

The Analysis of Computerized Accounting Systems Usage in The Micro-Small Enterprises



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ARTIKEL INFO

Submitted:
April 18, 2022

Revision:
February 07, 2023

Accepted:
February 08, 2023

Keywords:

*computerized accounting system;
moderated regression analysis;
micro and small enterprises;
bookkeeping, business*

ABSTRACT

This study aims to analyze demographic factors: understanding of SAK EMKM and motivation on Computerized Accounting System (CAS) usage in Indonesian MSEs. This study used online survey. Hypothesis testing through the t-test, ANOVA test, and Moderated Regression Analysis test. From the 87 respondents who did bookkeeping, there were 47,12% (41 respondents) using CAS and the remaining 52,88% (46 respondents) still using manual bookkeeping. From the 41 respondents who have using CAS consists of 87,8% (36 respondents) still using Microsoft Excel and the remaining of 12,2% use accounting software. The finding from this study show that only level education had a direct significant effect on CAS usage, while motivation did not moderate the relationship of the independent variables to CAS usage. Low level of education influence on the low CAS usage. But result for the simultaneous test without moderation and with moderation that the independent variables have a significant effect on the CAS usage.

1. INTRODUCTION

In recent years, the number of Indonesians in the productive ages (17 – 55 years) are more than the number of the available jobs. This surely this case triggers productive age to be able to survive by creating job opportunities for themselves. Most of them choose as the business actors in the sector of Micro, Small, and Medium Enterprises (MSMEs). However, the growth of MSMEs, especially for Micro and Small Enterprises (MSEs), have not been followed by the growth of awareness to apply computerized-accounting systems

(hereinafter abbreviated as CAS) to their business processes. The awareness of the usage of CAS, for example using accounting software programs both online and offline for business bookkeeping, is still rarely done by the business owners. Many MSE actors still feel more comfortable doing all their business activities manually. An example of entrepreneur carried out manually is to record sales transactions by only using paper and pens. Many business people are hesitant to use accounting software because of concerns about the cost factor (more expensive) to procure the necessary hardware and software. In reality, not all accounting software programs are expensive. Currently, many available online accounting software programs are free of charge forever but they still provide the best features for the users (Akbar, 2018).

The implementation of Information and Communication Technology (ICT) that supports CAS in the business operations of MSEs can be in the form of the computer integrated with software, middleware, and cloud-based data storage that may allow users to access, store, process, and transmit information quickly. When using CAS, MSE actors usually worry about privacy and transaction security issues, time constraints, and lack of resources (Camilleri, 2019; Thottoli, 2020). In actual practice, CAS has many positive impacts on business operations, those are including data accuracy, time efficiency in financial reporting, financial area control, providing internal control system reports at any time, helping monitor consumers and suppliers, and assisting in the decision-making process for management (Thottoli, 2020). The evidence regarding to the use of ICT and CAS in MSEs is still much debated. In addition, the use of CAS by MSEs in Indonesia is not evenly distributed. This is likely due to the absence of mandatory rules which are binding for MSEs to produce financial reports regularly, such as monthly reports, which are the obligation of large companies. Therefore, this study aimed to fill the gap regarding empirical studies on factors which is influences the decision of MSEs to apply CAS to their business operations. This research focuses on the usage of CAS which is computerized bookkeeping using Excel or/and accounting software.

2. LITERATURE REVIEW AND HYPOTHESIS

Accounting is an important way of managing trust between strangers in business and nearly all accounting practices arose to make trust easier to induce (Gabriel Donleavy, 2016). Based on mimetic isomorphism theory, the MSE's actors will survey the terrain and borrow legitimized practices of CAS usage from other succesfull MSEs, apparently

superior, performing actors in the MSE. Following to use the CAS's concept in business is voluntary and associated with one entity copying the practices of another. Mimetic pressures include benchmarking and identifying processes motivated by these pressures become institutionalized so that copying continues because of its institutional acceptance rather than its competitive necessity (Gabriel Donleavy, 2016).

The Use of Computerized Accounting Systems

The accounting process can be carried out in two categories: manual accounting and computer-based accounting by utilizing computerized-accounting systems (CAS). According to Waburoko in Amanamah, Morrison, & Asiedu (2016), CAS is defined as the use of a computer which is an electronic device to receive, store, process, and produce information as output. Furthermore, according to Wood & Sangster (2005), Meigs, Meigs, & Meigs (1998), and Marivic (2009), CAS is an accounting system that uses computers not only to process input and business transactions but also process, store, collect, summarize, analyze, and make financial reports as outputs for the needs of stakeholders (Amanamah *et al.*, 2016; Munasinghe, 2016).

