to opening employment opportunities and employment. Second, as forming Gross Domestic Product (GDP). Third, MSMEs can become a safety net for low-income people to carry out productive economic activities.

The great potential of MSMEs must be balanced with good management from its business actors so that there is no failure in the business. Factors that influence the success of MSMEs include adequate financial information, accounting records, and well-managed management (Ismail & Zin, 2009). Poor financial management and poor accounting records are the two main reasons for the failure of MSMEs (Alshir'ah et al., 2016).

The APBD allocated in the end requires an institution with a strong capacity and human resources (HR) in the regional government apparatus, the community involved, and the assistants. However, the reality is that cases of fund misuse are still found.

Accounting is one of the professional fields that has experienced many changes from the past and present to the future. Changes in accounting are caused by the rapid innovation produced by humans to create innovative and creative solutions to problems (Khanom, 2017). This change began to transform all aspects of accounting, transitioning from traditional manuals to digitized, which automated all

procedures for recording financial statements quickly (Friday & Japhet, 2020). Technological advances in the digital era have the potential to develop more for MSMEs in terms of marketing, ease of transactions, and financial recording (Pramono et al., 2020). Various mobile applications have provided easy financial recording and digitally presenting financial statements for MSMEs. Accounting applications are made to help MSMEs manage finances to improve their performance.

MSMEs need accounting information to overcome problems in the short and long term, providing the knowledge needed to strengthen the control and monitoring functions in various fields, including cost, expenditure, and cash flow. Accounting information is also precious for long-term strategic planning in a market environment with high competition and dynamism (Ali et al., 2012).

Medan City has the most significant number of MSMEs in North Sumatra Province. At the end of 2022, 38,343 MSMEs were recorded in the Simdakop MSMES Medan application. Of these, as many as 1,825 MSMEs have registered as fostered by the Cooperative Office and Medan City MSMEs, with various types of businesses that are run, including culinary businesses, fashion, and services. The following is the development of the number of micro, small, and medium enterprises in the city of Medan:

Table 1. The number of MSMEs fostered by the Medan City Cooperative and MSMEs Office in 2018-2022

No	Type of Business	Total Unit				
		2018	2019	2020	2021	2022
1	Micro	1480	918	890	1.480	1.695
2	Small	112	113	103	112	117
3	Medium	72	41	47	11	13
Total		1.664	1.072	1.040	1.603	1.825

Source: Data from the Department of Cooperatives and MSMEs Medan City, 2023

The data above shows the total number of micro, small, and medium business units registered as fostered businesses by the Medan City Cooperative and UKM Office. The data above shows that the development of micro, small, and medium enterprises in Medan City Micro business is the highest and vice versa. It is a tiny medium-sized business, and this is a joint task with the government to raise the class for businesses from the original micro business to small businesses and from small businesses, maximize to medium businesses, which will later have a positive impact on MSMEs and can open jobs for the community.

However, the existence of MSMEs cannot be separated from problems. One problem is related to MSMEs' ability to adopt the latest technology, especially in the micro and small sectors (Asri, 2018). Those who do not want to adopt technology still carry out their operational activities conventionally or manually (Achadiyah, 2019). This results in a lack of accounting information, which will help MSMEs make decisions and prospects for increasing their business work.

The second problem is related to time, where the SMEs, in their efforts, do not have time to prepare good financial reports (Chhabra, 2014). In addition, conventional operational and bookkeeping activities are very vulnerable to errors when carrying out the transaction input process, and stored data can be easily lost (Legina & Sofia, 2020).

MSMEs need digital accounting in their business process. It can help MSMEs in several services, such as preparing financial statements and evaluating business performance (Widanengsih, 2021). Based on the initial survey, from 1,695 MSMEs in the Micro category in Medan City and 76 MSMEs surveyed, 35 MSMEs have been digitized in accounting, especially in using accounting applications.

