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Determinants of Accounting Information Usage in Micro Small Medium Enterprises: Multigroup Analysis of Gender

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ABSTRACT

Micro Small Medium Enterprises (MSMEs) are major contributors to the economy growth in Indonesia. However, many MSMEs do not record yet their transaction properly as accounting information. The purpose of this study is to investigate the factors that influence accounting information usage among MSME's owners. The factors tested are accounting knowledge, accounting training, business age, business turnover, education level, and motivation to use along with gender as the moderating factor. The 165 respondents of the MSME owners, will be analyzed based on Structural Equation Model (SEM) using SmartPLS. The results of this study show that business age and motivation of use have a positive and significant effect towards the use of accounting information, while accounting knowledge, accounting training, business turnover and education level are not proven influencing the accounting information usage. In addition, gender is not showed as moderating variable. This research is expected to carry practical benefits by providing additional references for future research and contributing to the accounting literature regarding the use of accounting information.

Keywords: Accounting Information Usage, Micro Small Medium Enterprise, Multigroup Analysis, Gender.

1. INTRODUCTION

Micro, small, and medium enterprises (MSMEs) are one of the entities that play a key role in economic growth in developing countries and are crucial to developed nations in Indonesia because MSME have an important role in the contribution of the gross domestic product as well as in employment or workforce absorption and investment growth. MSMEs contribute 22.9% of Indonesia's total GDP; SMEs also absorb 97% of the total workforce in Indonesia and gather 60.4% of total investment based on the data of the Coordinating Ministry for Economic Affairs in 2019. The high number of MSMEs in Indonesia also provides some challenges. Many industries, especially MSMEs, have not yet realized how crucial transaction recording is for the going concern of business to

maintain company continuity (Entina and Pramono, 2019). Recording accounting transactions are not considered necessary by MSMEs. In addition, the guidelines to implement MSME accounting based on Indonesian Standard Financial Accounting for MSMEs have not been optimally utilized.

Kurniawati and Hermawan (2012) stated that there was still a lack of awareness of the importance of recording transactions among MSMEs. In practice, MSMEs already maintain accounting records within their company archives, although the employed transaction recording methods remain uncomplicated (Hartono, 2013). Recording transactions and the availability of accounting information in the business depend significantly on: the awareness of business actors and the willingness and interest of business actors to record and use accounting information in their business (Djazari & Sagoro, 2011). Businesses use accounting information in many aspects. One of the ways businesses use accounting is by making an accounting record. Accounting also has an essential role in business development in the micro-small-medium enterprise. An example of accounting's role in the development of business is in lending or fund submission to the bank, businesses that do not have an accounting system, apply bookkeeping, or keep track of their transaction record would find it difficult when applying for funds in banks. Another use of accounting information is to give and provide relevant information to know the performance of the business. Many Small-medium enterprises still do not understand how accounting is implemented in the business, even though it is very important in developing the MSME business.

The research regarding the use of accounting Information has been conducted using existing theories such as the Technology Acceptance Model (TAM). TAM Theory was used by Meiryani, Chang, Lorenzo and Daud (2021) in their research on the quality of Accounting Information Systems. There are several studies examining the use of accounting information in the MSMEs. A research by Rahmawati and Anisykurlillah (2019) indicated that accounting knowledge, corporate culture, and perception on accounting benefits positively influence the use of accounting information. Santosa and Wulandari (2019) in their research showed that the level of education and business scale had a positive effect on the use of accounting information while gender, business age, training and accounting knowledge had no effect on the use of accounting information. Meanwhile, research by Nirwana and Purnama (2019) stated that business size does not have a significant effect on the use of accounting information for MSMEs. Yolanda (2020) concluded that education does not affect the use of accounting information for MSMEs. Diana, Sudarmiatin and Hermawan (2023) studied the influence of accounting knowledge, business experience, business strategy on accounting information systems and business performance.

Accounting knowledge occurrence is the capacity to perceive accounting as the process of documenting, classifying, and summarizing economics (Belkaoui, 2011). Abdipour (2011) defines that accounting knowledge as the ability of MSMEs owners and administrators to develop high-quality of accounting information systems. Effective accounting knowledge demonstrates an understanding of the significance of accounting for users (Djazari and Sagoro, 2011). Accounting training refers to the quantity or regularity of accounting courses offered by non-school or higher education institutions, training facilities, or governmental agencies that MSMEs' owners attend (Novianti, Mustika & Eka, 2018). Based on how frequently accounting training is attended, MSMEs' owners' accounting training is measured.