Financial Accounting Standards for Micro, Small, and Medium Entities

Due to the issue of complexity and lack of knowledge of MSME actors regarding accounting reporting, Indonesia's Financial Accounting Standards Board (Indonesian: *Dewan Standar Akuntansi Keuangan* (DSAK)) has compiled a standard that is tailored to the interests of MSMEs. This aims at assisting the process of making MSME financial reports. The standards are called the Financial Accounting Standards for Micro, Small, and Medium Entities (Indonesian: *Standar Akuntansi Keuangan Entitas Mikro, Kecil, dan Menengah* (SAK EMKM)). This standard is effective as of 1 January 2018 (Sudirwan, 2019).

In SAK EMKM, the components of financial statements that are required to be reported by MSME actors have been adjusted to the needs of being smaller and easier than other accounting standards as those required for large businesses, such as IFRS-based SAK or SAK ETAP. The components of the financial reports based on SAK EMKM are as follows.

- a. Statement of Financial Position

This report presents information related to the number of assets, liabilities, and capital (equity) accounts as of the reporting date.

b. Income Statement

This report presents information related to elements of income and expense.

c. Notes to Financial Statements

This report describes in detail the nominal amount presented in the statement of financial position and income statement added with several other things that must be disclosed or explained in the report.

Motivation

Motivation is the attachment of certain behaviors to achieve the desired goals (Zainuddin, Suria Isa, 2011). In addition, motivation is an internal and external factor that influences performance or certain decision-making. In the case of this study, the decision is specified to the use of CAS in business operations. The motivation gets convenience when implementing CAS are for tax purposes, clear recording of income and expenses, clear financial performance assessment, easy tracking of receivables and debts, ease of applying for credit to banks, and business scale planning.

Hypothesis Development

Age of MSME Actors, Decision to Use CAS, and Motivation

Not everyone as MSE's owner has a computer to running their business. And not all business owner which have computer, do the computerized accounting system. It is all depend on their own decision to use or not to use computer for bookkeeping. In the study conducted by Camilleri (2019) indicates that MSE actors with young ages use electronic media are much more in their business operations.

H₁: Age has significant effect on the decision to use CAS.

H₆: Age has significant effect on the decision to use CAS moderated by motivation.

Age of Business, Decision to Use CAS, and Motivation

A study conducted by Ismail, Abdullah, & Tayib (2012) indicates that MSMEs that have been running for less or equal to six years are more likely to adopt computer-based accounting systems (CBAS) than those that have been running for more than six years. In addition, a study conducted by Nyathi, Nyoni, Nyoni, & Bonga (2018) reveals that most of

the management of the young MSEs do not have the experience and skills in managing a business effectively. Furthermore, according to Musah (2017), all levels and ages of businesses need reliable accounting information in their business operations. This can be related to the effective use of CAS which aims to run an effective business and produce reliable financial information.

H₂: Age of business has significant effect on the decision to use CAS.

H₇: Age of business has significant effect on the decision to use CAS moderated by motivation.

Education, Decision to Use CAS, and Motivation

Companies need employees who have special skills and qualifications to be able to work and operate CAS in their working area (Do *et al.*, 2018). A study conducted by Putra (2019) shows that weak knowledge, especially for accounting software, makes MSEs tend to carry out business operations manually. Apart from that, a study conducted by Ismail & King in Musah (2017) indicates that the development of accounting information in MSEs depends on the level of accounting knowledge of business owners. Therefore, it can be concluded that the lack of knowledge can be correlated with the respondents' latest education status, in which the assumption is that mastery of certain software is learned or obtained at a certain level of education. Furthermore, knowledge of accounting can be associated with the understanding of the applicable provisions, namely SAK EMKM.

H₃: Education has significant effect on the decision to use CAS.

H₈: Education has significant effect on the decision to use CAS moderated by motivation.

H₄: The understanding of SAK EMKM has significant effect on the decision to use CAS.

H₉: The understanding of SAK EMKM has significant effect on the decision to use CAS moderated by motivation.

H₅: Age, age of business, education, and the understanding of SAK EMKM have significant simultaneous effect on the decision to use CAS.

H₁₀: Age, age of business, education, and the understanding of SAK EMKM have significant simultaneous effect on the decision to use CAS moderated by motivation.