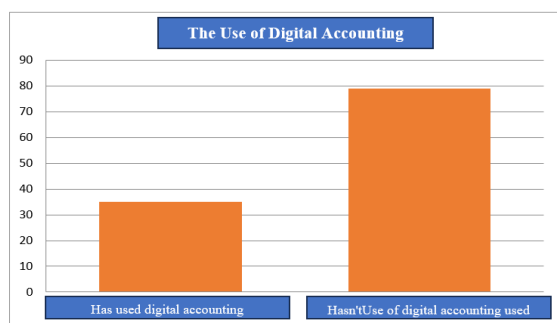


Figure 1. The Use of Digital Accounting

Therefore, the presence of digital accounting-based applications technology can be one solution to overcoming the problems experienced by MSME actors. MSMEs can use applications or software such as Majoo, Qasir, Zahir, Moka, Warung Books, Smart Cashier, and Quickbook. This innovation is expected to improve performance in MSMEs (Achadiyah, 2019). Previous research on the use of many technologies is based on theories that investigate and analyze the use of individual perspectives, such as the Technology Acceptance Model (TAM), Theory of Reasoned Action (TRA), and Unified Theory of Acceptance and Use of Technology (UTAUT). Some studies that focus on organizational levels use related theories such as the theory of diffusion of innovation (DOI), the technological – organizational – environmental (TOE) framework, the resource-based view (RBV) theory, and the contingency theory. However, after reviewing the previous literature, Ramdani and Kawalek (2008) concluded that research on the use of technology usually assesses several technological factors, organizations, and the environment that accept or reject the use of technological innovation.

This study uses the Technological-Organizational-Environmental (TOE) model. The Toe model developed by Tornatzky et al. (1990) identifies three categories of factors that affect the use of technology in business: technology, organization, and the environment.

Several reasons support the choice of implementing the toe framework in this study. First, the Toe framework explains

how technology, organizations, and the environment affect technology use and how these three characteristics affect company decision-makers (Hamed & Counsell, 2014). Second, Toe is a flexible contextual theory that can be applied in diverse arrangements and allows the exceptions and inclusion of technological variables, organizations, and the environment that align with various contexts (Ali, A. et al., 2012). Third, the Toe framework is considered a formidable theoretical basis and strongly supports research on the organizational level (Alsyof et al., 2022). Finally, the Toe framework has been recognized as the theory of information systems and innovations most often applied among researchers. Therefore, the Toe framework is the most applied theory (extraordinary theoretical framework) for the context of MSMEs because it provides a dynamic and broad perspective to handle MSMEs (Lutfi et al., 2017).

In addition, researchers will also discuss and analyze the research scheme of indirect effects on the use of digital accounting by adding moderation effects. Digital literacy as a moderating variable used in this study is essential for researchers to determine whether digital literacy can strengthen or weaken the variables of technology, organizations, and the environment when using digital accounting on MSME actors. Research conducted Tantriana & Rahmawati (2019) and Salsabila (2019) shows digital literacy affects the use/adoption of technology. Wardoyo Research (2022) entitled "Use of TAM in Reviewing Student Interest Using OVO Services: Moderation of Financial Literacy and Digital Literacy" shows the results that digital literacy as a moderation variable strengthens the perception of the benefits of students' interest in using OVO services, but weaken the relationship of perception of ease with interest in using OVO services. Based on this, the researcher wants to identify and analyze the analysis of the use of digital accounting in micro, small, and medium enterprises (MSMEs) in Medan

City.

Micro, Small and Medium Enterprises (MSMEs)

The definition of MSMEs in Indonesia has been regulated in Law No. 20 of 2008, namely: Productive Economic Efforts that stand alone, carried out by people per person or body of the Saha who are not subsidiaries or branches of the company that are owned, controlled, or become parts either directly or indirectly with medium businesses or large businesses with criteria Micro, Small and Medium Enterprises (MSMEs) based on the amount of wealth and annual income are shown in the following table.

Table 2. Law No. 20 of 2008 Concerning Indonesian MSMEs

Category	Criteria	Annual Sales
Micro Business	≤ 50 million	≤ 300 million
Small Business	> 50 million – 500 million	> 300 million – 2.5 billion
Medium Business	> 500 million – 10 billion	> 2.5 – 50 billion

While the BPS Statistics Report (2023: 357) divides the manufacturing industry into four groups based on the number of workers, namely:

1. Large industry (100 or more workers),
2. Middle/medium sector (20–99 workers),
3. Small sector (5-19 workers), and
4. Micro Industry (1-4 Workers)

Digital Accounting

Digital accounting represents accounting information in digital format, which can be manipulated and transmitted electronically (Deshmukh, 2006). Digital Accounting is a system in an organization that brings together daily transaction processing needs that support managerial and organizational operations with an organization's strategy activities to complete the reports needed by outside parties (Supriyanto, 2008).