Business age refers to the age of the business, its age, or the period of time it has been in operation (Handayani, 2011). The age of the business in this research was determined based on how long it had been in operation (in years) from the time it was founded until the study was done. The longer the business operates the more it tends for the business to have more complicated use of accounting information. Business turnover is the av erage of total gross revenue received per month by the business owner, calculated in units of rupiah (Arinta, 2014). Turnover is an accounting concept that calculates how quickly a business conducts its operations. Most often, turnover is used to understand how quickly a company collects cash from accounts receivable or how fast the company sells its inventory.

Educational level is formal education obtained through school (Hamza, 2019). Starting from elementary level, tertiary level, and university level. Education is the activity to develop human resources through skills, abilities, and knowledge to solve a problem (Pramana and Wirakusuma, 2019). The formal education level of MSME owners has a significant impact on how they use accounting data. The usage of accounting information in business management increases with the level of formal education of firm owners (Fauziah, 2015). The motivation of use was assessed by examining MSMEs' inclination to record transactions as either a requirement for administrative fulfillment or a need in business management MSME owners recorded business transactions for two reasons: to meet administrative obligations and as a necessity for business management, the motive of MSME owner affects how the accounting information used in the business (Puspita, 2018).

Gender is the difference between men and women in roles, functions, rights, responsibilities, and behaviors that are shaped by the social, cultural, and customary values of community groups and can change according to time and local conditions. Gender is a trait that is inherent in humans, both men and women who are constructed socially and culturally (Widiarta, 2013).

So, based on the explanation above, the purpose of conducting this research is to find out the determinant factors that affect the usage of accounting. The variables namely: accounting knowledge, accounting training, business age, business turnover, education level, motivation of use. Furthermore, in this research, gender will be used as variables that moderates the relationship between the variables. In the context of similar study, the usage of gender as moderating effect can be considered rare. It is hoped that the results of this research can prove and produce an effective model towards the determinant factors of accounting information usage in MSME.

2. THEORETICAL REVIEW AND HYPOTHESIS DEVELOPMENT

2.1. Theoretical Review

2.1.1 Technology Acceptance Model Theory (TAM Theory)

The Technology Acceptance Model (TAM) is the most widely used research model to research the adoption of accounting information systems. Initially introduced by Davis (1989), TAM adapted from the Theory of Reasoned Action (TRA). Grounded in psychological theory, TAM seeks to understand users' behavior towards information technology by examining beliefs, attitudes, intentions, and relationships between user behavior.

This theory remains relevant due to its thorough analysis of factors influencing the acceptance of systems or information technology. Rooted in psychological theory, TAM

delineates the behavior of information technology users based on their beliefs, attitudes, interests (intentions), and relationships with user behavior (Kurniawati, 2022). The model aims to elucidate the primary determinants influencing the behavior of information technology users as they embrace and utilize such technology.

2.1.2 Micro, Small, Medium Enterprise (MSMEs)

Based on the Law in Indonesia Number 20 of 2008 concerning Micro, Small and Medium Enterprises in Article 1 paragraph 3 explain that what is meant is as follows:

a. Micro-Enterprise are productive businesses owned by individuals or individual business entities that meet the criteria for micro-enterprises.

b. Small-enterprise is a stand-alone productive economic business carried out by individuals or business entities that are not subsidiaries or branches of companies that are owned or controlled or become a part either directly or indirectly of a medium or large business that meets the criteria of a small business.

c. Medium-enterprise is a stand-alone productive economic business performed by people or firms who aren't subsidiaries, branches of owned companies, under the management of, or who have a direct or indirect relationship with, a small business or a large business.

MSME categorized based on the revenue and assets owned by the business, the criteria of MSME are on the Table 1.

Table 1. MSME Criteria

No	Enterprise	Criteria	
		Assets (IDR)	**Revenue (IDR)**
1	Micro	Maximum IDR 50.000.000	Maximum 300. 000. 000
2	Small	> IDR 50.000.000 – IDR 500.000.000.	> IDR 300.000.000 – IDR 2.500.000.000.
3	Medium	> IDR 500.000.000 – IDR 10.000.000.000.	> IDR 2.500.000.000 – IDR 50.000.000.000.

Based on Article No. 20 year 2008 the MSME criteria is as illustrated in Table 1 for micro enterprise is an enterprise that has a maximum asset of 50 million and revenue of 300 million. Small enterprise is an enterprise that has an asset between 50 and 500 million and revenue between 300 million and 2.5 billion. Medium enterprise is an enterprise that have an asset between 500 million and 10 billion and revenue between 2.5 billion and 50 billion.

2.1.3 Accounting Information

Accounting can be defined by three critical characteristics: identification, valuation, and the transmission of financial information related to economic activities to interested parties (Kieso, 2002). In general, an accounting referred to an information system that provides reports to interested parties about the business and state of the company (Warren, 2006). Additionally, accounting information is delineated as a series of data processing activities from business transactions to processing company financial data using a harmoniously integrated computer information system (Puspitawati & Anggadini, 2014). Small business accounting, also known as bookkeeping, involves the straight-forward process of documenting transactions and reporting financial information (Karyawati, 2008). Moreover, accounting information aids in determining a company's future steps to achieve its goals. The use of accounting information involves the process, method, or act

of utilizing accounting information for economic decision-making among alternative actions (Puspita, 2018).