3. RESEARCH METHOD

Population and Samples

This study was quantitative research by collecting numerical information as primary data. The population in this study were SME actors. In determining the samples, the researchers applied an accidental sampling method, specifically a non-random sampling technique based on coincidence, in which anyone considered appropriate and accessible (business owners or managers) as a data source could become a sample. In this study, the total of samples were not predetermined. Therefore, researchers directly collected the data from the sampling units encountered. According to Cooper & Schindler in Wasanthi Madurapperuma (2016), the survey method is an appropriate fact-finding study to be able to provide adequate data in interpreting a finding. The applied data collection techniques in this study were the online open-and-closed questionnaire survey method.

Research Variables

The variables in this study consisted of three types of variables: (1) the dependent variable (i.e., the use of computerized accounting systems include excel or/and accounting software (Y)), (2) the independent variables (i.e., demographic factors in the form of respondents' age (X_1), age of business (X_2), latest education status (X_3), and the understanding of SAK EMKM (X_4)), and (3) the moderating variable (i.e., the motivation to perform accounting records (X_5)).

Operational Definition of Variables

The detailed information regarding to the measurement used in this study to each variable is presented in the following.

(Y) For the variable of the use of computerized accounting systems, the researchers used dummy variables in the form of number 0 for respondents who did not apply CAS (doing accounting records manually or paper-based) and number 1 for respondents who did accounting records by utilizing computer programs (computer-based).

(X_1) For the variable of respondents' age, the researchers categorized it into the range of 18 – 35 years, 36 – 47 years, and > 47 years. The age range was adjusted to the productive age according to the Central Statistics Agency (Indonesian: *Badan Pusat Statistik* (BPS)), which is between 15 – 60 years (see www.bps.go.id).

(X₂) For the variable of the age of business, the researchers referred to the study conducted by Putra (2019) that the age of the business is calculated from the year the business was established until the year the research was conducted. In this study, the researchers categorized the age of business into 3 years, 4 – 10 years, and > 10 years.

(X₃) For the variable of the latest education status, the researchers referred to the study conducted by Putra (2019) that the respondents' latest education status was categorized into high schools, diploma level, undergraduate level, and postgraduate level.

(X₄) For the variable of the understanding of SAK EMKM, the researchers applied 3 indicators, namely measurement (historical cost), basic assumptions (accrual basis, business entity concept, and business continuity), and presentation of financial statements (type of report and accounts in the statement of financial position, accounts in the income statement, and accounts in the notes to financial statements). In measuring understanding of SAK EMKM, the researchers used a differential semantic scale, which was arranged in a continuum line for the answers “highly understand” (score 4) and “highly not understand” (score 1).

(X₅) For the variable of the motivation to perform accounting records, the researchers examined 6 benefits obtained by MSE actors when performing accounting records: ease of taxation interests, clear recording of income and costs, clear financial performance assessment, easy tracking of receivables & debts, ease of credit application to the bank, and business scale planning. In this study, the motivation was measured by using a differential semantic scale, which was arranged in a continuum line for the answers “strongly agree” (score 4) and “strongly disagree” (score 1).

Techniques of Data Analysis

The technique used in analyzing the data to find out the influence of demographic factors and the understanding of SAK EMKM on the decision to use CAS with motivation as a moderating variable was the multiple linear regression. In this study, the researchers processed the data using SPSS v. 22 software. The applied model of the multiple linear regression in this study can be seen in the following equation.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + e \dots\dots\dots (1)$$

According to Lie (2009), the moderated regression analysis (MRA) or interaction test is a special application of multiple linear regression in which the regression equation

contains an interacting element (multiplication of two or more independent variables). Its equation is as follows.

$$Y = a + b_1X_1 + b_2X_2 + b_3X_3 + b_4X_4 + b_5(X_1*X_5) + b_6(X_2*X_5) + b_7(X_3*X_5) + b_8(X_4*X_5) + e$$

..... (2)

Where:

Y = The use of computerized accounting systems

a = The constant value

b₁-b₈ = Multiple linear regression coefficients

X₁ = Respondents' age

X₂ = Age of business

X₃ = Latest education status

X₄ = The understanding of SAK EMKM

X₅ = Motivation to perform accounting records

X₁*X₅= Moderation between respondents' age and motivation to perform accounting records

X₂*X₅= Moderation between the age of business and motivation to perform accounting records

X₃*X₅= Moderation between the latest education status and motivation to perform accounting records

