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Determination of Financial Literacy, Business Strategy and Innovation on Financial Performance of Small and Medium Enterprises (SMEs) Palm Oil Sector in North Aceh Regency

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Abstract: This study aims to see how financial literacy, business strategy and business innovation affect financial performance in SMEs entrepreneurs in the palm oil sector in North Aceh district. In this study, using the Structural Equation Modeling (SEM) Analysis Moment of Structural (AMOS) equation model using path analysis, to analyze the pattern of relationships between variables with the aim of determining the direct and indirect influence of a set of independent variables (exogenous) on the dependent variable (endogenous). This study found that financial literacy, business strategy have a positive and significant effect on financial performance, while business innovation does not affect financial performance in entrepreneurs. Guidance for entrepreneurs in this business sector must be improved so that business entreprenuer can continue to improve business innovation by providing training, especially regarding innovation in the development of business information technology.

Keywords: Financial Performance, Financial Literacy, Business Strategy, Innovation and SMEs

1. Introduction

Business small and medium enterprises (SMEs) play an important role in wealth creation and improving income distribution in all sectors of the economy, especially in developing countries. SMEs have made significant contributions to economic growth and are considered the backbone of a country's economy. The government has paid close attention to poverty alleviation efforts by fostering SME actors (Mustapha et al., 2020). The government has made various efforts to increase the growth of SMEs because SMEs are considered to be a determining sector in increasing economic growth. SMEs can manage all the factors that determine economic growth. SMEs are defined as part of the business sector that can be established independently by individuals or business entities in all sectors of the economy whose criteria and capital have certain limitations to separate between micro, small, medium, or large sizes (Sari & Fisabilillah, 2021).

SMEs have advantages in carrying out their business activities because they have several advantages, including, ease of obtaining raw materials, easy production activities to carry out because they use simple technology, basic skills that are passed down from generation to generation, able to provide greater employment opportunities because they are labor-intensive, have a wide market share at home or abroad, certain products contain special characteristics regarding regional culture, and are economically profitable because in practice they involve lower-class people as part of their business. As one of the pillars of SMEs, it is one of the pillars



supporting the economy in Indonesia which has a role in the formation and growth of Gross Domestic Product (GDP), employment opportunities, increasing foreign exchange reserves (through exports), and contributing to government finances.

SMEs must improve themselves in order to be able to compete and improve their business performance in order to survive various attacks, especially imported products that continue to flood the domestic market (Amalia, 2018). SMEs actors do not have adequate managerial and technical skills to achieve their effectiveness in business management. They do not innovate when compared to large companies. In fact, when SMEs innovate they are very open because of special characteristics such as organization, culture, and easy strategy. On the other hand, business innovation in the SME sector can increase greater opportunities because of the little bureaucracy and risk they will get when making changes in business development to be able to increase their profitability (Hossain, 2015).

The development of SMEs businesses in Indonesia is hampered by the weak aspect of human resources. Many SME sectors have not followed the development of science and technology, even though the higher the level of education and the ability to utilize existing technology, the greater the opportunity for competitiveness. However, the level of entrepreneurship in these developing countries is generally low (Tohidyan Far & Rezaei-Moghaddam, 2019). SME managers must have a good level of financial literacy in managing the financial and cash cycle. SMEs in a successful company are highly dependent on how the company obtains cash, allocates it, uses it, and manages funds. According to Remund (2010), financial literacy is the level of a person's understanding of important financial concepts and has the capacity and confidence to handle decision-making regarding personal funds. When SME actors lack the knowledge, skills, attitudes, and awareness to manage and direct finances in a resilient, transparent, and professional manner, it will be a significant obstacle to the growth of the performance and sustainability of the SME business (Agyapong & Attram, 2019).

The tight business competition in the SME sector makes understanding financial literacy very important for owner-managers to improve SMEs. SMEs are always faced with various financial decisions in their business activities, so financial literacy will be an important instrument in making business decisions and policies. Lack of financial literacy will hinder SMEs and create new challenges such as low trust in the banking sector towards SMEs (Okangi, 2019). Along with the development of technology and information, SME owners must have a strong strategy to be able to win the competition, minimize losses, manage their business well so that they can achieve profit levels and increase sales (Anwar et al., 2021). SME entrepreneurs who use well-planned business strategies can make a business known, develop, be organized and get income according to target. It is so important that business strategies in SMEs must be implemented in order to maintain the sustainability of SMEs (Sularsih & Nasir, 2021).