2.2 Hypothesis Development

2.2.1 Accounting Knowledge

Accounting knowledge encompasses education, comprehension, and experience in understanding various aspects related to accounting (Entina and Pramono, 2019). Accounting knowledge plays an important role in the development of a business and offers various advantages in the utilization of accounting information. Lack of accounting knowledge may results management failure in determining what policies to implement in business.

Previous research findings suggest that both declarative and procedural knowledge positively impact performance, emphasizing the crucial role of accounting knowledge for MSME owners in managing their businesses (Risal and Kristiawati, 2020). Accounting knowledge positively influences accounting information systems (Diana, Sudarmiatin, & Hermawan, 2023). Studies consistently indicate a positive relationship between accounting knowledge and the utilization of accounting information. For instance, Risal and Kristiawati's (2020) research highlights the positive impact of accounting knowledge on the use of accounting information in MSMEs. Based on the description above and the results of previous studies, the first hypothesis formulated as follows:

H1: Accounting knowledge has a positive effect on accounting information usage.

2.2.2 Accounting Training

Accounting training involves enhancing an individual's skills to manage finances through accounting practices (Santosa, 2019). It helps in identifying both the positive and negative aspects of a manager's accounting mastery. This training evaluates the technical proficiency of a manager in accounting practices (Nita & Yuliyati, 2015). Moreover, accounting training is one of the most crucial factors in utilizing accounting information for decision-making. The more frequently a manager attends these sessions, the better their ability to utilize accounting information effectively (Holmes and Nicholls, 1989).

Previous research indicates that accounting training positively influences the quality of provided accounting information. The study conducted by Entina and Pramono (2019) demonstrates the positive impact of accounting training on the usage of accounting information in MSMEs. Similarly, study by Supeno (2018) suggests a positive correlation between accounting training and the use of accounting information. Attending accounting training sessions increases the likelihood of a business utilizing accounting information effectively. The more a business owner participates in accounting training, the greater the likelihood of employing accounting information effectively within the business. Based on the description above and the results of previous studies, the second hypothesis formulated as follows:

H2: Accounting training attended by business actors has a positive effect on accounting information usage.

2.2.3 Business Age

The age of a business denotes its operational duration (Handayani, 2011). Longer-standing businesses tend to accumulate greater experience compared to newly established ones. Owners of well-established firms acquire substantial knowledge through their prolonged experience, distinguishing them from those just entering the business arena.

The age of a business significantly influences the mindset shifts and decision-making levels of MSMEs owners. Seasoned business owners often understand and appreciate the value of accounting information (Handayani, 2011).

Previous research conducted by Rini (2016) revealed a positive correlation between company age and the utilization of accounting information in MSMEs. That fact suggests that a business matures, it tends to use accounting information more frequently. Over time, business owners comprehend and integrate the significance of employing accounting information in their decision-making processes. Based on the description above and the results of previous studies, the third hypothesis formulated as follows:

H3: Business age has a positive effect on accounting information usage.

2.2.4 Business Turnover

Business turnover, measured in rupiah units, signifies the average monthly gross revenue which received by the business owner (Arinta, 2014). In accounting terms, turnover indicates the speed at which a company conducts its operations. Higher turnover typically correlates with more frequent recorded transactions. However, some enterprises with low turnover might overlook documenting transactions due to transaction sizes or being privately owned (Fauziah, 2015).

A higher business turnover often prompts MSMEs to maintain transaction records (Puspita, 2018). Furthermore, as a business's revenue or sales increase, the complexity of utilizing accounting information tends to grow (Fitriyah, 2006). Actually, higher revenue levels imply a greater likelihood of businesses applying accounting information. From the description above, the fourth hypothesis is as follows:

H4: Business turnover has a positive effect on accounting information usage.

2.2.5 Education Level

Education level refers to the formal education completed by MSME owners. The utilization of accounting information in business management tends to increase with the owners' level of formal education (Fauziah, 2015). The educational level significantly shapes how MSME owners understand accounting, subsequently impacting their preparation and capability in utilizing accounting information (Santosa, 2019).

In general, MSMEs are typically directly owned and led by their owners, signifying that the managerial abilities of MSME owners reflected by their education levels. A higher educational background among MSME owners or leaders generally translates to better managerial abilities. The expertise and capability of a company's owner are often influenced by the formal education they have acquired. From the description above, the fifth hypothesis is as follows:

H5: The level of education has a positive effect on accounting information usage.

