

Gender, Information Technology, Financial Literacy, Financial Accessibility, and Performance of MSMEs in Rokan Hilir Regency - Indonesia

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Abstract

MSMEs have become the concern of governments in many countries because of their contribution to improving the economy. For this reason, this study analyzes several factors that can affect the performance of SMEs. This study analyzes gender disparities, technology use, financial literacy, and financial accessibility on the performance of MSMEs. A total of 245 SMEs became respondents in this study. The questionnaire technique was used to collect data delivered directly to MSME managers in Rokan Hilir regency, Indonesia. Data analysis using SEM with warpPLS 8.0 shows that there is no difference in performance between women and men.

Meanwhile, other factors, such as the use of technology, financial literacy, and financial accessibility, significantly improve the performance of MSMEs. This research contributes to the government increasing the role of women in MSMEs, providing training on the use of information technology, and providing access to finance. For MSME actors, it is necessary to increase their understanding of information technology and financial literacy.

JEL classification: M15, M40, L26

Key Words: MSME Performance, Gender, Utilization of Technology, Financial Literacy, Financial Accessibility

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1. Introduction:

Micro, Small, and Medium Enterprises (MSMEs) are productive businesses owned by individuals and business entities that meet the criteria of micro, small, and medium enterprises. MSMEs are one of the businesses that affect a country's economic growth (Muliadi et al., 2020). The labor-intensive nature of MSMEs, having excellent flexibility and the capacity to turn people's consumption into savings, makes MSMEs crucial for the country's economy (Pompeia, 2021)(Qi & Chu, 2022).

In Indonesia, the MSME sector has a relatively large number. According to data, 99.9% of around 64 million businesses in Indonesia are SMEs, and 98.6% are micro businesses. MSMEs contribute 60.34% of the country's GDP and employ 97% of the country's total workforce. As a result, MSMEs play an important and strategic role in Indonesia's economic development (job. Ministry of Finance, 2022). However, in many regions, the performance of MSMEs still needs to be improved (Iskandar et al., 2020 and Alam et al., 2021).

The low performance of MSMEs is a problem still being discussed by many studies. This research highlights that gender differences are one of the factors that can drive the productivity of MSMEs. Gender differences are still often discussed, especially the role of women in the economy, both the family economy and a country's economy. Data from the Director General of Small and Medium Industries and the Ministry of Industry show that as of December 2019, the number of SMEs in Indonesia was around 4.4 million, of which 80% were engaged in the food and beverage sector. Of these, almost 90% are managed by women (Hidayat & Alliyah, 2021). The data shows that currently, women have a strategic role in the family and national economy. However, if the role of women is compared to that of men, it is seen that from the age of 15 and over, it is based on their own business, which temporary workers or laborers assist. Research conducted by Hidayat & Alliyah (2021) and Budyastuti (2021) found that gender differences had a direct and indirect effect on the performance of MSMEs. Meanwhile, according to Fatimah et al (2022), gender differences do not affect the increase or decrease in business performance; in this case, what is meant is MSMEs in Magelang Regency.

Other problems related to the utilization of information technology still need improvement. The increasing growth of MSMEs in Indonesia requires MSMEs to survive and be ready to compete with other MSMEs. With the industrial revolution 4.0, the first step that MSMEs must take is to use smartphones and the Internet to support their business performance (Djakasaputra et al.,

2021; Muafi et al., 2021). Research proves that the use of technology can improve the performance of MSMEs (Zahra et al., 2019 ;Chege et al., 2020;Prasanna et al., 2019), But research Suwanto et al (2022) found that digitization did not affect the performance of MSMEs.

The importance of financial management is also often overlooked by MSMEs. The ability to financial literacy is vital for MSME managers to have. A study Kusuma (2020) found that financial literacy among MSME entrepreneurs in Indonesia still needs to improve. Financial literacy is knowledge, skills, and beliefs, influencing attitudes and behavior to improve the quality of decision-making and financial management to achieve prosperity (Kuswati, 2019). A study Naufal & Purwanto (2022) cannot prove that financial literacy is related to the performance of MSMEs.

Based on the inconsistency of the research results above, it becomes attractive for researchers to conduct further research. Therefore this study aims to analyze gender differences, the use of information technology, and financial literacy on the performance of MSMEs. In addition, researchers also tested the effect of financial accessibility on the performance of MSMEs. Research on financial accessibility on the performance of MSMEs is still rare. Rizki et al., (2021) explain that the entrepreneur's need for financial resources is the most significant obstacle to business expansion and growth. Many MSME business owners need help financing to discontinue functioning due to funding issues. This research is also supported by Usama & Yusoff (2018), Maesarah (2021), Buchdadi et al (2020) and Lakuma et al (2019) that access to finance affects the performance of MSMEs.

This research was conducted in one of the Rokan Hilir districts in Riau Province, Indonesia. The selection of this area was based on the consideration that Rokan Hilir Regency is one of the regencies with the most MSMEs in Riau Province, Indonesia.

2. Literature Review

Gender socialization theory

Gender socialization theory by Giddens et al (2009) explains that socialization in individuals is differentiated based on gender, so there are differences in socialization between boys and girls, which can lead to gender inequality. Nagel (1998) and Mosse (2020) said that women mainly experience gender inequality.

In the social network structure approach, there are "strong" and "weak" work ties. "Strong" work ties refer to men, and "weak" work ties refer to women. From this approach, women are considered weak, starting from building businesses and opening work networks, and ineffective in business strategy. So that women tend to open micro-businesses due to limited network capabilities and processes. Not only that, too many gender differences in the labor market affect performance on the job (Bengtsson et al., 2012). Women choose micro-enterprises because of gender inequality in the labor market, time flexibility, and business opportunities (Senapati & Ojha, 2019; da Rocha & Zbucka-Gargas, 2022). Gender differences in social and economic networks have an impact on business results. The result is that most women are engaged in micro-enterprises because of the perception that women are weak networks and resources valued cheaper or lower. Because the more comprehensive community still accepts gender differences, this impacts the results of businesses built by women (Setini et al., 2020) (Ge et al., 2022). Therefore, women's participation in micro-enterprises has increased significantly in urban and rural areas. Women prefer micro businesses because these businesses do not need significant capital (Tripathi et al., 2022; Maseda et al., 2022).