By using the SMEs entrepreneur behavior indicator, this study aims to analyze the level of financial literacy, business strategy and business innovation on the performance of SMEs in the palm oil sector. This paper attempts to find the behavior of SMEs in running their businesses by looking at their development and understanding of the businesses they run. The main hypothesis of this study is that the palm oil sector business continues to grow and business actors also follow business developments and continue to innovate to achieve prosperity. For the government, this business development will be able to increase economic growth in the long term. In the next section, this paper will link research variables using data and statistical technique methodologies applied in the analysis. The results and discussion discuss the findings empirically. Finally, the Conclusion and policy implications conclude and recommend policy directions based on the facts of the findings.

2. Materials and Methods

The type of research used is quantitative research and also uses an explanatory approach. In addition, this study also uses a survey method which uses a Likert scale questionnaire as a

medium for data collection. The results obtained from the questionnaire will be tested using SEM (Structural Equation Modeling) data analysis techniques and operated with the help of the AMOS 24.0 application. The population in this study were SMEs entrepreneurs in the palm oil sector in North Aceh. Determination of the number of samples in this study used the Slovin formula with a significance error of 5% and obtained a sample size of 105 SMEs entrepreneurs in the palm oil sector. Several stages in testing this study are as follows.

Amos Social Equation Modeling Analysis Prerequisite Test is conducted Before being able to use the SEM method, there are several requirements that must be met to be able to use the SEM method in a study as follows:

- 1. Adequacy of Sample Size According to (Ghozali, 2011), the minimum number of samples needed in SEM analysis using Maximum Likelihood estimation is 100-200 samples.
- 2. Normality Test, The normality test is used to determine whether the distribution of research from each variable is normal. The evaluation is carried out using the critical ratio skewness value criteria, where the data is said to be normally distributed if the absolute value of the critical ratio skewness and/or kurtosis is below 2.58 (Ghozali, 2011).
- 3. Multicollinearity Test, The multicollinearity test can be carried out by looking at the correlation value between exogenous variables. The model is declared free from multicollinearity if the correlation value between exogenous variables is less than 0.9. Measurement Model Testing (Ghozali, 2011) explains that in conducting suitability tests and statistical tests, several suitability indices and their cut-off values are required to be used in testing a model:
- 4. Validity Test Validity is the level of accuracy of a measuring instrument in research related to the meaning or content that is actually measured (Sekaran & Bougie, 2010). The validity test of exogenous variables is carried out by looking at the estimate value of each indicator in the construct. An indicator is declared valid if it has an Estimate value > 0.5. In the SEM discriminant validity test, it can be seen through the Average Variance Extracted (AVE) value where the variable is declared valid if the AVE value ≥ 0.05.
- 5. Reliability Test (Sekaran & Bougie, 2010) explains that reliability testing is a test process carried out to test the reliability of data. Furthermore, (Ghozali, 2011) explains that to test the reliability of data, the reference is Construct Reliability (CR). CR shows how big the correlation factor is between a variable and other variables. The indicator of the variable is declared reliable if $CR \ge 0.07$ (Ghozali, 2011).
- 6. Significance Test (Hypothesis Test) The significance test is carried out to see the influence of exogenous (dependent) variables on endogenous (independent) variables

3. Results and Discussion

3.1 Results

3.1.1 Respondent Characteristics

The results of the analysis of respondent characteristics are explained in table 1 below:

Table 1 Respondent Characteristics

Characteristics		Amount	Percentage
Gender			
Male		78	74,3
Female		27	25,7
	Total	105	100,0
Age			
≤35 Years		36	34,3
35-45 Years		50	47,6