2.2.6 Motivation of Use

Motivation of use is the desire of an individual that drives a person to act or do something (Solahudin, 2019). Only motivation drives a person to become highly focused and high spirited to achieve goals. In the context of utilizing accounting information, motivations play a pivotal role in encouraging MSME owners to incorporate accounting data into their operations (Terry, 2009). This impulse prompts actions aimed to attain particular objectives or adequate specific needs (Rafika, 2017).

MSME owners often report two primary motivational tendencies for recording transactions: the necessity for effective business management and the fulfillment of

administrative requirements. These aspects are critical not only for managing a firm efficiently but also for meeting administrative obligations necessary for activities such as credit applications, business licensing, trademark registrations, and tax reporting (Puspita, 2018). These motivations drive MSMEs to use accounting information both strategically for business operations and administratively for regulatory compliance. From the description above, the sixth hypothesis is as follows:

H6: Motivation of use has a positive effect on accounting information usage.

2.2.7 Gender

Gender refers to the distinctions in roles, nature, positions, responsibilities, and behavioral rights between men and women, shaped by societal norms, customs, and beliefs (Puspitawati, 2010). Solahudin (2019) highlights gender differences in decision-making processes, noting that men tend not to fully used available information. Additionally, Palmer and Kandasaami (1997) emphasize gender stereotypes, portraying men as objective, independent, aggressive, and work-oriented, while characterizing women as soft, passive, decision-oriented, and more sensitive. Meyers and Levy (1989) suggest that in information processing, men may not utilize all available information, resulting in less comprehensive decision-making compared to women. From the description above, the seventh hypothesis is proposed as follows:

H7: Gender has effects as moderating variable towards accounting information usage.

Based on previous explanations, the model of this study will be created. The model of this research can be seen in Figure 1.
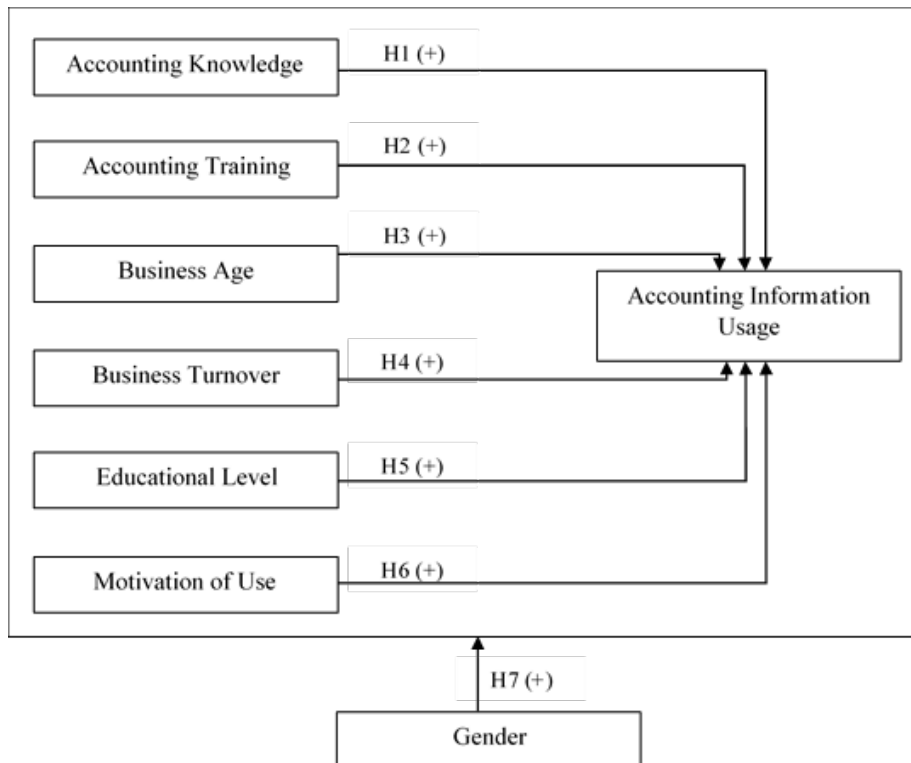
Figure 1. Research Model

3. RESEARCH METHOD

3.1 Research and Data Collection Method

This study employed surveys conducted through questionnaires to gather primary data from individual MSME owners. The questionnaires were administered either directly or through online platforms like Google Forms.

The primary data source for this study is the questionnaire, serving as a research instrument completed by respondents (Cooper & Schindler, 2013). Adapted from previous research, the questionnaire underwent modifications tailored to meet the specific requirements of this study. To ensure clarity and ease the response for MSME owners, a pilot test involving 20 research forms was conducted. These were manually distributed among local MSMEs and revised based on the feedback we received.