RBV (Resource-Based View) Theory

MSMEs are business entities that consist of a collection of resources with unique capabilities, able to support the implementation of a strategy to face competition and achieve business goals optimally. This pool of resource capabilities continues to dynamically evolve to earn above-average returns. This view later became the resource-based view (RBV) or resource-based theory (Barney & Clark, 2007). This theory suggests that tangible and intangible resources in companies and organizations can encourage a company or organization to develop strategies to achieve competitive advantage. (Osakwe et al., 2022)

Competitive advantage can only occur in situations of heterogeneity of company resources and immobility of company resources. The heterogeneity of company resources refers to the variety of resources a company has (physical capital, human capital, and organizational capital) and how much these resources differ among existing companies. (Šmaguc, 2022).

The RBV theory in this study is the basis that explains that the use of technology, financial literacy, and financial accessibility, which are internal company resources, have value and potential in supporting the running of a business to achieve a competitive advantage and sustainable performance growth (Andriamahery & Qamruzzaman, 2022; Borah et al., 2022).

Gender and MSME Performance

The existence of female entrepreneurs in Micro, Small, and Medium Enterprises (MSMEs) is a reality of the economic life of most Indonesian people. Women have the potential to carry out various productive activities that produce and can help the family economy and, more broadly, the national economy; moreover, this potential is spread across multiple fields and sectors (Jabeen et al., 2020)

Research showing the role of women in advancing SMEs has become the concern of many researchers (e.g. Sultans & Sultans, 2020; Inmyxai & Takahashi, 2010; Trivedi & Gaur, 2015). There is a stereotype that women's productivity is lower than men's (Gnambs, 2021). According to research findings on personnel factors, namely, Self-efficacy put forward by (Elliott et al., 2020;; Nguyen, 2019; Casile et al., 2021), women have lower self-efficacy and confidence than men in math, finance, decision-making, and problem-solving. However, women's values are more diligent, conscientious, tenacious, and responsible (Randall, 2010). The proportion of women working as independent entrepreneurs has also increased in the last ten years. Following the field of business, there has been a shift from being dominated by farm laborers to being a sales force. Meanwhile, women who work as salespeople have increased from 23.95 percent in 2011 to 27.75 percent in 2021. This research shows that the female workforce is increasingly productive (news. detik, 2022). Research Singh et al. (2018), Muralidharan & Pathak (2018) and Welsh et al (2018) shows that gender, in this case, women entrepreneurs, can improve the performance of MSMEs. However Tambunan (2019) found Men tend to have higher business performance than women. Based on the description above, to see the effect of gender differences in improving MSME performance, a hypothesis can be formulated:

H1: Gender Differences Affect MSME Performance

The Influence of Technology Utilization on UMM Performance

The use of information technology in MSMEs will have a varying effect on performance because different situations and environments influence it. Using information technology that is successfully implemented in an organization/entity may give different results if the information technology is applied in other entities/organizations. It is because policies between entities/organizations differ, so the use of information technology between one MSMEs and another will not have equally satisfactory results related to the performance of these MSMEs.

In the long term, MSMEs who are reluctant to carry out digital transformation will not be able to survive in the industry (Tomičić Furjan et al., 2020). MSMEs must decide whether to stick with traditional business models or change their business digitally. The Internet allows MSMEs to spread their promotions to the global market so that the possibility of export penetration is wide open. In addition, transaction costs can also be reduced (Wibowo & Iriantini, 2022). So it can be concluded that the ability of information technology for MSMEs is now a matter of priority to increase the competitiveness of MSMEs in the global market (Zahra et al., 2019; Chege et al., 2020; Prasanna et al., 2019). But research Suwanto et al (2022) found that digitization did not affect the performance of MSMEs

H2: Use of Technology Influences the Performance of SMEs

Influence Financial Literacy on MSME Performance

Financial literacy is the knowledge that must be known before going further. By understanding financial literacy, someone will know the positive and negative impacts on the future. Understanding financial literacy facilitates decision-making (Lusardi, 2019)(Chan et al., 2022). MSME players who are financially literate have the potential to be more productive in producing MSMEs with higher competitiveness in running and developing a better business (Gunawan & Pulungan, 2023 and Meitriana et al., 2022)

Research conducted by Lubis & Irawati (2022), Yanto et al (2022), Lubis & Irawati (2022) and Anshika & Singla (2022) found that financial literacy has a significant positive effect on the performance of MSMEs. However, there are different results from research conducted by Naufal & Purwanto (2022), who found that financial literacy does not affect the performance of MSMEs. It can be seen from the many aspects and other influential performance factors, such as the quality of human resources, the owner's ability to manage employees, and discipline at work. These things are also factors that influence the development of MSME performance. Based on the description above, to see the effect of financial literacy on the performance of MSMEs, a hypothesis can be formulated:

H3: Financial Literacy Influences MSME Performance

The Effect of Financial Accessibility on MSME Performance

Access to finance is defined as the ability of individuals, households, entrepreneurs, and companies to access and utilize various financial services for personal needs or to fund their business (Ahsan et al., 2021). In RBV theory, financial resources complement strategic

management by concentrating corporate efforts on asset accumulation. Sufficient finance significantly affects a small business's survival and growth; with it, a small business will find it easier to succeed. Lack of access to financial resources by entrepreneurs is the most significant obstacle to business expansion and growth (Zarrouk et al., 2020)

Financial accessibility influences business performance through its positive impact on the EO autonomy dimension and ultimately improves business performance (Zarrouk et al., 2020). Whereas. This is in line with research conducted by Usama & Yusoff (2018), Maesarah (2021), Buchdadi et al (2020) and Lakuma et al., 2019) who also get the result that financial accessibility affects the performance of MSMEs. Access to finance is related to how entrepreneurs obtain capital (Rusu et al., 2022). Based on the discussion above, the hypothesis we propose is as follows:

H4: Financial Accessibility Affects MSME Performance

Based on the framework above, it can be seen above that the research model can be described as follows:

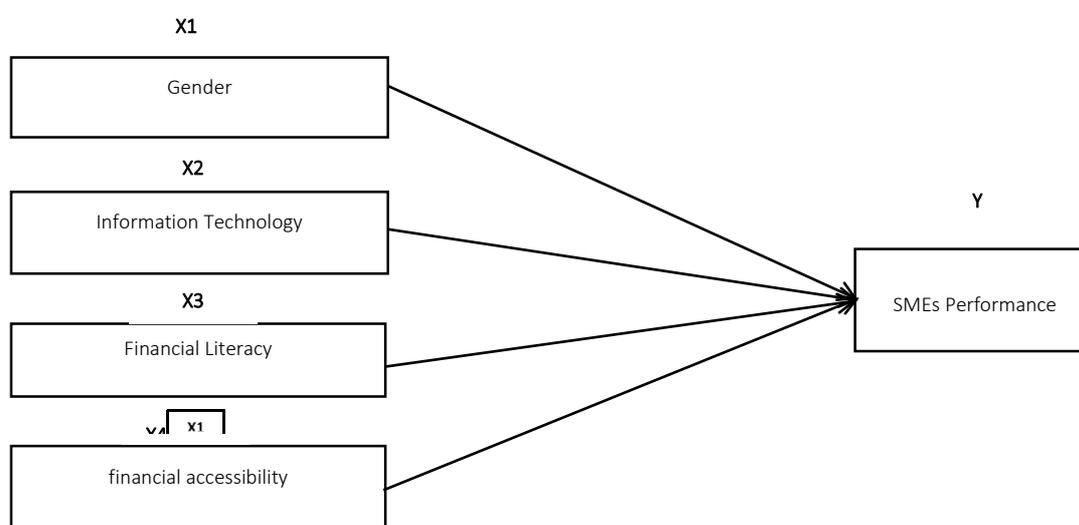


Figure 1: Research Framework

3. Research Methods

The population used for this study was 6,856 MSMEs in Rokan Hilir Regency, Indonesia. The subject or unit of analysis is MSME actors or people who run MSMEs. Sampling was done using the Simple Random Sampling technique, a simple random sampling technique for a population. Using the Slovin formula, the sample for this study was 377 MSME actors.

The data collection method used a survey by distributing questionnaires directly to MSME owners. The questionnaire is closed, and respondents cannot provide answers in their diction. The statements in the questionnaire are based on a 5-point Likert scale to make it easier to calculate each variable's value (score). Score 1 strongly disagree to 5 strongly agree.

Operational Definition and Variable Measurement

MSME performance is the result of business activities that show growth in an effort to achieve business goals (Ratnawati, 2020). Measurement of MSME performance can be done with two indicators, namely a) Financial indicators, which include increasing sales volume, increasing business transactions, and increasing profits, b) Non-financial indicators, including customer satisfaction, customer loyalty, and brand equity (Mjongwana & Kamala, 2018)

Gender differences refer to labeling certain parties as a result of gender differences. Gender roles add color and influence to particular objects or materials. Gender measurement indicators (Gnambs, 2021) is a Dummy measurement indicators with codes 1 for Males and 0 for Females.

The use of technology is measured by indicators: availability of information technology, the intensity of use of information technology, technology investment, ease of exchange of information, and use of IT for business (Firdhaus & Akbar, 2022).

Financial literacy is measured by five indicators: financial knowledge and understanding, ability to manage finances, financial decision-making skills, confidence in future financial planning, and decision-making behavior. Indicator adopted from (Sugiharti & Maula, 2019)

Financial accessibility is defined as the ability of individuals, households, entrepreneurs, and businesses to access and use various financial services for personal or business purposes (Adomako et al., 2016). Several indicators that can be used to measure accessibility are access or availability, use, and quality.

Data analysis

SEM (Structural Equation Modeling) is used in this study to determine the relationship and influence of variables. PLS (Partial Least Squares) is a statistical test tool with the warpPLS 8.0 program. This analysis consists of descriptive statistics regarding the responses given by

respondents to the questionnaire (Ghozali, 2016), evaluation of the measurement model (Outer Model), which includes convergent validity testing, discriminant validity testing, and Composite Reliability testing, as well as Evaluation of Structural Measurement Models (Inner Model) which consists of the R-Square test, predictive relevance (Q2), and the goodness of fit test, and the last is the hypothesis test seen from the value of the path coefficient and the significance of the p-value.

4. Research Result

A total of 245 MSME managers participated in this study. The characteristics of the respondents are described in Table 1

Table. 1 Characteristic of Respondents

No	Characteristics of Respondents	Information	Frequency	Percentage
1	Gender	Man	131	53.40%
		Woman	114	46.50%
	Total		245	100%
2	Age	17-25 years	17	6.9%
		26-35 years	65	26.5%
		36-45 years	94	38.3%
		46-55 years	57	23.2%
		56-65 years	12	4.9%
	Total		245	100%
3	Business Type	Trade	196	78.8%
		Serve	16	6.5%
		Industry	33	13.46%
	Total		245	100%
4	Education	Elementary	71	28.9%
		Middle School	45	18.4%
		High School	121	49.3%
		Bachelor	8	3.30%

Descriptive statistics

Descriptive analysis is shown by the minimum, maximum, mean, and standard deviation values, which can be seen in Table 2

Table 2: Variable Descriptive Statistics

	N	min	MAX	MEAN	STD. Deviation
Technology Utilization	245	2	5	3.91	0.85
Financial Literacy	245	1	5	3.64	1.03
Financial Accessibility	245	2	5	3.88	0.6
MSME performance	245	2	5	3.96	0.78

Descriptive statistics show that the standard deviation value does not exceed the mean value, which means that there are no high deviations from the data.