X₄*X₅= Moderation between the understanding of SAK EMKM and motivation to perform accounting records

e = Error

The variable of motivation as a moderating variable was analyzed whether it served to strengthen or weaken the relationship among the variables of age, age of business, education, & the understanding of SAK EMKM and the variable of the use of computerized accounting systems. Regression model 1 is a test to determine the effect of the independent variables (i.e., age, age of business, education level, and the understanding of SAK EMKM) on the dependent variable (i.e., the use of computerized accounting systems (CAS)) without including the moderating variable. Meanwhile, the regression model 2 consists of moderation test or moderated regression analysis (MRA) by multiplying age (X₁) and motivation (X₅), age of business (X₂) and motivation (X₅),

education (X_3) and motivation (X_5), and the understanding of SAK EMKM (X_4) and motivation (X_5).

4. RESULTS AND DISCUSSIONS

Descriptive Statistics

The survey was conducted on 129 respondents. However, 42 respondents were not included in the research samples because they did not fit into the criteria, namely that respondents as MSE actors had to do accounting records. Meanwhile, the remaining 87 respondents fulfilled the criteria to become the samples in this study.

Table 1. Number of Respondents

No.	Description	Number of Respondents	Percentage (%)
1	Respondents filled out the survey.	129	-
2	Respondents did not perform any record.	(42)	-
3	Respondents performed accounting records.	87	100
4	In doing accounting records, the respondents used CAS.	41	47.12
5	In doing accounting records, the respondents did it manually.	46	52.88

Source: Processed Data (2021)

Table 1 indicates that the total of respondents is 87 MSE actors. Those who did accounting records using CAS are 41 respondents (47.12%), while those who did accounting records manually (recording in papers or books) are 46 respondents (52.88%). This finding supports the results of studies conducted by Munasinghe (2016), Wasanthi Madurapperuma (2016), and Nyathi *et al.* (2018), that MSEs that still perform manual accounting records (not using CAS) are greater than MSEs that have used CAS in their business operations.

Table 2. Details of Respondents Who Use CAS

No.	Description	Number of Respondents	Percentage (%)
1.	Accounting records conducted by using CAS	41	100
2.	Using Microsoft Excel	36	87.8
3.	Using accounting software	5	12.2

Source: Processed Data (2021)

Table 2 indicates that the total of respondents using CAS are 41 people. Those who still utilized Microsoft Excel were 36 people (87.80%). Meanwhile, the remaining 5 respondents (12.20%) already used accounting software programs, such as Teman Bisnis, MYOB, and others. This finding supports the results of studies conducted by Putra (2019) and Ismail, Abdullah, & Tayib (2012), that Microsoft Excel is still the most preferred choice of MSEs in applying CAS. Apart from that, the utilization of offline business applications is still not used maximally by MSEs as a device for implementing CAS. Currently, many accounting software programs are available and easily found, ranging from online to offline programs, such as Oracle, SAP, ERP, and applications from related agencies (e.g., Bank Indonesia with Si Apik and Indonesia's Ministry of Cooperatives and SMEs with Lamikro). In addition, those accounting applications can be downloaded on computers or mobile phones. This is likely to happen because the type of business is still simple, making MSEs not maximize the use of CAS in their business operations. Moreover, the education level of most respondents is high schools (In Indonesian, equivalent to *Sekolah Menengah Pertama* (SMP) and *Sekolah Menengah Atas* (SMA)), namely 32 respondents or 36.8%.

The Classical Assumption Test

Table 3. Results of the Classical Assumption Test

No.	Classical Assumption	Tests	Results	Notes
1	Normality	Kolmogorov-Smirnov	The Kolmogorov-Smirnov sig value is 0.316 greater than the probability value of 0.05.	Data are normally distributed.
		Normal P-P Plot	The dots spread along the diagonal line.	
2	Autocorrelation	Durbin-Watson	Durbin-Watson score is 2.230, between DU (k = 5; N = 87) 1.7745 and more than 2.2255 (4-DU = 4 - 1.7745).	There is no certainty whether any autocorrelation occurs so that it is continued with the runs test
		Runs Test	The value of asymptotic significance 2-tailed is 0.332 greater than 0.05.	It indicates no autocorrelation symptoms.
3	Multicollinearity	Tolerance	Age = 0.865 Age of Business = 0.952 Education = 0.901 Motivation = 0.965 The Understanding of SAK EMKM = 0.975	All independent variable tolerance values are greater than 0.10. It indicates no multicollinearity symptoms in the regression model.
		VIF	Age = 1.156 Age of Business = 1.050 Education = 1.110 Motivation = 1.036 The Understanding of SAK EMKM = 1.026	All VIF values are less than 10. It indicates no multicollinearity symptoms in the regression model.
4	Heteroscedasticity	Glejser	Age = 0.848 Age of Business = 0.610 Education = 0.315 Motivation = 0.620 The Understanding of SAK EMKM = 0.971	The dependent variable is indicated by the variable ABS RES 1. The results show that all the significance values of the independent variable are greater than 0.05. It means that there is no heteroscedasticity symptom in the regression model.