In research terminology, the population encompasses the complete set of elements or cases, whereas samples represent subsets of this population (Saunders, 2019). This study's population comprises individual business owners of MSMEs in Yogyakarta, Indonesia. The sampling method adopted is non-probability sampling, specifically convenience sampling, targeting MSME owners available during the research period.

3.2 Operational Definition and Variable Measurements

Research variables refer to the characteristics of individuals, objects, or activities studied to draw conclusions (Rahmida, 2020). This study incorporates six independent variables, namely Accounting Knowledge (AK), Accounting Training (AT), Business Age (BA), Business Turnover (BT), Education Level (EL), and Motivation to Use (MU). These variables are employed to analyze factors influencing the accounting information usage (AIU). The dependent variable in this study is the accounting information usage (AIU), while gender serves as the moderating variable.

Measurements in this research employ the Likert scale, where respondents rate their perceptions and opinions by selecting values from 1 to 6. They fill in the provided columns based on their perceptions and opinions regarding the researcher's questions. Table 2 presents the operational definitions and measurements for each independent and dependent variable.

Table 2. Definition and Operational Measurement

Variable	Operational Definition	Measurement	References
Accounting Knowledge (AK)	The capacity to understand accounting as the process of noting, classifying, and summarizing economic events	5 items	Entina and Pramono (2019)
Accounting Training (AT)	The number or frequency of accounting training held by a non-school educational institution or institution of higher education	5 items	Entina and Pramono (2019)
Business Age (BA)	The length of company has been in operation	4 items	Handayani (2011)
Business Turnover (BT)	The gross revenue received per month by business owners, in Rupiah.	3 items	Arinta (2014)

Variable	Operational Definition	Measurement	References
Education Level (EL)	The formal education taken	4 items	Entina and Pramono (2019)
Motivation of Use (MU)	Conscious effort or drives that lead individuals towards an action	5 items	Rafika (2017)
Accounting Information Usage (AIU)	Transactional data that has been converted to financial statistics and is used to inform economic decision-making	6 items	Entina and Pramono (2019)

The moderating variable in this study is gender, characterized as the differentiation between male and female based on social, cultural, values, behaviors, emotions, mentalities, and other non-biological factors (Solahudin, 2019). The Smith-Satterthwaite method is used to calculate t-statistics.

3.3 Data Analysis Tools

The data analysis in this study was conducted simultaneously using Partial Least Squares (PLS). The measurement model and the structural model are two sub-models of data analysis carried out using SmartPLS. A summary explanation of the measurement model is presented in Table 3.

Table 3. Measurement Model Testing Stage

Steps	Measurement type	Requirement	Source
Convergent Validity	• Average Variance Expected (AVE); • Loading Factors	> 0.5 > 0.5	Chin (1998)
Discriminant Validity	• AVE Analysis	AVE every variable must greatest correlation with other variables	Ghozali (2018)
Reliability Test	• Composite Reliability	> 0.7	Chin (1998)
Cronbach Alpha Reliability	• Cronbach Alpha	> 0.7	Ghozali (2018)
Model Fit	• SRMR • NFI	<0.10 or <0.08 Between 0 and 1	Hu and Bentler (1999)

Structural testing is conducted to observe the R-square value, the relationship value between constructs, and the significance level of the research model that has been established (Ghozali, 2018). A summary explaining the structural model testing is available in Table 4.

Table 4. Structural Model Testing Phase

Measurement type	Requirement	Source
Coefficient of Determination	$R^2 > 0.10$	Falk dan Miller (1992)
Hypothesis test	Significance t value > 1.65 (alpha 10%); > 1.96 (5% alpha); and > 2.58 (alpha 1%)	Ghozali (2018)

Moreover, due to the presence of moderating variables in this research, the assessment of the moderating effect will involve the use of the multigroup analysis

method. This method includes t-statistical testing through the Smith-Satterthwaite test, employing the following formula (Chin, 1998):

$$t = \frac{\text{Path}_{\text{Sample1}} - \text{Path}_{\text{Sample2}}}{\sqrt{(\text{S.E.}^2_{\text{Sample1}} + \text{S.E.}^2_{\text{Sample2}})}}$$

Description:
Path sample 1: Coefficient path for group 1 (Male)
Path sample 2: Coefficient path for group 2 (Female)
S.E. sample 1: Standard error coefficient value for group 1 (Male)
S.E. sample 2: Standard error coefficient value for group 2 (Female)

4. ANALYSIS AND DISCUSSION

4.1 Demographics

A total of 185 questionnaires were collected, but only 165 surveys met the requirements for processing; the remaining 20 were incomplete. Hence, 165 individuals are considered participants or responders in the survey. Among the 165 respondents, 71 (43%) were male, while 94 (57%) were female respondents. Regarding the age distribution of MSME owners in this study: 5 respondents (3%) were below 20 years old, 124 respondents (75.2%) were aged between 20 and 30, 14 (8.5%) were between 31 and 40, and 3 (1.8%) were above 50.