≥ 45 Years		19	18,1
	Total	105	100,0
Level of Education			
Senior High School		36	34,3
Diploma 3		12	11,4
Undergraduate		9	8,6
Postgraduate		1	1,0
Others		47	44,8
	Total	105	100,0
Type of business			
Fertilizer pesticide shop		25	23,8
Bulk trader Pedagang penampung		19	18,1
Transportation/Truck/Freight		16	15,2
Cafe/Shop/Kiosk Café/Warung,	/Kios	35	36,2
Others		7	6,7
	Total	105	100,0
Venture Capital			
Own capital Modal sendiri	-	83	79,0
Partners/Credit/Debt		22	21,0
	Total	105	100,0

Source: Data Analysis Results

Total of 105 respondents who have been reviewed were found to be on average business owners who manage their own businesses. The highest level of education is high school graduates with an average age of 40 years. The most common business sectors in SMEs are palm oil cafes and plantation equipment sales businesses.

3.1.2. Descriptive Statistic

Descriptive statistical analysis for the sample includes the mean, maximum, minimum, and standard deviation values for each variable, as shown in the following table:

Table 2 Descriptive Statistic

Variabel	Minimum	Maximum	Mean	Stand. Deviation
Financial Literacy (FL)	1,60	5,00	4,1095	,80688
Business Strategy (BS)	1,60	4,80	4,0410	,72000
Business Innovation (BI)	1,50	5,00	3,4286	,88641
Financial Performance (FP)	1,60	4,80	3,9181	,77692

According table 3, descriptive statistics for dependent and independent variables can be seen. This statistical analysis is calculated only for observations whose dependent variable values. The average value of financial performance is 3.91 with a financial literacy level of 4.10, business strategy 4.04 and business innovation with an average value of 3.42.

3.1.3. Measurement Constructs, Confirmatory Factor and Convergent Reliability Analysis

We assumed IBM AMOS version 24 to anatomize data applying a two- step procedure (Anderson & Gerbing, 1988). The first is to assess a dimension model, including evaluation of model fit, reliability, and validity. The reliability test used compound reliability (CR), which should surpass a threshold of 0.70 (Fornell & Larcker, 1981). also, both convergence validity and discriminant validity are vindicated. The confluence validity test vindicated SRW that must be statistically significant for all particulars (Anderson & Gerbing, 1988). The SMC (squared multiple correlations) must be lesser than 0.40 for all particulars (Bollen, 1989); and the Adieu (average friction uprooted) must be larger than 0.50 for all idle variables or constructs (Fornell & Larcker, 1981). The discriminant validity test achieves when the square root of the Adieus for each construct is larger than the friction of any of the interconstruct correlations (Fornell & Larcker, 1981). Eventually, virtuousness- of- fit indicators were used to estimate the model fit for both the dimension and structural models, independently. These include relative fit indicator (CFI) or Tucker - Lewis indicator (TLI), root mean square error of approximation (RMSEA), and formalized root mean square residual (SRMR) (Hu & Bentler, 1999). Outcome of the Measurement Constructs are featured in Table 3 below:

Table 3 Measurement Constructs

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Model-Fit Summary	Factor Loading
CMIN	166,74
GFI	0.872
CFI	0.975
DF	144
PClose	0,753
RMSEA	0.039
CMIN/DF	1.158
TLI	0.97
RMR	0.057

The study achieved the required thresholds as opined by Hair et al. (2010). For instance, all the standardized factor loadings exceeded 0.5 as expected. Additionally, the required model-fit indices were attained as the CMIN/DF was ≤3, GFI was ≥0.8, PClose was >0.5, TLI and CFI were ≥0.9, and RMSEA and SRMR were ≤0.08. Hence, it was revealed that the dataset fit the structural model appropriately. Next, the results of the Confirmatory Factor Analysis and Convergent Reliability are shown in Table 2 and Figure 1:

Table 4 Confirmatory Factor and Convergent Reliability Analysis

Variables	Loading Factor		
Financial Literacy (FL): CA = 0.851; CR = 0.863; AVE = 0.559			
FL1	0.69		
FL2	0.71		
FL3	0.739		
FL4	0.737		
FL5	0.853		
Business Strategy (BS): CA = 0.826; CR = 0.834; AVE = 0.504			
BS1	0.71		
BS2	0.607		
BS3	0.795		
BS4	0.709		
BS5	0.715		
Business Innovation (BI): CA = 0.824; CR = 0.826; AVE = 0.543			
BI1	0.703		