A Digital Accounting System (DAS) is a

system that collects, stores, records, and processes data to produce valuable information for managers for decision-making and increase activities related to control and planning (Almaiah et al., 2022).

Indicators of the use of digital accounting in this study, namely:

1. Use
2. Ease of use
3. Reliability
4. Privacy and Security

Technology

The context of technology is defined as the integration of technology available for the company. In general, the context of technology refers to applications, software, or objects of new technology adoption. The technological context refers to the technology characteristics available in organizations for technology adoption. These characteristics include both structural aspects and special human resources. Structural aspects refer to the company's platform or technological infrastructure. Human special resources are people in organizations with the knowledge and skills to use e-account services (Oliveira et al., 2014).

When a company assesses the benefits of specific technology adoption, technology plays a crucial role (San-Martín et al., 2016). The context of technology describes the two existing technologies used and the new technology relevant to the company (Oliveira & Martins, 2010). SunBased on research (Rogers, 2003), there are five indicators of technological factors, including:

1. Compatibility
2. Perceived Usefulness
3. Relatively Gantage
4. Complexity
5. Security Concerns.

Organization

The organization's context is defined in terms of available resources to support the adoption of innovation, referring to

the company's characteristics that can facilitate or inhibit the adoption and implementation of innovation (Oliveira et al., 2014). Various authors have examined organizational parameters as independent variables for technology adoption. The organization's context within the toe framework refers to resources and other characteristics of the company, such as company size, organizational structure, managerial structure, human resources, and employee skills (Sun et al., 2018). Based on research (Rogers, 2003), there are five indicators of technological factors, including:

1. Cost
2. Organization Readiness
3. Top Management Support
4. Organization size
5. Organization Culture.

Environment

The environmental context is where a company does business, which refers to the competition industry (Oliveira & Martins, 2010). The environmental context is an arrangement in which a company does business and is influenced by the nature of the industry, competitors, and access to sources provided by others (Oliveira et al., 2014). The environmental context consists of environmental characteristics in which the organization carries out its operational activities (Aulia et al., 2016). In a more competitive environment, organizations tend to innovate by choosing a lot to adopt innovation (Alsharji et al., 2018). Competitive pressure refers to the level of pressure companies feel from competitors in the industry (Oliveira & Martins, 2010). Based on research (Rogers, 2003), there are four indicators of technological factors including:

1. Government Support
2. Competitive pressure
3. Uncertainly Environment
4. Vendor Quality

Digital Literacy

Digital literacy refers to the ability to deal with the development of digital technology at the level of technology, cognitive, and social. Users must be digitally literate to overcome sociological, cognitive, and pedagogical obstacles caused by increased internet penetration. These skills include the ability to operate computers and access information effectively, master data, assess the truth of data, and critically examine the nature of technical tools (Qu et al., 2016).

Digital literacy, according to Martin, accentuates its broad meaning and significance in the media. Digital literacy is a person's awareness, attitude, and capacity to use digital-based tools and facilities to find, access, manage, integrate, assess, analyze, synthesize technical resources, obtain new knowledge, produce media expressions, and interact with others to allow constructive community participation in the creation of certain living conditions. Thus, digital literacy that emphasizes the ability to use and utilize digital technology is expected to encourage MSME actors to be prepared to work with all changes in the role of the business system changes that are happening. The indicators used in measuring the digital literacy variables in this study are as follows:

1. Basic Ability
2. The ability to use the application
3. Financial Statement Analysis Skills
4. Understanding Data Security

Framework

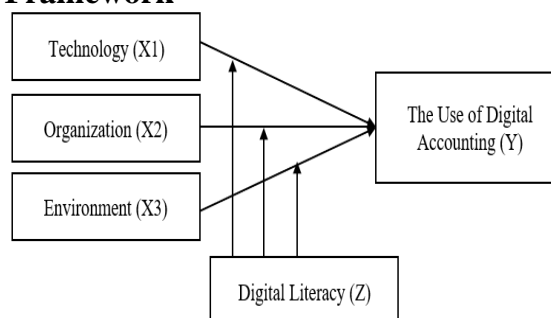


Figure 2. Framework

H1: Technology has a significant effect on the use of digital accounting

H2: Organizations have a significant effect on the use of digital accounting

H3: The environment has a significant effect on the use of digital accounting

H4: Digital literacy moderates the effect of technology on the use of digital accounting.