4.2 Measurement Model Testing

The convergent validity in this research presented in Table 5.

Table 5. Convergent Validity Test Results

	AK	AT	BA	BT	EL	MU	AIU
AK11	**0.863**	0.260	0.465	0.476	0.517	0.572	0.533
AK12	**0.900**	0.296	0.428	0.499	0.506	0.549	0.471
AK13	**0.835**	0.412	0.513	0.501	0.495	0.542	0.484
AK14	**0.902**	0.298	0.429	0.520	0.518	0.554	0.474
AK15	**0.784**	0.380	0.471	0.556	0.514	0.698	0.541
AT21	0.322	**0.799**	0.481	0.411	0.338	0.397	0.366
AT22	0.338	**0.747**	0.350	0.431	0.376	0.438	0.335
AT23	0.228	**0.747**	0.459	0.333	0.286	0.263	0.309
AT24	0.293	**0.792**	0.549	0.430	0.400	0.383	0.382
AT25	0.298	**0.765**	0.534	0.411	0.369	0.326	0.330
BA31	0.518	0.515	**0.746**	0.525	0.477	0.476	0.476
BA32	0.355	0.417	**0.741**	0.439	0.300	0.300	0.357
BA33	0.258	0.493	**0.778**	0.505	0.342	0.343	0.431
BA34	0.469	0.447	**0.768**	0.529	0.397	0.591	0.579
BT41	0.545	0.286	0.437	**0.782**	0.492	0.575	0.508
BT42	0.491	0.468	0.586	**0.835**	0.502	0.622	0.533
BT43	0.436	0.521	0.599	**0.832**	0.517	0.568	0.572

	AK	AT	BA	BT	EL	MU	AIU
EL51	0.389	0.340	0.371	0.464	**0.857**	0.467	0.450
EL52	0.662	0.252	0.357	0.481	**0.723**	0.587	0.479
EL53	0.413	0.366	0.374	0.466	**0.884**	0.502	0.502
EL54	0.428	0.512	0.517	0.551	**0.709**	0.534	0.459
MU61	0.529	0.427	0.483	0.542	0.430	**0.709**	0.487
MU62	0.482	0.371	0.477	0.589	0.529	**0.854**	0.581
MU63	0.732	0.331	0.441	0.602	0.582	**0.783**	0.598
MU64	0.482	0.332	0.505	0.573	0.548	**0.888**	0.625
MU65	0.528	0.450	0.462	0.580	0.539	**0.766**	0.577
AIU1	0.411	0.314	0.489	0.486	0.381	0.516	**0.738**
AIU2	0.563	0.405	0.542	0.593	0.532	0.683	**0.796**
AIU3	0.438	0.376	0.397	0.493	0.488	0.518	**0.829**
AIU4	0.494	0.328	0.551	0.543	0.493	0.565	**0.838**
AIU5	0.418	0.344	0.512	0.594	0.512	0.590	**0.819**
AIU6	0.476	0.379	0.486	0.425	0.432	0.540	**0.770**

No item shows a correlation with another variable question whose value exceeds the correlation between the question items within themselves. The correlation value of each variable (highlighted in bold) with itself is higher than its correlation value with other variables. Consequently, it can be concluded that all variables in this study have passed the discriminant validity testing. The composite reliability (CR), Average Variance Extracted (AVE), and Cronbach's Alpha (CA) are presented in Table 6.

Table 6. Composite Reliability (CR), AVE and CA

Variables	CR	AVE	CA	SRMR	NFI
AK	0.933	0.736	0.910		
AT	0.879	0.593	0.829		
BA	0.844	0.575	0.758		
BT	0.857	0.667	0.750	0.084	0.602
EL	0.873	0.635	0.804		
MU	0.900	0.664	0.860		
AIU	0.914	0.638	0.886		

The table above indicates that the variables in this research exhibit an AVE value above 0.5, meeting the criteria for convergent validity testing. Additionally, both the composite reliability and Cronbach's alpha values for each variable exceed 0.7, satisfying the reliability testing requirements for all variables in this study.

4.3 Structural Model Testing

The structural model testing for independent and dependent variables in this study is presented in Table 7, showcasing the r-square value and summarizing the results of hypothesis testing along with their corresponding conclusions.