Evaluation of the Measurement Model (Outer Model)

The next stage is data analysis using Warp Pls. The first stage is testing the measurement model's validity and reliability. Validity testing was carried out in two stages, namely convergent validity and discriminant validity. Convergent validity uses factor loading and AVE values. In contrast, discriminant reality uses cross-loading and correlation between latent variables. Reliability testing uses Cronbach alpha and composite reliability. The test results are presented in Table 2.

Table. 2 Convergent Validity Factor Loading

Variables					AVE	Cronbach Alpha	Composite Reliability	R Square
	X2	X3	X4	Y				
Technology Utilization	0.766	-0.546	-0.091	0.128	0.625	0.910	0.929	0.734
	0.902	-0.307	-0.225	-0.172				
	0.608	-0.515	-0.598	-0.268				
	0.840	0.121	0.120	-0.165				
	0.582	-0.114	0.834	-0.309				
	0.808	0.042	0.116	0.157				
	0.850	0.746	-0.077	0.404				

	0.900	0.339	0.025	0.076			
Financial					0.563	0.840	0.884
Literacy	-1,610	0.772	0.102	0.787			
	0.676	0.822	0.257	-0.081			
	1,335	0.751	0.088	-0.544			
	0.086	0.872	-0.050	0.101			
	-1,291	0.646	-0.226	0.322			
	0.742	0.603	-0.275	-0.710			
Financial					0.506	0.752	0.835
Accessibility	0.789	-0.285	0.700	-0.665			
	-0.394	-0.070	0.839	0.011			
	-0.262	0.684	0.698	0.131			
	-0.093	-0.487	0.640	0.286			
	0.030	0.139	0.663	0.274			
MSMEs					0.585	0.818	0.866
Performance	-0.818	0.195	0.012	0.648			
	1014	-0.488	-0.305	0.533			
	-0.744	-0.114	0.465	0.639			
	0.645	-0.718	0.175	0.736			
	0.448	0.112	0.171	0.808			
	-0.163	0.147	-0.205	0.786			
	-0.356	0.773	-0.363	0.684			

Table 2 shows that in this test, the loading factor value for each variable is > 0.50 , which is considered sufficient to meet the convergence validity requirements (Hair et al., 2010). The AVE value is above 0.50 (Hair et al., 2010). It can be concluded that all variables meet the rules of thumb criteria of convergence validity.

Discriminant validity testing with cross-loading shows that the correlation value of the variable block is higher than the other blocks, which indicates that the indicator meets discriminant validity (Ghozali & Latan, 2015). Discriminant validity testing can also be carried out by comparing the square root of the AVE of each component using the relationship between other elements in the model (Ghozali & Latan, 2015)

Table. 4 Discriminant Validity Test

Correlation between l.vs. With square rts. from AVE				
	IT	LK	AK	K.UMKM
IT	0.791	0.665	0.450	.687
LK	0.665	0.850	0.384	0.536
AK	0.545	0.384	0.711	0.627
K.UMKM	0.870	0.536	0.627	0.796

The results of the discriminant validity test listed in Table 4 show that the square root value of AVE is greater than the correlation between other variables. From this, we can conclude that all variables satisfy the discriminant validity rule.

From the results listed in Table 2, it can be seen that the reliability score is > 0.7 for all variables, which means that the entire constitutive model of external reflection meets the requirements or is reliable. (Hair et al., 2010)

Evaluation of Structural Measurement Model (Inner Model)

Changes in the R² score are used to calculate the influence of several factors, from exogenous to endogenous latent variables. The R-squared value is 0.25 (weak), 0.50 (moderate), and 0.75 (strong) (Ghozali & Latan, 201).

From Table 2, it can be concluded that the performance variables of SMEs can be explained by gender differences, technology utilization, financial literacy, and financial accessibility of 73.4%. Other variables outside of research explain the remaining 26.6%.

Furthermore, the goodness of fit test aims to determine a model's suitability. In this research, there are three studies in the appropriate test model: path coefficient (APC), average R-squared (ARS), and average variance inflation factor (AVIF). With the P-value criteria for APC and ARS respectively 0.05 and 3.3, but 5 is still acceptable (Ghozali & Latan, 2015)

Table. 3 Compatibility Test

Model fit and quality indices.

Average path coefficient (APC)=0.454, P<0.001
Average R-squared (ARS)=0.734, P<0.001
Average block VIF (AVIF)=2.916, acceptable if <= 5, ideally <= 3.3

From Table 8, it can be seen that APC and ARS get a P-value < 5 and AVIF < 3.3, meaning that there is accuracy in the sample function being tested in estimating the actual value.

Hypothesis testing for this study was carried out with the help of this PLS 8.0 Warp Software. This test can prove the truth of the hypothesis or conjecture in the course of research. The relationship between each construct is measured by looking at the path coefficient. If the P-value is less than 0.05, it is significant, and vice versa. If the P-value is greater than 0.05, it means it is not substantial (Ghozali and Latan, 2015)

Table. 9 Hypothesis testing

	B	P-value	Results
X1 Y	0.003	0.467	Has no influence
X2 Y	1,100	<0.001	It has a significant positive effect
X3 Y	0.497	<0.001	It has a significant positive effect
X4 Y	0.220	<0.001	It has a significant positive effect

5% significance level α

Table 9 explains that the variable X1 (gender) with a significance level of 0.470 > 0.05 proves that gender does not affect performance in MSMEs. Variable X2 (use of technology), variable X3 (financial literacy), and variable X4 (financial accessibility) have a significance level of <0.001 <0.05 which indicates that the use of technology, financial literacy, and financial accessibility means different MSME performance.