BI2	0.669		
BI3	0.752		
BI4	0.816		
Financial Performance (FP): CA = 0.856; CR = 0.862; AVE = 0.557			
FP1	0.697		
FP2	0.696		
FP3	0.742		
FP4	0.743		
FP5	0.845		

Source: Data Analysis Results

Note: CA = Cronbach's Alpha; CR = Composite Reliability;

AVE = Average Variance Extracted

Concerning the convergent validity, all the thresholds as asserted by Fornell and Larcker (1981) were achieved in the study. For instance, the average variance extracted (AVE) and composite reliability (CR) were >0.5 and CR ≥0.7, respectively. Moreover, Cronbach's alpha (CA) which measures internal consistency among the observed items was ≥0.7. Hence, it was concluded that the study achieved internal consistency in the data set.

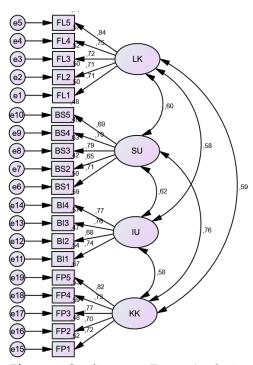


Figure 1. Confirmatory Factor Analysis Source: Data Analysis Results

3.1.4. Structural Model Analysis Results

This study examines how Financial Literacy, Business Strategy and Business Innovation can be leveraged to achieve improved financial performance of MSMEs, focusing on empirical evidence from developing countries. The findings of the regression analysis for the hypothesized relationships are presented in Table 3 and Figure 2, which show a favorable correlation between FL, BS and BI. However, BI is not a major concern for MSMEs during their business activities.

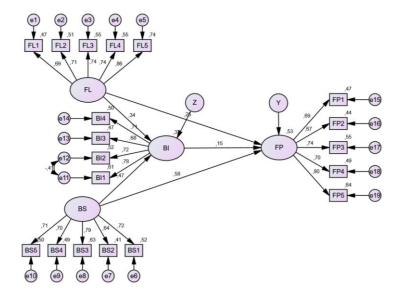


Figure 2. Structural Equation Model Source: Data Analysis Results

The results of the goodness of fit test obtained that the SEM model in this study was good and acceptable. Therefore, the hypothesis test analysis can be carried out. There is a significant influence of exogenous variables on endogenous variables if the significance value is less than 0.05. The following are the results of the hypothesis test from this study.

Table 5. Path Coefficients

Tuble 5. Full Coefficients							
			Path	Standard Error	Critical review	Cian	Significance (p <
			Coefficients	(S.E.)	(C.R.)	Sign	0.05)
BI	<	FL	0,342	0,113	3,114	0,002	Confirmed
BI	<	BS	0,466	0,142	3,798	***	Confirmed
FP	<	FL	0,246	0,098	2,12	0,034	Confirmed
FP	<	BS	0,58	0,143	3,869	***	Confirmed
FP	<	BI	0,154	0,099	1,274	0,203	Not Confirmed

Source: Data Analysis Results

3.2 Discussion

3.2.1 The Influence of Financial Literacy on Financial Performance

Based on the results of statistical testing, it was found that the level of financial literacy of SMEs in the palm oil sector has a positive and significant effect on the performance of SMEs in the palm oil sector. The coefficient value of 0.246 means that there is a positive influence, meaning that the better the financial literacy, the financial performance of the palm oil SMES sector will also increase. The development of science and technology requires entrepreneurs to continue to improve their abilities to win the competition. One of the problems in the weak competitiveness of SMEs is the lack of financial literacy, every entrepreneur must face this competition by creating good management of decision-making, which consists of marketing strategies, human resource management, and financial decision-making (Latifiana, 2017). Financial literacy plays an important role in empowering SMEs. By understanding and adopting digital financial technology, SMEs can increase efficiency, gain access financing,