Table 7. R-Square, Path Coefficient, and Significance

	Path	Path Coefficient	T-Statistic	Results
H1	AK → AIU	0.062	0.605	**Not Accepted**
H2	AT → AIU	-0.023	0.309	**Not Accepted**
H3	BA → AIU	0.236	2.705	**Accepted**
H4	BT → AIU	0.137	1.118	**Not Accepted**
H5	EL → AIU	0.123	1.502	**Not Accepted**
H6	MU → AIU	0.368	3.428	**Accepted**
R² AIU = 0.619				

Note: Significant level 5%

From the table above, it is evidence that the accounting information usage has an R-square value of 0.619, indicating that all of the independent variables affect the accounting information usage by 61.90%. Meanwhile, the remaining influence is attributed to other variables. Moreover, the table demonstrates that both the third hypothesis (H3) and the sixth hypothesis (H6) exhibit a positive path coefficient value, with a t-statistic value exceeding 1.96 (alpha 5%). Hence, it can be inferred that business age and motivation of use positively affect the accounting information usage. The results of testing the moderating effect of gender (H7) using the Smith-Satterthwaite t-test are detailed in Table 8.

Table 8. Smith-Satterthwaite t test results for Gender Subgroup

	Male			Female		
Path	β (Path coefficient)	t-value	Results	β (Path coefficient)	t-value	Results
AK-AIU	-0.032	0.193	**NS**	0.087	0.732	**NS**
AT-AIU	0.116	0.870	**NS**	-0.065	0.625	**NS**
BA-AIU	0.041	0.279	**NS**	0.294	2.456	**S**
BT-AIU	0.120	0.854	**NS**	0.109	0.604	**NS**
EL-AIU	0.364	2.059	**S**	0.078	0.756	**NS**
MU-AIU	0.294	1.572	**NS**	0.410	3.073	**S**
NS = not significant; **S**= significant						

It can be seen from the table above there are differences between male and female. The result from male shows only education level has positive impact towards the use of accounting information. Meanwhile, for female, business age and motivation of use have positive effect towards accounting information usage. Out of the six relationships established, none are significant, leading to the conclusion that gender has not been confirmed as a moderating variable.

4.4 Discussions

This research was conducted to analyze the moderating effect of gender on determinants of accounting information usage. The results of this study have shown that business age and motivation of use have proven to have a positive effect towards the use of accounting information. In addition, gender has also not been proven as moderating variables and does not have an effect on the use of accounting information.

Accounting knowledge is knowledge learned about anything through education, comprehension, and experience about accounting (Entina & Pramono, 2019). The capacity to perceive accounting as the process of documenting, classifying, and

summarizing economic occurrences is known as accounting knowledge (Belkaoui, 2011). The findings from previous research found that declarative and procedural knowledge has a positive impact towards performance (Rahmawati, 2018). However, the result of the first hypothesis test (H1) shows that accounting knowledge does not positively affect the use of accounting information. Accounting knowledge used by business owners might not lead to the increase of accounting information. This finding is not in line with the increase in accounting knowledge but is in line with the increase in the use of accounting information. The implication of the results of this study that accounting information need in MSMEs is relatively simple and easy. Thus, the MSME's owners do not really need complicated accounting knowledge.

Accounting training is the process of increasing a person's skill to manage finances through accounting practices (Santosa, 2019). Accounting training will help identify the positive and negative side of the manager on how they master accounting skills. The result of the second hypothesis test (H2) shows that accounting training does not have a positive effect towards the use of accounting information. The results are contrasting with the results of previous research (Entina & Pramono, 2019) which showed that accounting training has a significant effect towards the use of accounting information. The implication of the results of this study is that accounting training should be considered as there are differing results between studies. Accounting training used by business owner might not lead to the increase of accounting information. Some studies suggested considering accounting training to be used in MSME. As for the result from this research, accounting training does not increase the use of accounting information, hence is not considered to have significant effects towards the use of accounting information

Business age is the age or length of time a company operates (Handayani, 2011). Businesses with a longer age tend to have more experience compared to newly created companies. Based on research conducted by Sitoresmi (2013), the company's age causes a shift in the owner's thinking and decision-making capacity The result of the third hypothesis test (H3) shows business age have a positive effect towards the use of accounting information. The results are contrasting with the results of previous research (Entina & Pramono, 2019) that shows that business age does not affect the use of accounting information on MSME business. The implication of the results of this study is that Business Age should be considered. Business age might lead to the increase of accounting information. Some study suggested business age affects the use of accounting information. Because of differing results between studies. MSME owner might consider business age. The results shows that business age is in line with an increase in the use of accounting information. The result from this research suggests that business age does increase the use of accounting information. Hence business age is considered to have positive effects towards the use of accounting information.