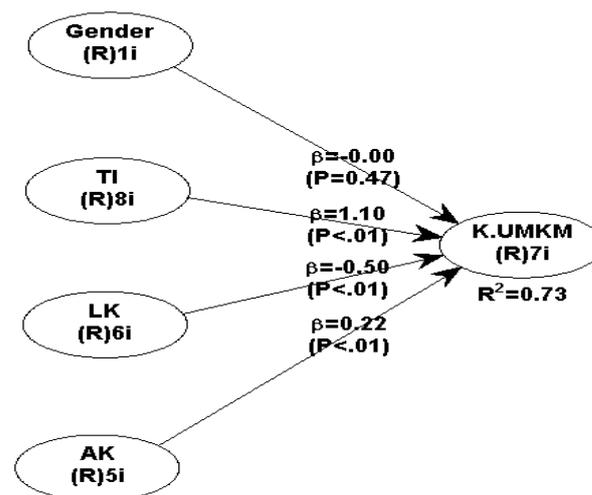


Figure 2. Structural Model

Discussion

The Effect of Gender Differences on MSME Performance

From Table 9, it can be seen that H1 is rejected because hypothesis test 1 shows a path coefficient value of 0.003 with a p-value of 0.467 ($> \alpha 0.05$), which indicates that hypothesis 1 cannot be supported. Gender differences do not affect the performance of MSMEs. It means there is no difference in performance results for MSMEs managed by men and women. The emergence of support for women's emancipation which is gender equality, which is currently being paid more and more attention, is one of the factors causing the absence of differences in the performance of MSMEs produced by men and women. Research also proves in a study Sultans & Sultans (2020) and Prasetio et al (2023) that women play a crucial role in business, especially in small and medium enterprises. Women are seen as effective in achieving their business goals without abandoning their feminine character (Barkhuizen et al., 2022).

The Effect of Technology Utilization on MSME Performance

From Table 9, it can be seen that H2 is accepted with a path coefficient value of 1,100 with a p-value of <0.001 ($<\alpha 0.05$), indicating that the use of technology significantly positively affects MSME performance. It means that the more MSME managers utilize technology, the more MSME performance will improve. Globalization, which requires everyone to enhance their skills, especially in terms of technology and accessibility, can be utilized by MSME players so that they can perform well in the financial and non-financial sectors. The presence of MSME technology allows MSME actors to sell their products and services both offline and online. Even with technology, one can become an entrepreneur by running an online shop on various e-commerce and social media. (B Wernerfelt, 1984). Technology functions as an internal and corporate intellectual resource that has value and potential to assist businesses in achieving competitive advantage and long-term performance growth (Hilmawati & Kusumaningtias, 2021). The findings of this study are in line with the results Chege et al. (2020), Prasanna et al (2019) and Kurniawan et al., (2023), which found that the use of IT has a positive effect on the performance of SMEs

The Effect of Financial Literacy on MSME Performance

From Table 9, it can be seen that H3 is accepted with a path coefficient value of 0.497 with a p-value of <0.001 ($<\alpha 0.05$), which indicates that financial literacy affects the performance of MSMEs. Knowledge of financial management affects the performance of MSMEs. This study supports the RBV theory (Birger Wernerfelt, 1984), which states that company resources and capabilities are essential because they are the primary basis of the company's competitiveness and performance. The ability of financial literacy owned by MSME managers is an ability possessed by MSMEs that can support MSME performance. MSME managers' understanding of finance makes planning and making business decisions easier. Support t(Lusardi, 2019) that a sense of financial literacy will make it easier to make business decisions

This study supports research Lubis & Irawati (2022) and Buchdadi et al (2020) that financial literacy affects the performance of SMEs.

The Effect of Financial Accessibility on MSME Performance

From Table 9, it can be seen that H4 is accepted with a path coefficient value of 0.220 with a p-value of <0.001 ($<\alpha 0.05$), which indicates that accessibility affects the performance of SMEs. Supporting the RBV theory that access to finance is one of the resources owned by the company. The study results show that the ease of access to financing helps MSME actors; in this case, venture capital loans can increase their businesses' sustainability. With easy access to finance, MSME managers can use it to improve MSME performance. MSME managers must know what MSME needs so that the funds spent are on target, effective and efficient. The results of this study are not in line with research studies Zarrouk et al (2020) and Usama & Yusoff, (2018) that access to finance can improve business performance.

5. Conclusions, Limitations, And Suggestions

Based on the answers to the problem formulation, it can be concluded that gender differences do not affect MSME performance. This research shows no difference in the performance of MSMEs in male or female businesses.

The use of technology significantly positively affects the performance of SMEs. The higher the utilization of technology controlled by MSME managers, the higher the interpretation of these MSMEs. The test results also prove that financial literacy positively affects MSME performance. It means that the higher the financial knowledge of MSME actors, the easier it will be for them to manage and improve the performance of the MSME they run.

The study's results also prove that financial accessibility has a significant positive effect on the performance of MSMEs. It means that both MSME actors choose to use their own capital and business loan capital which will impact the condition of their business performance which is getting higher.

This study has the limitation of using an inadequate number of samples in a small area. Therefore it is suggested that further research can expand the research area. Researchers also did not examine the effect of moderation or mediation of other variables. Other variables can influence possible relationships between variables. For example, the type of business women are interested in and their entrepreneurial orientation. Therefore, further research can test variables by developing moderation and mediation models.

Based on the research results, the first implications of this research are theoretical implications that support the RBV theory that a company can achieve a performance advantage and sustainable competitive advantage if it obtains valuable resources such as the ability to utilize technology, financial literacy, and financial accessibility capabilities. The practical implication of this research is to contribute to SMEs increasing the knowledge of MSME managers in terms of technology utilization and understanding of financial literacy by conducting training. For the government and financial institutions can also help MSMEs to facilitate access to finance.