expanding markets, and maintaining financial security, many SMES actors still have financial literacy that is on average below the expected standard (Darnawati et al., 2023). The government is trying to answer the challenge so that SMES have good financial literacy by providing a lot of training so that SMES actors are able to manage their businesses well, financial literacy as the main capital for SMES entrepreneurs who develop their businesses (Darnawati et al., 2023). Because it is not impossible to open up opportunities to collaborate with investors. Financial literacy is important to improve so that there is a balance and fair negotiation for both parties working together. In another study, it was found that there was a positive influence between financial literacy and SMES business performance, and there were demands on the government to increase its role in efforts to foster and improve financial literacy for SMEs actors (Agyapong & Attram, 2019).

In other research, it was found that factors that affect the performance of SMEs in developing countries are the lack of business capital due to weak financial literacy and poor infrastructure as well as economic barriers, corruption, and management problems. These barriers have a positive and significant effect on SMEs failure (Khan, 2022). Researchers recommend improving aspects such as literacy and competitiveness as key factors in SME development in addition to access to capital as a driver of growth. The government should further improve the existing policy framework and provide more business opportunities and skills training for SMEs actors (Angeles et al., 2019).

3.2.2 The Influence of Business Strategy on Business Performance

The SMEs entrepreneur the palm oil sector in North Aceh was statistically found to have implemented good business strategies. The coefficient value of 0.580 means that there is a positive influence, meaning that the better the SMES palm oil business strategy, the financial performance of the SMES palm oil sector will also increase. The right business strategy needs to be developed by SMEs actors which aims to evaluate the strengths, weaknesses, opportunities and threats of a business. The strength that benefits the business is through product development. The weakness here is the loss experienced by business actors due to the business competition that occurs. Opportunities are strategies that must be carried out by business actors if the opportunities are large or many, so business actors can innovate the product. The threat to a company is competition between one company and another, because in the business world the biggest threat is competition between businesses or can also sell the same product. (Ariani, 2017). Entrepreneurial strategies can be designed and redesigned to encourage value creation, shared value creation and experiential value for customers through entrepreneurial initiatives that will continue to be improved (Saoula et al., 2023).

In the development of SMEs, there are many challenges faced in it, to strengthen this, it is necessary to provide more guidance for the ability of small entrepreneurs to become medium entrepreneurs and micro entrepreneurs to become small entrepreneurs. Weak management and human resource capabilities result in SMEs being unable to run their businesses properly, because of this, their development is not good (Setyanto, 2015). The strategy of protecting nature and conservation is something that must be considered by palm oil sector business actors. The commitment of newly emerging SMEs to a deforestation-free supply chain has the potential to reduce the unwanted environmental impacts of palm oil expansion, and although this also risks impacting SMEs from the supply chain, this commitment can serve to improve the production and business systems of SMEs actors (Pacheco. et al., 2017). SMEs actors must be able to compete by implementing an internationalization strategy to increase the competitive advantage of small and medium enterprises (SMEs), the internationalization in question is at least SMEs actors can win competition in the regional area by increasing business flexibility and problem-solving abilities (Olaore et al., 2020).

The desire of SMEs in running a business to win the competition is greatly influenced by the habitual factors that exist in society that have been established since they were born. SMEs inherit these habits from their families and their environment. Many SMEs that have developed have implemented the right strategy to continue to grow. The combination of these dimensions significantly influences strategy formulation and strategy implementation consequentially, although it does not directly affect international performance (Baimai & Mukherji, 2015).

SMEs entrepreneurs in the palm oil sector in North Aceh have used well-planned business strategies according to their experience, especially in facing business competition. They are able to make a business known, develop, organize and get the appropriate income to survive in business. By implementing a planned and appropriate strategy, they can continue to increase sales. SMEs entrepreneurs will maintain significant sales increases according to the business strategy that has been implemented. SMEs actors will try to avoid a decrease in income, maintain their position in the market, maintain competition between SMEs entrepreneurs and can attract consumers and then make consumers become subscribers.