H5: Digital literacy moderates the effect of organizations on the use of digital accounting.

H6: Digital literacy moderates the influence of the environment on the use of digital accounting.

MATERIALS & METHODS

The type of research used in this study is associative research. According to (Sugiyono, 2018), an association is a study that aims to determine the effect or relationship between two or more variables. By using associative research methods, the effects of technology, organization, and the environment will be known in the application of digital accounting.

The population in this study were micro and medium enterprises registered with the Department of Cooperatives, Small and Medium Enterprises in Medan City. The sample is part of the number and characteristics possessed by the population. Sampling must be representative and must be able to describe the population's state. The sampling technique in this study was purposive sampling, namely, certain specific people provide the information needed because they have the information or criteria set (Sekaran & Bougie, 2017). The criteria for research samples are:

1. Registered at the Medan City Cooperative and MSMEs Office that already has NIB
2. Business turnover is less than Rp. 100,000,000.00 per month,
3. Medium or ever-used digital accounting applications in financial recording

The instrument in this study was carried out by distributing questionnaires to respondents who were the object of research. The questionnaire contained statements that could be chosen according to respondents' desires, by their choices, without coercion, and by the necessity of choosing what and how.

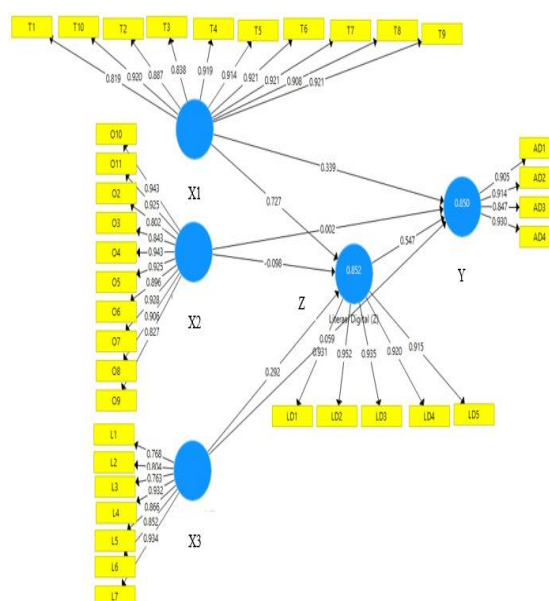
The scale used in this study is a Likert Sekala, which measures the perception of nature and the opinions of respondents who are employees for research purposes regarding social phenomena (Sugiyono, 2018). The data analysis technique used in this study is SEM PLS.

RESULT

A. Measurement Model (Outer Model Test)

The design model (outer model) aims to test the feasibility of the research model by analyzing the relationship of each indicator with its latent variable measured through validity and reliability.

The following is a combined diagram of the path analysis of the relationship between the independent variable X1 (technology), X2 (organization), and X3 (environment) to the quality of Y (digital accounting) moderated by Z (digital literacy) as shown in the following figure.



Source: SEM PLS Data Processing Results, 2023
Figure 3. Design of Research Models

1. Convergent Validity (Convergent Validity) Test

This test is assessed from the correlation between the Item Score/Component Score and the Construct Score to determine it can see the loading factor value in the following table:

Table 3. Loading Factor/ Outer Model

Construct	r-count Validity	Expected Loading Factor (0.7)	Convergent Validity
Technology (X1)			
T1	0,819	0,7	Valid
T2	0,887	0,7	Valid
T3	0,838	0,7	Valid
T4	0,919	0,7	Valid
T5	0,914	0,7	Valid
T6	0,921	0,7	Valid
T7	0,921	0,7	Valid
T8	0,908	0,7	Valid
T9	0,921	0,7	Valid
T10	0,920	0,7	Valid
Organization (X2)			
O2	0,943	0,7	Valid
O3	0,929	0,7	Valid
O4	0,886	0,7	Valid
O5	0,928	0,7	Valid
O6	0,903	0,7	Valid
O7	0,825	0,7	Valid
O8	0,943	0,7	Valid
O9	0,927	0,7	Valid
O10	0,783	0,7	Valid
O11	0,835	0,7	Valid
Environment (X3)			
L1	0,774	0,7	Valid
L2	0,810	0,7	Valid
L3	0,769	0,7	Valid
L4	0,930	0,7	Valid
L5	0,863	0,7	Valid
L6	0,848	0,7	Valid
L7	0,931	0,7	Valid
Digital Accounting (Y)			
AD1	0,900	0,7	Valid
AD2	0,903	0,7	Valid
AD3	0,838	0,7	Valid
AD4	0,931	0,7	Valid
Digital Literacy (Z)			
LD1	0,931	0,7	Valid
LD2	0,992	0,7	Valid
LD3	0,939	0,7	Valid
LD4	0,920	0,7	Valid
LD5	0,915	0,7	Valid

Source: SEM PLS Data Processing Results, 2023

All indicators of technology, environment, and digital literacy must have a value above 0.7, meaning that all indicators can be valid. In the organizational variable in the cost indicator, there is one questionnaire question with a value below 0.7, namely the O1 indicator of 0.657 (invalid) and the digital accounting variable with each AD5 indicator of 0.515 (invalid).

An invalid indicator must be expelled from the model and re-run the SmartPLS program, so indicators of the organization's variables and digital accounting are only represented by 1 question item. The results of the Smartpls program running after removing the invalid indicator will change the loading factor value in other indicators. Table 3 shows that the loading factor value after the running run is valid or > 0.7.

2. Discriminant Validity Test

The discriminant validity test aims to determine whether the construct or latent variable has an adequate discriminant by comparing the loading value on the destination construct to be greater than the loading value with other constructs. Discriminant validity test results based on the value of Fornell Larcker Criterion in this study showed the following results.

Table 4. Discriminant Validity Test

	X1	X1*Z	X2	X2*Z	X3	X3*Z	Y	Z
X1	0,897							
X1*Z	-0,532	1,000						
X2	0,622	-0,178	0,873					
X2*Z	-0,197	0,386	-0,530	1,000				
X3	0,847	-0,437	0,852	-0,371	0,849			
X3*Z	-0,510	0,859	-0,391	0,730	-0,521	1,000		
Y	0,885	-0,590	0,632	-0,220	0,817	-0,526	0,832	
Z	0,916	-0,607	0,604	-0,199	0,825	-0,510	0,901	0,931

Source: SEM PLS Data Processing Results, 2023

Table 4 shows that the relationship between each construct is good. The value of each construct with the construct itself is higher than its relationship with other constructs.

3. Discriminant Validity Test Based On AVE (Average Variance Extracted)

Discriminant validity test results based on the Cross Loading AVE (Average Variance Extracted) value of the six research variables are as follows:

Table 5. AVE Test (Average Variance Extracted)

Latent Variable	AVE _{-count}	AVE _{-table}	Conclusion
X1	0,674	0,5	Adequate
X1*Z	1,000	0,5	Adequate
X2	0,757	0,5	Adequate
X2*Z	1,000	0,5	Adequate
X3	0,773	0,5	Adequate
X3*Z	1,000	0,5	Adequate
Y	0,669	0,5	Adequate
Z	0,739	0,5	Adequate

Source: SEM PLS Data Processing Results, 2023

Table 5 shows that all latent variables respectively have an Ave-count value, which is all larger than Ave-table (0.5), so it can be concluded that the five latent (exogenous and endogenous) variables have a discriminant validity value (Ave) adequate.

4. Reliability Test

The reliability test was carried out to measure internal consistency, accuracy, and accuracy of measuring devices based on composite reliability (> 0.6) and strengthened with the value of Cronbach Alpha (> 0.6) with the following results:

Table 6. Reliability Test

Latent Variable	Cronbach's Alpha (0.6)	Composite Reliability (0.6)	Reliability	Conclusion
X1	0,946	0,954	0,6	High
X1*Z	1,000	1,000	0,6	High
X2	0,967	0,972	0,6	High
X2*Z	1,000	1,000	0,6	High
X3	0,951	0,960	0,6	High
X3*Z	1,000	1,000	0,6	High
Y	0,876	0,910	0,6	High
Z	0,911	0,934	0,6	High

Source: SEM PLS Data Processing Results, 2023

Table 6 shows that the five latent variables in a row have a total Cronbach's Alpha value greater than 0.6. Furthermore, the seven latent variables have a total composite reliability value of 0.6, so it can be concluded that all latent research variables have high reliability. In other words, the research model is considered feasible.