6. References

- Adomako, S., Danso, A., & Ofori Damoah, J. (2016). The moderating influence of financial literacy on the relationship between access to finance and firm growth in Ghana. *Venture Capital, 18*(1), 43–61.
- Ahsan, M., Adomako, S., & Mole, K. F. (2021). Perceived institutional support and small venture performance: The mediating role of entrepreneurial persistence. *International Small Business Journal, 39*(1), 18–39.
- Alam, A., Sholihah, N. M., & Nurrahman, A. (2021). Evaluation of the Micro, Small and Medium Enterprises (MSMEs) Empowerment Program LAZISMU Magetan dengan Pendekatan Diagram Kartesius. *AL-MUZARA'AH, 9*(2), 147–165.
- Andriamahery, A., & Qamruzzaman, M. (2022). Do access to finance, technical know-how, and financial literacy offer women empowerment through women's entrepreneurial development? *Frontiers in Psychology, 12*, 776844.
- Anshika, A., & Singla, A. (2022). Financial literacy of entrepreneurs: a systematic review. *Managerial Finance*.
- Barkhuizen, E. N., Masakane, G., & van der Sluis, L. (2022). In search of factors that hinder the career advancement of women to senior leadership positions. *SA Journal of Industrial Psychology, 48*(1), 1–15.
- Barney, J. B., & Clark, D. N. (2007). Resource-Based Theory: Creating and Sustaining Competitive Advantage. *Creating and Sustaining Competitive*.
- Bengtsson, O., Sanandaji, T., & Johannesson, M. (2012). *Do women have a less entrepreneurial personality?* IFN Working paper.
- Borah, P. S., Iqbal, S., & Akhtar, S. (2022). Linking social media usage and SME's sustainable performance: The role of digital leadership and innovation capabilities. *Technology in*

Society, 68, 101900.

- Buchdadi, A. D., Sholeha, A., Ahmad, G. N., & Mukson. (2020). the Influence of Financial Literacy on Smes Performance Through Access To Finance and Financial Risk Attitude As Mediation Variables. *Academy of Accounting and Financial Studies Journal*, 24(5), 1–16.
- Budyastuti, T. (2021). Gender Differences In Financial Management And Its Literacy. *International Journal of Management Studies and Social Science Research*, 3(3).
- Casile, M., Gerard, J. G., & Soto-Ferrari, M. (2021). Gender differences in self-efficacy, acceptance, and satisfaction in business simulations. *The International Journal of Management Education*, 19(2), 100473.
- Chan, R., Troshani, I., Rao Hill, S., & Hoffmann, A. (2022). Towards an understanding of consumers' FinTech adoption: The case of Open Banking. *International Journal of Bank Marketing*, 40(4), 886–917.
- Chege, S. M., Wang, D., & Suntu, S. L. (2020). Impact of information technology innovation on firm performance in Kenya. *Information Technology for Development*, 26(2), 316–345.
- da Rocha, C. I., & Zbucka-Gargas, M. (2022). Work life balance directive in European Union- a chance for gender equality? *REVISTA QUAESTIO IURIS*, 15(2), 714–736.
- Djakasaputra, A., Wijaya, O., Utama, A., Yohana, C., Romadhoni, B., & Fahlevi, M. (2021). Empirical study of Indonesian SMEs sales performance in digital era: The role of quality service and digital marketing. *International Journal of Data and Network Science*, 5(3), 303–310.
- djpb.kemenkeu. (2022). *Ekosistem Fiskal Sebagai Pengungkit Kebangkitan Umkm*. Djpb.Kemenkeu.Go.Id.
- Elliott, C., Mavriplis, C., & Anis, H. (2020). An entrepreneurship education and peer mentoring program for women in STEM: mentors' experiences and perceptions of entrepreneurial self-efficacy and intent. *International Entrepreneurship and Management Journal*, 16(1), 43–67.
- Fatimah, A. N., Priyono, N., Panggiarti, E. K., Astutik, E. P., & Suryatimur, K. P. (2022). Entrepreneurship Analysis And Model Planning For Students And Alumni To Form Msme Entrepreneurs. *Jurnal Pemikiran Dan Penelitian Administrasi Bisnis Dan Kewirausahaan*, 7(1), 67–76.
- Firdhaus, A., & Akbar, F. S. (2022). The Effect of Application of Accounting Information Systems and Utilization of Information Technology on MSMEs Performance. *Jurnal Proaksi*, 9(2), 173–187.

- Ge, T., Abbas, J., Ullah, R., Abbas, A., Sadiq, I., & Zhang, R. (2022). Women's entrepreneurial contribution to family income: innovative technologies promote females' entrepreneurship amid COVID-19 crisis. *Frontiers in Psychology, 13*, 828040.
- Ghozali, I., & Latan, H. (2015). *Partial Least Squares : Concepts, Techniques and Applications Using Smarts Pls 3* (2nd ed.). Universitas Diponegoro.
- Giddens, A., Duneier, M., Appelbaum, R., & Carr, B. (2009). *Introduction to sociology*. New York: WW Norton & Company.
- Gnambs, T. (2021). The development of gender differences in information and communication technology (ICT) literacy in middle adolescence. *Computers in Human Behavior, 114*(June 2020). <https://doi.org/10.1016/j.chb.2020.106533>
- Gunawan, A., & Pulungan, D. R. (2023). Improving MSME performance through financial literacy, financial technology, and financial inclusion. *International Journal of Applied Economics, Finance and Accounting, 15*(1), 39–52.
- Hair, J. F., Black, W. C., Babin, J. B., & Anderson, R. E. (2010). *Multivariate data analysis*. Amazon.
- Hidayat, R., & Alliyah, S. (2021). Gender Relations, Information Technology and the Performance of MSMEs in Coffee. *Jurnal Akuntansi Dan Manajemen, 18*(01), 9–21. <https://stei.ac.id/ojsstei/index.php/JAM/article/view/373>
- Hilmawati, M. R. N., & Kusumaningtias, R. (2021). Financial Inclusion and Financial Literacy on the Performance and Sustainability of the Micro, Small and Medium Enterprises Sector. *Nominal: Barometer Riset Akuntansi Dan Manajemen, 10*(1), 135–152. <https://doi.org/10.21831/nominal.v10i1.33881>
- Inmyxai, S., & Takahashi, Y. (2010). Performance contrast and its determinants between male and female headed firms in Lao MSMEs. *International Journal of Business and Management, 5*(4), 37.
- Iskandar, Y., Zulfainarni, N., & Jahroh, S. (2020). The Influence of Business and Entrepreneurial Characteristics on the Performance of SMEs in the Fisheries Processing Industry in Sukabumi Regency. *Jurnal REKOMEN (Riset Ekonomi Manajemen), 4*(1), 1–12.
- Jabeen, S., Haq, S., Jameel, A., Hussain, A., Asif, M., Hwang, J., & Jabeen, A. (2020). Impacts of rural women's traditional economic activities on household economy: Changing economic contributions through empowered women in rural Pakistan. *Sustainability, 12*(7), 2731.
- Kurniawan, -, Maulana, A., & Iskandar, Y. (2023). The Effect of Technology Adaptation and