Business turnover is the average of total gross revenue received per month by the business owner (Arinta, 2014). The previous research suggested that the higher the business turnover, the more likely for a MSMEs business to record their transaction. Businesses that are privately owned and still small in transactions, tend to ignore the need to record the transactions (Fauziah, 2015). The result of the fourth hypothesis test (H4) shows that Business Turnover does not have a positive effect towards the use of accounting information. The findings of this study are consistent with those of earlier

research by Julia (2016), which showed that the usage of accounting information by SMEs is not positively impacted by business turnover. The findings of this study are contrast to research by Fauziah (2015), who found that SMEs had a stronger tendency to record transactions in business the more businesses they transacted with. The implication of the results of this study is that, business turnover should be considered as there are differing results between studies. Business turnover of business owners might not lead to the increase of accounting information. Some study suggested that business turnover has positive effects towards the use of accounting information. As for the result from this research, business turnover does not increase the use of accounting information, hence is not considered to have significant effects towards the use of accounting information.

Education is a learning process which can be in forms of formal or informal education. Education level refers to formal education done by the MSMEs owner (Entina & Pramono, 2019). The formal education is the education obtained in formal school starting from elementary school to tertiary level diploma (D3) and bachelor degree (S1). The previous research suggested that the education level of MSMEs owners have a positive impact towards the use of accounting information (Santosa and Wulandari, 2019). The result of the fifth hypothesis test (H5) shows that Educational Level does not have a positive effect towards the use of accounting information. The findings of this study are consistent with research by Puspita (2019), which demonstrated that educational attainment has little bearing on how accounting information is used. The level of knowledge could not motivate SMEs to record transactions and apply accounting data in running their businesses. Fauziah (2015), who found that business actors used accounting information in business management to a greater extent the more educated they were. The implication of the results of this study is that, educational level should be considered as there are differing results between studies. Educational level of business owners might not lead to the increase of accounting information. Some studies suggested that educational level to have positive effects towards the use of accounting information. As for the result from this research, educational level does not increase the use of accounting information, hence is not considered to have significant effects towards the use of accounting information.

Motivation to use is the will or desire of an individual that drives a person to act or do something (Solahudin, 2019). Only motivation drives a person to become highly focused and high spirited to achieve goals. In other words, motivations encourage someone including MSMEs owner to use accounting information. Motivation is an impulse that causes someone to act to achieve a certain goal (Terry, 2009). The result of the sixth hypothesis test (H6) shows motivation of use does have a positive effect towards the use of accounting information. The motivation to use could influence the use of accounting information for SMEs. Contrary to that, the study by Puspita (2019) shows that motivation to use does not have a positive effect on the use of accounting information on SMEs. Motivation in this study observes the tendency of SMEs to record transactions as a necessity in business management or to record transactions only as a condition for administrative fulfillment. The implication of the results of this study is that, motivation of use should be considered. Motivation of use might lead to the increase of accounting information. Some study suggested motivation of use affects accounting information usage. Because of differing results between studies. MSME owners might consider the

motivation of use. The results show that motivation of use is in line with increase of accounting information usage. As for the result from this research, motivation of use does increase of accounting information usage. Hence motivation of use considered to have positive effects towards accounting information usage.

Gender is the differences in role and functions, nature, positions, responsibility, and behavioral rights between man and woman formed by norms, customs, and locals' beliefs, the difference in gender might lead to different risks taken (Puspitawati, 2010). The result of the seventh hypothesis test (H7) using the smith-satterthwaite test shows that gender is not proven as a moderating variable towards the use of accounting information. This is because from all the 6 relationships built, none shows gender proven as moderating variable because all the variables have the t-statistics below t-value 1.96 (Alpha 5%). However, there are differences between males and females, in male education has significant effects towards the use of accounting information with t-value of 2.059, meanwhile in female business age and motivation of use has significant effect towards the use of accounting information with t-value of 2.456 and 3.073 respectively. In conclusion, gender does have an effect towards accounting information usage.

5. CONCLUSION

This research was conducted to analyze the moderating effect of gender on determinants affecting accounting information usage in MSMEs. The factors tested in this study included accounting knowledge, accounting training, business age, business turnover, educational level, and motivation for use as independent variables, while the use of accounting information served as dependent variable, and gender as the moderating variable. The results of this study revealed that business age and motivation of use demonstrated a positive effect on accounting information usage. In addition, the findings indicated that gender did not prove to be a moderating variable in the relationship between the independent variables and accounting information usage.

However, this study encountered several limitations that should be considered for future research. The use of gender as a moderating variable remains rare in research on this topic, leading to limited comparable data with other studies. The research was conducted broadly among all MSME owners and did not comprehensively cover all MSMEs in Indonesia due to the large number of MSME owners, potentially leading to varied outcomes in subsequent studies.

Based on the limitations and constraints, there are a few recommendations for future study. It is encouraged that upcoming researchers persist in conducting similar studies utilizing comparable moderating variables. This is crucial due to the scarcity of similar research in Indonesia. Moreover, future studies could focus on specific groups within the MSME sector and explore alternative data collection methods, such as mini-interviews or focus group discussions. These approaches aim to mitigate biases and foster a more comprehensive and accurate dataset.

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