Resource: Processed Data (2021)

Results of the Multiple Linear Regression Test of Independent Variables Against the Dependent Variable without the Moderating Variable

From the data presented in Table 4, the formulated linear regression equation is as follows.

$$\text{CASU} = 0,119 - 0,126. U + 0,073 UU + 0,178. P + 0,027. \text{PSE} \dots\dots\dots (1)$$

With an adjusted *R* square of 0.174 or 17.4%, the variation in the variable of the decision to use CAS can be explained by the variables of age, age of business, education, and the understanding of SAK EMKM. The value of t-table is 1.989 (df = 82 (87 - 5); α = 5%).

H₁: Age has significant effect on the decision to use CAS.

The value of the t-count is -1.611 smaller than the value of the t-table, namely 1.989. In addition, the obtained significance value is 0.111 greater than the probability value of 0.05. Therefore, it can be concluded that the hypothesis is rejected. In other words, age does not affect the decision to use CAS.

Table 4. T test and ANOVA Without Moderating

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.460 ^a	.212	.174	.456

a. Predictors: (Constant), PSE, UU, P, U

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	4.596	4	1.149	5.516	.001 ^b
	Residual	17.082	82	.208		
	Total	21.678	86			

a. Dependent Variable: CASU

b. Predictors: (Constant), PSE, UU, P, U

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.119	.255		.465	.643
	U	-.126	.078	-.169	-1.611	.111
	UU	.073	.078	.094	.935	.353
	P	.178	.049	.377	3.660	.000
	PSE	.027	.053	.049	.501	.618

a. Dependent Variable: CASU

Resource: Processed Data (2021)

H₂: Age of business has significant effect on the decision to use CAS.

The value of the t-count is 0.935 smaller than the value of the t-table, namely 1.989. In addition, the obtained significance value is 0.353 greater than the probability value of 0.05. Therefore, it can be concluded that the hypothesis is rejected. In other words, the age of business does not affect the decision to use CAS. Moreover, this result strengthens the findings of a study conducted by Putra (2019).

H₃: Education has significant effect on the decision to use CAS.

The value of the t-count is 3.660 greater than the value of the t-table, namely 1.989. In addition, the obtained significance value is 0.000 smaller than the probability value of 0.05. Therefore, it can be concluded that the hypothesis is accepted. In other words, education affects the decision to use CAS. This means that education and training are key to the factors needed by human resources as the determinants of the success of a business.

H₄: The understanding of SAK EMKM has significant effect on the decision to use CAS.

The value of the t-count is 0.501 smaller than the value of the t-table, namely 1.989. In addition, the obtained significance value is 0.618 greater than the probability value of 0.05. Therefore, it can be concluded that the hypothesis is rejected. In other words, the understanding of SAK EMKM does not affect the decision to use CAS.

H₅: Age, age of business, education, and the understanding of SAK EMKM have significant simultaneous effect on the decision to use CAS.

The obtained significance value is 0.001 smaller than 0.005 and the value of F-count is 5.516 greater than the value of F-table (df 1 = 4; df 2 = 82), namely 2.48. Therefore, it can be concluded that the hypothesis is accepted. In other words, age, age of business, education, and the understanding of SAK EMKM simultaneously have a significant effect on the decision to use CAS.

Results of the Multiple Linear Regression Test of Independent Variables are Against the Dependent Variable with the Moderating Variable

From the data presented in Table 5, the formulated multiple regression equation is as follows.

$$CASU = 0,095 + 0,032.U + 0,041.UU + 0,209.P - 0,106.PSE - 0,151.U*M + 0,047.UU*M - 0,019.P*M + 0,110.PSE*M \dots\dots\dots (2)$$

Table 5. T test Using Moderating Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	.095	.256		.372	.711
U	.032	.138	.043	.234	.816
UU	.041	.116	.053	.354	.724
P	.209	.083	.442	2.511	.014
PSE	-.106	.090	-.197	-1.189	.238
Moderated1.X1.X5	-.151	.115	-.408	-1.313	.193
Moderated2.X2.X5	.047	.077	.151	.605	.547
Moderated3.X3.X5	-.019	.069	-.090	-.278	.782
Moderated4.X4.X5	.110	.059	.573	1.857	.067

a. Dependent Variable: CASU

Resource: Processed Data (2021)