- Government Financial Support on Sustainable Performance of MSMEs during the COVID-19 Pandemic. *Cogent Business & Management*, 10(1), 2177400.
- Kusuma, I. N. P. (2020). Pengaruh Literasi Keuangan terhadap Inklusi Keuangan melalui Financial Technology pada UMKM di Bandar Lampung. *Jurnal Manajemen Bisnis Dan Kewirausahaan*, 4(5), 247–252.
- Kuswati, M. (2019). Development of Financial Literacy and Anti-Corruption Education in Primary Schools Through Storytelling Activities. *International Journal of Science and Applied Science: Conference Series*, 3(1), 75–82.
- Lakuma, C. P., Marty, R., & Muhumuza, F. (2019). Financial inclusion and micro, small, and medium enterprises (MSMEs) growth in Uganda. *Journal of Innovation and Entrepreneurship*, 8(1), 1–20.
- Lubis, K. S., & Irawati, L. (2022). The Effect of Financial Literacy and Capital Management on MSME Performance. *Asean International Journal of Business*, 1(1), 77–85.
- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. *Swiss Journal of Economics and Statistics*, 155(1), 1–8.
- Maesaroh, S. S. (2021). Determinants of Loan Access towards Financial Performance in MSMEs. *ADI International Conference Series*.
- Maseda, A., Iturralde, T., Cooper, S., & Aparicio, G. (2022). Mapping women's involvement in family firms: A review based on bibliographic coupling analysis. *International Journal of Management Reviews*, 24(2), 279–305.
- Meitriana, M. A., Yuliarmi, N. N., Utama, M. S., & Marhaeni, A. A. I. N. (2022). Social capital-based financial literacy to improve business performance: a narrative review. *International Journal on Social Science, Economics and Art*, 12(2), 83–90.
- Mjongwana, A., & Kamala, P. N. (2018). Non-financial performance measurement by small and medium sized enterprises operating in the hotel industry in the city of Cape Town. *African Journal of Hospitality, Tourism and Leisure*, 7(1), 1–26.
- Mosse, G. L. (2020). *Nationalism and sexuality: Middle-class morality and sexual norms in modern Europe*. University of Wisconsin Press.
- Muafi, M., Syafri, W., Prabowo, H., & Nur, S. A. (2021). Digital Entrepreneurship in Indonesia: A Human Capital Perspective. *The Journal of Asian Finance, Economics and Business*, 8(3), 351–359.
- Muliadi, M., Darma, D. C., & Kasuma, J. (2020). MSMEs as mediation in the effects of investment credit, interest rates, and labor on economic growth: Evidence from Indonesia. *International Journal of Finance & Banking Studies (2147-4486)*, 9(2), 1–12.

- Muralidharan, E., & Pathak, S. (2018). Sustainability, transformational leadership, and social entrepreneurship. *Sustainability (Switzerland)*, *10*(2), 1–22. <https://doi.org/10.3390/su10020567>
- Nagel, J. (1998). Masculinity and nationalism: Gender and sexuality in the making of nations. *Ethnic and Racial Studies*, *21*(2), 242–269.
- Naufal, M. I., & Purwanto, E. (2022). Dampak Literasi Keuangan Terhadap Kinerja Dan Keberlanjutan Umkm (Studi Kasus Industri F&B Kecamatan Sumbersari Jember). *Jurnal Administrasi Bisnis*, *16*(2), 209–215.
- news.detik. (2022). “Perempuan dan Ketimpangan Ketenagakerjaan.” News.Detik.Com.
- Nguyen, H. T. (2019). Development and validation of a women’s financial self-efficacy scale. *Journal of Financial Counseling and Planning*, *30*(1), 142–154.
- Osakwe, J., Waiganjo, I. N., Tarzoor, T., Iyawa, G., & Ujakpa, M. (2022). Determinants of Information Systems Resources for Business Organisations’ Competitive Advantage: A Resource-Based View Approach. *2022 IST-Africa Conference (IST-Africa)*, 1–8.
- Pompeia, M. L. F. (2021). Assessing the suitability of a single brand of MSMEs in the hospitality sector to boost sustainable development: the case of Mauritius. *Worldwide Hospitality and Tourism Themes*.
- Prasanna, R., Jayasundara, J., Naradda Gamage, S. K., Ekanayake, E. M. S., Rajapakshe, P. S. K., & Abeyrathne, G. (2019). Sustainability of SMEs in the competition: A systemic review on technological challenges and SME performance. *Journal of Open Innovation: Technology, Market, and Complexity*, *5*(4), 100.
- Prasetio, A., Basri, Y. M., Taufik, T., & Wahyuni, N. (2023). role of gender equality , human capital , government policies , and business strategies in improving msme performance peran gender equality , human capital , kebijakan pemerintah , dan strategi bisnis. *Berkala Akuntansi Dan Keuangan Indonesia*, *1*, 100–122. <https://doi.org/10.20473/baki.v8i1.40006>
- Qi, Y., & Chu, X. (2022). Development of the digital economy, transformation of the economic structure and leaping of the middle-income trap. *China Political Economy*, ahead-of-print.
- Randall, M. (2010). Sexual assault law, credibility, and “ideal victims”: Consent, resistance, and victim blaming. *Canadian Journal of Women and the Law*, *22*(2), 397–433.
- Ratnawati, K. (2020). The Influence of Financial Inclusion on MSMEs’ Performance Through Financial Intermediation and Access to Capital. *Journal of Asian Finance, Economics and Business*, *7*(11), 205–218. <https://doi.org/10.13106/jafeb.2020.vol7.no11.205>
- Resmi, S., Pahlevi, R. W., & Sayekti, F. (2021). The effect of financial and taxation literacy