3.2.3. The Influence of Innovation on Business Performance

In the development of SMEs, there needs to be product innovation. SMEs are currently growing rapidly in Indonesia, not only small businesses but SMEs are also being eyed by big entrepreneurs. Competition between SMEs and big entrepreneurs is now a natural thing because SMEs have become a priority in Indonesia, and also help the economy of the lower class, and can also reduce unemployment in Indonesia. Open innovation is widely applied in large companies (Hossain, 2015) and is currently also being practiced in SMEs companies that aim to win the competition strategy.

The results of this study found that there was no influence of business innovation on performance in SMEs in the palm oil sector in North Aceh. There is a positive and insignificant influence of business innovation on financial performance. This is evidenced by the significance value of the influence of business innovation on financial performance, which is 0.203 so that the significance value is greater than 0.05. Currently, disruptive innovation brings benefits to society as well as being a challenge and opportunity for business actors, but scientific studies on SMEs are still limited.

Disruptive innovation in Indonesia began to attract attention in 2010 when Nadiem Makarim founded and then developed GO-JEK which serves transportation through motorcycle taxis based on information technology (Nurhajati et al., 2018). Digital technology has had a profound impact on business innovation practices. The recent introduction of digital technologies has revolutionized the way organizations conduct business, forming connections with customers and other stakeholders (Pham & Vu, 2022). SMES) need to engage in organizational change to find effective responses to the changing technological landscape to ensure their survival.

This study found that innovation does not affect the performance of SMEs in the palm oil sector in North Aceh. SMEs do not think too much about innovation due to the lack of skills and training. So far they have only focused on short-term results or profits without considering them in the long term. Compared to large company owners, SMEs do indeed experience more limited capital and business experience. However, that does not mean it is impossible for SMEs to move up a class and develop their business scale. SMEs have made improvements in their product innovation. Creativity, use of quality raw materials, competitive prices and services that will later affect the competitiveness of products in the market have been implemented well. For creativity, it is usually related to packaging, logos and product taglines related to branding. Then quality raw materials will make SMEs products able to be sold in a more prestigious

environment. From both of these things, there will be an adjustment to the selling price but it must still be competitive where usually the profit is determined at 30% of the production cost.

Same findings with Udimal et al., (2019) who found that low innovation in the SMEs sector can be strengthened by the government by providing incentives in the form of tax credits and subsidies so that SMEs can improve their business activities in the form of better innovation. In fact, the rate of innovation always increases in developed countries in growing markets. Limited resources result in many SMEs being unable to innovate due to their lack of ability to keep up with technological and information developments (Farsi & Toghraee, 2015). On the other hand, innovation has been proven to improve company performance and transformational leadership (Afriyie et al., 2020). Big challenges will be faced by SMEs in Aceh in particular and in Indonesia in general which are included in the category of developing countries. Innovation has a crucial role in developing SMEs business models in the digital era. By innovating, SMEs can increase competitiveness, operational efficiency, and market penetration. However, to achieve effective innovation, support from various parties is needed.

4. Conclusions

Based on the results of the analysis using Structural Equation Modeling (SEM), two hypotheses were accepted and one hypothesis was rejected. Both test results will strengthen previous research. This study found that financial literacy factors, strategic business of SMEs in the palm oil sector, affect the performance of SMEs businesses. However, innovation does not affect the performance of SMEs businesses; therefore Innovation has a crucial role in the development of SMEs business models in the digital era. Entrepreneurs engaged in the palm oil sector are less innovative in running their businesses, efforts to improve SMEs competitiveness data must be done in operational efficiency factors, and market penetration. However, to achieve effective innovation SMEs, it is necessary to get support from various parties.

In practice, these findings will be very useful for policy makers and SMEs in Aceh in particular and Indonesia in general. Since SMEs have limited resources, the government should optimize the private sector and other related institutions, to provide consulting services for SMEs to strengthen their managerial capabilities, which will enable them to access international markets. Continuous literacy development by implementing educational strategies for SMEs (Kasema, 2023). In the future, SME managers will ensure their business performance by developing their capabilities, especially in improving financial literacy and innovation that will educate themselves on issues, especially their ability to increase market share such as exports and develop their business networks at home and abroad to expand internationally.

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