By considering the significant value greater than the probability value (> 0.05) (moderated1.U*M = 0.193; moderated2.UU*M = 0.547; moderated3.P*M = 0.782; moderated4.PSE*M = 0.067) for the interaction to all independent variables (age, age of business, education, and the understanding of SAK EMKM), it can be concluded that the

variable of motivation does not have a significant effect both as a moderating variable and not as a moderating variable on the decision to use CAS in this regression analysis (H_6 , H_7 , H_8 , and H_9 are rejected). These results support a study conducted by A.A.N.B Dwirandra (2016), that motivation does not strengthen the effect of using information technology on the accounting sector.

Table 6. ANOVA Test Using Moderating Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.511 ^a	.261	.185	.453

a. Predictors: (Constant), Moderated4.X4.X5, P, UU, U, PSE, Moderated2.X2.X5, Moderated1.X1.X5, Moderated3.X3.X5

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5.652	8	.707	3.439	.002 ^b
	Residual	16.026	78	.205		
	Total	21.678	86			

a. Dependent Variable: CASU

b. Predictors: (Constant), Moderated4.X4.X5, P, UU, U, PSE, Moderated2.X2.X5, Moderated1.X1.X5, Moderated3.X3.X5

Resource: Processed Data (2021)

The value of the adjusted R square (R^2) is 0.185, meaning that 18.5% of the variation of the variable of the decision to use CAS can be explained by the variables of age, age of business, education, and the understanding of SAK EMKM moderated by motivation. The result of the ANOVA test or F-test shows that the obtained value of the F-count is 3.439 with a significance value of 0.002. Because the significance value is less than 0.05, this multiple regression model can be used to predict the variable of the decision to use CAS. In other words, H_{10} is accepted, namely that the variables of age, age of business, education, and the understanding of SAK EMKM simultaneously have a significant effect on the variable of the decision to use CAS moderated by the variable of motivation.

5. CONCLUSIONS AND SUGGESTIONS

The variable of education is the only variable that has a direct significant effect on the decision to use CAS, while the variables of respondents' age, age of business, and the understanding of SAK EMKM have no significant effect on the decision to use CAS.

However, the researchers also found that the variables of respondents' age, age of business, education, and understanding of SAK EMKM simultaneously have a significant effect on the decision to use CAS. Furthermore, the low level of education results in the low use of CAS in SMEs. This finding is in line with the results of a study conducted by Amanamah *et al.* (2016).

In the moderated regression analysis (MRA), the researchers found that the variable of motivation to perform accounting records is a moderating variable for the partial (individual) relationship among the independent variables (respondents' age, age of business, education, and understanding of SAK EMKM) and the dependent variable (the decision to use CAS). However, the results of the simultaneous test show that the independent variables concurrently have a significant effect on the dependent variable (i.e., the decision to use CAS) which is moderated by the variable of motivation.

The motivation to carry out bookkeeping returned to the personal wishes of each MSE actor. External factors besides motivation, educational level, and age of MSE actors that indirectly affect the MSE's business environment to start conducting CAS are 1) business trends that lead to fully online where there are currently many MSE success stories based on good bookkeeping, 2) the opportunity to obtain external funding facilities such as crowdfunding which requires good bookkeeping and in accordance with the rules, and 3) the many parties (such as the government, NGOs, education providers) who carry out training, outreach and assistance regarding bookkeeping needs for MSE.

It can also be considered that apart from the education level of MSE actors, the type of education will also more or less influence the decision to use CAS. For example, an MSE actor who has an educational background in accounting minimum at the high school or even college level, is most likely to carry out CAS, whether they use Excel as the simplest application or using accounting software. This is because they already have basic bookkeeping knowledge at school and can apply it independently in their business, even without special assistance from other parties. But apart from that, it is also possible for MSES actors who do not have basic accounting knowledge to also carry out CAS to their business, by attending special training or hiring accounting staff.

For further research, the researchers expect that other types of research variables can be included, such as the intervening variables. Apart from that, the implications of this study hopefully can be applied to decision-making in the world of education, especially in

preparing graduates by incorporating the lesson regarding accounting software programs that are widely used in the Business World & Industrial World (Indonesian: *Dunia Usaha Dunia Industri* (DUDI)).

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