B. Structural Model (Inner Model Test)

The following is a combined path analysis diagram of the relationship between independent variables X1 (technology), X2 (organization), and X3 (environment) to the quality of Y (digital accounting) moderated by Z (digital literacy).

1. R-Square Test (R2)

Testing the structural model sees the R-Square (R2) value to determine the effect of independent variables on the dependent. R-Square test results can be seen in the following table.

Table 7. R-Square Test

	R-Square	R-Square Adjusted
Digital Accounting	0,781	0,764

Source: SEM PLS Data Processing Results, 2023

Based on Table 7, the R-squared value is 0.781. These results indicate that digital accounting can be explained by technology, organization, environment, and digital literacy by 78.1%. The remaining 21.9% is explained by other variables not included in this study.

2. Goodness of Fit (GOF)

Table 8. Goodness of Fit Test

	Saturated Model
SRMR	0,106

Source: SEM PLS Data Processing Results, 2023

Based on the results of Table 8, GOF values in this study are categorized quite well because the SRMR value ranges from 0.08 to 0.10.

C. Hypothesis Testing

The hypothesis test is carried out to determine the significance level of each coefficient of the path and whether the inter-constructors that have been hypothesized are (significant) or not.

Table 9. Hypothesis Test (Path Coefficients)

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ((O/STDEV))	P Values
X1->Y	0,423	0,479	0,252	11,980	0,047
X1*Z->Y	0,086	0,056	0,115	4,344	0,041
X2->Y	0,371	0,388	0,188	21,967	0,025
X2*Z->Y	0,081	0,090	0,092	0,881	0,189
X3->Y	0,261	0,283	0,137	19,992	0,029
X3*Z->Y	0,026	-0,002	0,171	0,152	0,440
Z->Y	0,359	0,263	0,366	0,982	0,163

Source: SEM PLS Data Processing Results, 2023

Table 9 shows the effect of the significance of technology variables (X1) on digital accounting. The mean sample value is 0.479, and the T-statistics of 11,980 is greater than 1.96. Then, the variable p-value value of 0.047 <0.05. The original sample value shows a positive value of 0.423. It means that technological variables have a positive and significant effect on the use of digital accounting.

Table 9 further shows the effect of the significance of the organizational variable (X2) on digital accounting. The mean sample value is 0.388, and T-statistics is 21.967, greater than 1.96. Then, the variable p-value value of 0.025 <0.05. The original sample value shows a positive value of 0.371. It means that organizational variables have a positive and significant effect on the use of digital accounting.

Table 9 subsequently shows the effect of the significance of environmental variables (X3) on digital accounting. The mean sample value is 0.283, and the T-statistics is 19,992, greater than 1.96. Then, the variable p-value value of 0.029 <0.05. The original sample value shows a positive value of 0.261. It means that environmental variables have a positive and significant effect on the use of digital accounting.

Table 9 The next also shows the role of the digital literacy moderation variable (Z) on the effect of the significance of the technology variable (X1) on digital accounting of the variable p-value value of 0.047 <0.05. The original sample value shows a negative value of 0.086. It means that the digital literacy variable acts as a moderation variable in the relationship of

technology variables to the use of digital accounting.

Table 9 also shows the role of the digital literacy moderation variable (Z) on the effect of the significance of the organizational variable (X2) on digital accounting of the variable p-value value of 0.189 > 0.05. The original sample value shows a positive value of 0.081. It means that the digital literacy variable does not act as a moderation variable in the relationship of organizational variables to the use of digital accounting.

Table 9 The following section also shows the role of the digital literacy moderation variable (Z) in the effect of the significance of the environmental variable (X3) on digital accounting of the variable p-value value of 0.163 > 0.05. The original sample value shows a positive value of 0.359. It means that the digital literacy variable does not act as a moderation variable in the relationship of environmental variables to the use of digital accounting.