- on competitive advantages and business performance: A case study in Indonesia. *The Journal of Asian Finance, Economics and Business*, 8(2), 963–971.
- Rita, M. R., & Huruta, A. D. (2020). Financing access and SME performance: A case study from batik SME in Indonesia. *International Journal of Innovation, Creativity and Change*, 12(12), 203–224.
- Rizki, M., Putra, A., Nuzula, N. F., Mawardi, M. K., Administrasi, F. I., & Brawijaya, U. (2021). Pengaruh orientasi kewirausahaan dan akses keuangan terhadap kinerja usaha. *Jurnal Administrasi Bisnis*, 1, 84–94.
- Rusu, V. D., Roman, A., & Tudose, M. B. (2022). Determinants of entrepreneurial intentions of youth: the role of access to finance. *Engineering Economics*, 33(1), 86–102.
- Senapati, A. K., & Ojha, K. (2019). Socio-economic empowerment of women through micro-entrepreneurship: Evidence from Odisha, India. *International Journal of Rural Management*, 15(2), 159–184.
- Setini, M., Yasa, N. N. K., Supartha, I. W. G., Giantari, I. G. A. K., & Rajiani, I. (2020). The passway of women entrepreneurship: Starting from social capital with open innovation, through to knowledge sharing and innovative performance. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(2), 25.
- Singh, S., Archer, G. R., & Madan, S. (2018). Gender and entrepreneurial activities: Microentrepreneurs in rural India. *Interdisciplinary Journal of Economics and Business Law*, 7(3), 55–74.
- Šmaguc, T. (2022). A Synthesis Of Overlapping And Divergent Areas Of The Resource-Based View Of The Firm And Entrepreneurship Theory. *UTMS Journal of Economics*, 13(1), 1–15.
- Subbarayudu, C., & Rao, C. S. (2021). Policies and schemes for women entrepreneurs in India. *International Journal of Research and Analytical Reviews*, 8(1), 213–225.
- Sugiharti, H., & Maula, K. A. (2019). Pengaruh literasi keuangan terhadap perilaku pengelolaan keuangan mahasiswa. *Accounthink: Journal of Accounting and Finance*, 4(2).
- Sultan, S., & Sultan, W. I. M. (2020). Women MSMEs in times of crisis: challenges and opportunities. *Journal of Small Business and Enterprise Development*, 27 No7, 1069–1083. <https://doi.org/https://doi.org/10.1108/JSBED-06-2020-0226>
- Suwanto, S., Sunarsi, D., & Achmad, W. (2022). Effect of Transformational Leadership, Servant Leadershi, and Digital Transformation on MSMEs Performance and Work Innovation Capabilities. *Central European Management Journal*, 30(4), 751–762.
- Tambunan, T. (2019). Recent evidence of the development of micro, small and medium

- enterprises in Indonesia. *Journal of Global Entrepreneurship Research*, 9(1), 1–15.
- Tomičić Furjan, M., Tomičić-Pupek, K., & Pihir, I. (2020). Understanding digital transformation initiatives: case studies analysis. *Business Systems Research: International Journal of the Society for Advancing Innovation and Research in Economy*, 11(1), 125–141.
- Tripathi, R., Tripathi, M. A., & Rawat, A. (2022). Performance of women artisans as entrepreneurs in ODOP in Uttar Pradesh to boost economy: strategies and away towards global handicraft index for small business. *Academy of Marketing Studies Journal*, 26(1), 1–19.
- Trivedi, M. P., & Gaur, A. (2015). The role of women entrepreneurs in Micro, Small and Medium Enterprises (MSMEs). *Pacific Business Review International*, 7(7), 100–106.
- Usama, K. M., & Yusoff, W. F. W. (2018). The relationship between entrepreneurs' financial literacy and business performance among entrepreneurs of Bauchi State Nigeria. *International Journal of Entrepreneurship and Business Innovation*, 1(1), 15–26.
- Welsh, D. H. B., Kaciak, E., & Shamah, R. (2018). Determinants of women entrepreneurs' firm performance in a hostile environment. *Journal of Business Research*, 88, 481–491. <https://doi.org/10.1016/j.jbusres.2017.12.015>
- Wernerfelt, B. (1984). The Resource-Based Theory of the Firm. *Strategic Management Journal*, 5, 171–180.
- Wernerfelt, Birger. (1984). A Resource-Based View of the Firm. *Strategic Management Journal*, 5(2), 171–180.
- Wibowo, T. S., & Iriantini, D. B. (2022). The Importance Of Understanding And Application Of Marketing Strategies For Household Micro, Small & Medium Enterprise (Msme) Products On Social Media Networks. *International Journal Of Humanities Education and Social Sciences (IJHESS)*, 1(5).
- Yanto, H., Baroroh, N., Hajawiyah, A., & Rahim, N. M. (2022). The Roles of Entrepreneurial Skills, Financial Literacy, and Digital Literacy in Maintaining MSMEs during the COVID-19 Pandemic. *Asian Economic and Financial Review*, 12(7), 504–517.
- Zahra, M., Hameed, W. U., Fiaz, M., & Basheer, M. F. (2019). Information technology capability a tool to expedite higher organizational performance. *UCP Management Review (UCPMR)*, 3(1), 94–112.
- Zarrouk, H., Sherif, M., Galloway, L., & Ghak, T. E. L. (2020). *Entrepreneurial Orientation , Access to Financial Resources and SMEs ' Business Performance : The Case of the United Arab Emirates* *. 7(12), 465–474. <https://doi.org/10.13106/jafeb.2020.vol7.no12.465>