CONCLUSION

Based on the results of data analysis on the effects of technology, organization, and the environment on the use of digital accounting in the city of Medan, it can be concluded that;

1. Technology has a significant effect on the use of digital accounting.
2. Organizations have a significant effect on the use of digital accounting.
3. The environment significantly affects the use of digital accounting.
4. Digital literacy moderates the effect of technology on the use of digital accounting.
5. Digital literacy does not moderate the influence of organizations on the use of digital accounting.
6. Digital literacy does not moderate the influence of the environment on the use of digital accounting.

LIMITATIONS

Based on research findings, the following are some of the weaknesses in this study:

1. The limitation of this study is the sample bias, where respondents include various business fields (culinary, textiles, fashion), so they are not in a particular field group. Further research to group research samples based on fields is expected to be more focused.
2. This research does not make criteria for the readiness of the level of technology application for MSME actors, so it is considered to have the same level of revenue, even though MSMEs can have the application of technology limited only to the non-cash payment system. For this reason, subsequent research can require and make a classification of technology absorption.
3. This research does not combine aspects of behavior and technological support, so further research can test the merging of various models to make it more concentrated.

SUGGESTION

Based on the results of data analysis and research findings, there are several suggestions:

1. Further research is expected to use other data collection methods, such as interviews, to collect more complete data. In addition, it is expected to be able to develop this research using other adoption models such as UTAUT, Diffusion Innovation, TAM, TRA, and others.
2. To the Medan City Cooperative and MSME Office to increase support for the application of digital accounting at MSMEs by providing training programs and assistance to MSMEs.
3. To the Medan City Cooperative and MSMEs Office, providing education about digital literacy for MSME actors is very suitable for MSMEs to face the digital era as it is today.
4. To the Medan City Cooperative and MSME Office to continue to carry out partnerships or collaboration with

external parties, such as academics, vendors, or consultants, to access technology or innovative ideas that can help speed up the digitalization process in MSMEs that the Cooperative Office and MSMEs assist. So that the government program on "MSMEs on the Class" can be achieved.

Declaration by Authors

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REFERENCES

1. Achadiyah, B. N. (2019). Otomatisasi Pencatatan Akuntansi pada UMKM. *Jurnal Akuntansi Multiparadigma JAMAL*, Volume 10, Nomor 1, 188-206.
2. Abidin, Zainal. Thareq Zendo Azhari. Wildan Naufal Esfandiar. 2020. Pemanfaatan Media Sosial Dalam Pemasaran Produk UMKM di Kelurahan Sidokumpul, Kabupaten Gresik. Vol. 10 No. 1 April 2020. Universitas Pengembangan Nasional Veteran Jawa Timur.
3. Ali, A.; Rahman, M.; Ismail, W. Predicting continuance intention to use accounting information systems among SMEs in Terengganu, Malaysia. *Int. J. Econ. Manag.* 2012, 6, 295–320.
4. Almaiah, M.A.; Al-Otaibi, S.; Lutfi, A.; Almomani, O.; Awajan, A.; Alsaaidah, A.; Alrawad, M.; Awad, A.B. Employing the TAM Model to Investigate the Readiness of M-Learning System Usage Using SEM Technique. *Electronics* 2022, 11, 1259.
5. AlSharji, A. et al.(2018).Understanding social media adoption in SMEs: Empirical evidence from the United Arab Emirates.*Journal of Entrepreneurship in Emerging Economies*.10 (2).302-328.
6. Alshir'ah, A. F., Abdul-Jabba, H., & Samsudin, R. S. (2016). Determinants of Sales Tax Compliance in Small and Medium Enterprises in Jordan: A Call for Empirical Research. *World Journal*

- of Management and Behavioral Studies, 4 (1), 41-46.
7. Alsyouf, A.; Ishak, A.K.; Alhazmi, F.N.; Al-Okaily, M. The Role of Personality and Top Management Support in Continuance Intention to Use Electronic Health Record Systems among Nurses. *Int. J. Environ. Res. Public Health* 2022, 19, 11125.
 8. Asri, D. P. B. (2018). Pengembangan industri kreatif UMKM asal Yogyakarta melalui pendaftaran “Jogja Co-Branding.” *Kosmik Hukum*, 18(2).
 9. Deshmukh, A. (2006). *Digital Accounting: The effects of the Internet and ERP on accounting*. Hershey, PA: Idea Group.
 10. Friday, I., & Japhet, I. (2020). Information technology and the accountant today: What has really changed? *Journal of Accounting and Taxation*.
<https://doi.org/10.5897/jat2019.0358>
 11. Hameed, M.A.; Counsell, S. Establishing relationships between innovation characteristics and IT innovation adoption in organizations: A meta-analysis Approach. *Int. J. Innov. Manag.* 2014, 18, 1450007.
 12. Ismail, N. A. (2009). Accounting information system: education and research agenda. *Malaysian Accounting Review*, 8(1), 63–80.
 13. Khanom, T. (2017). Cloud Accounting: A Theoretical Overview. *IOSR Journal of Business and Management*, 19(06), 31–38. <https://doi.org/10.9790/487x-1906053138>
 14. Legina, X., & Sofia, I. P. (2020). Pemanfaatan Software Pembukuan Akuntansi Sebagai Solusi Atas Sistem Pembukuan Manual Pada Umkm. *Jurnal Neraca: Jurnal Pendidikan dan Ilmu Ekonomi Akuntansi*, 4(2), 172-190.
 15. Lutfi, A., Idris, K., & Mohamad, R. (2017). AIS usage factors and impact among Jordanian SMEs: The moderating effect of environmental uncertainty. *Journal of Advanced Research in Business and Management Studies*, 1(1), 24–38.
 16. Oliveira, T., Thomas, M., & Espadanal, M. (2014). Assessing the determinants of cloud computing adoption: An analysis of the manufacturing and services sectors. *Information & Management*, 51(5), 497–510.
 17. Pramono, C, et al (2020). Analysis of Financial Performance Comparison before and after the Emergence of E-Commerce in Indonesian Retail Company. *International Journal of Research and Review*, Vol.7; Issue: 1.
 18. Pramono, I. P., Suangga, A., Mardiani, R., & Ilhamsyah, M. J. (2020). Aplikasi Akuntansi Berbasis Android dan Gambaran Profil UMKM Pengguna Potensial Menggunakan IFLS Data. *Kajian Akuntansi*, 21(1), 46-63.
 19. Qu, C., King, D., Chan, C., Mayor, E., Terras, M. M., & Ramsay, J. (2016). Family digital literacy practices and children’s mobile phone use. 7(article 157).
<https://doi.org/10.3389/fpsyg.2016.01957>
 20. Ramdani, B., & Kawalek, P. (2008). Exploring SME's adoption of broadband in the northwest of England. In *Handbook of Research on Global Diffusion of Broadband Data Transmission* (pp.504-523). IGI Global.
 21. Rogers, E. M. (2003). *Diffusion of Innovation FIFTH EDITION*. New York: Free Press.
 22. Salsabila, F. (2019). Pengaruh Literasi Ekonomi Dan Literasi Digital Terhadap Perilaku Berwirausaha Sektor Kuliner Yang Terdaftar Pada Aplikasi Go Food Di Pasar Segar Kota Makassar.” *Jurnal Manajemen dan Kewirausahaan* 10, no. 2 (2009): 93–104.
 23. Sekaran, Uma dan Roger Bougie, (2017), *Metode Penelitian untuk Bisnis: Pendekatan Pengembangan-Keahlian*, Edisi 6, Salemba Empat, Jakarta Selatan 12610.
 24. Sugiyono. 2018. *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.

25. Tantriana, D., & Rahmawati, L. (2019). The Analysis Of Surabaya Muzaki's Preference For Zakat Payment Through Zakat Digital Method. International Conference of Zakat, 23.
26. Tornatzky, L. G., & Fleischer, M. (1990). The process of technological innovation. Lexington: Lexington Books.
27. Wardoyo, M., Z., K. (2022). Penggunaan TAM dalam Mengkaji Minat Mahasiswa Menggunakan Layanan OVO: Moderasi Literasi Keuangan dan Literasi Digital. Universitas Kristen Satya Wacana.
28. Widanengsih, E., 2021. Technology Acceptance Model to Measure Customer's Interest to Use Mobile Banking. Journal of Industrial Engineering, 2(1): 73– 82.
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