International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The Influence Of Knowledge, Characteristics, And Entrepreneurial Skills On The Success Of Batik Msmes In Danau Teluk And Pelayangan Districts

Dewi Tri Wahyuni[1], Dwi Kurniawan[2], Dessy Ellyana[3]

[123]University of Jambi

Abstract

This study is motivated by the increasing competition among batik MSMEs (Micro, Small, and Medium Enterprises) in Danau Teluk and Pelayangan Districts, Jambi City, which requires entrepreneurs to possess adequate entrepreneurial capabilities in order to sustain and improve business success. The aim of this research is to analyze the influence of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills on the success of batik MSMEs in the study area, both partially and simultaneously. This research employs a quantitative approach with an explanatory research design. Data were collected through questionnaires distributed to 35 batik MSME owners as respondents and analyzed using multiple linear regression analysis. The results show that entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills have a positive and significant effect on business success, both partially and simultaneously. These findings indicate that improving these three aspects can enhance the success of batik MSMEs more effectively. In conclusion, the success of batik MSMEs is strongly determined by the quality of entrepreneurial knowledge, characteristics, and skills possessed by business actors.

Keywords: entrepreneurial knowledge, entrepreneurial characteristics, entrepreneurial skills, business success, batik MSMEs.

INTRODUCTION

The development of Micro, Small, and Medium Enterprises (MSMEs) in the global economic landscape demonstrates their increasingly vital role as drivers of economic growth, job creation, and socioeconomic stability, particularly in developing countries. In Indonesia, MSMEs make a significant contribution to employment and national economic growth, but still face challenges in innovation, business management, and

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

competitiveness in the digital era. This situation demonstrates that business success is determined not only by financial aspects, but also by the quality of entrepreneurial human resources possessed by business actors.

Various studies have shown that entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills play a crucial role in increasing business success. Entrepreneurial knowledge contributes to improving entrepreneurs' ability to understand the market, manage their business, and make strategic decisions (Heriyanto & Ie, 2024; Nirmalasari, 2024), as well as driving improved business performance through strategic understanding and innovation (Limbong & Putra, 2024; Umniyyah & Handoyo, 2025). However, knowledge alone is insufficient without the support of experience and the ability to implement it effectively.

Entrepreneurial characteristics such as self-confidence, risk-taking, creativity, and innovation have also been shown to influence business success (Sumari & Putri, 2022; Hafizah & Tumanggor, 2024). These characteristics help entrepreneurs navigate uncertainty and increase business resilience (Eko Haryansyah & Zairina, 2024; Heriyanto & Ie, 2024). However, several studies have shown that the influence of these characteristics is not always immediate if not supported by adequate business skills and experience.

Furthermore, entrepreneurial skills are a crucial factor in supporting business success, particularly in operational, marketing, and financial management aspects. These skills have been shown to significantly impact business management effectiveness and MSME competitiveness (Muksin et al., 2023; Nabilah, 2024), as well as contributing to improved business performance and sustainability (Limbong & Putra, 2024; Nugroho & Iryanti, 2023). Therefore, these skills are a crucial element in optimizing the business potential of MSMEs.

Theoretically, this research is supported by the entrepreneurial competency approach, which emphasizes that business success is the result of integrating the knowledge, characteristics, and skills of entrepreneurs (Ahmed et al., 2022; Rahmawati et al., 2024). Furthermore, the Resource-Based View (RBV) theory explains that a business's competitive advantage is determined by valuable internal resources, including entrepreneurial competencies as strategic intangible assets (Barney et al., 2021).

However, a research gap remains, characterized by discrepancies in research findings and limited studies integrating these three variables simultaneously. Furthermore, research focusing on batik MSMEs as a culture-based creative industry sector remains relatively limited, despite the challenges they face in product innovation,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

digital marketing, and modern business management (Sari et al., 2022). This situation highlights the need for a more comprehensive study to analyze the influence of these three entrepreneurial variables on business success.

Based on this, this study aims to analyze the influence of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills, both partially and simultaneously, on the success of batik MSMEs. The results are expected to provide theoretical contributions to the development of competency-based entrepreneurship literature and practical contributions to increasing the competitiveness and success of batik MSMEs in Indonesia.

RESEARCH METHODS

This study uses a quantitative approach with an explanatory research design that aims to analyze the influence of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills on the success of batik MSMEs in Danau Teluk and Pelayangan Districts, Jambi City. This approach was chosen because it is able to explain the causal relationship between variables empirically based on field data, in line with the finding that entrepreneurial competence is a crucial factor in determining business performance and success (Rahmawati et al., 2024; Soomro et al., 2024).

The research method used was a survey with a structured questionnaire instrument based on the indicators of each variable. The variables were measured using a five-point Likert scale to gauge respondents' perceptions of knowledge, characteristics, entrepreneurial skills, and business success. Primary data was obtained directly from batik MSMEs, while secondary data came from scientific literature, agency reports, and relevant previous research (Nugroho & Iryanti, 2023; Tanjung et al., 2024).

The research subjects were batik MSMEs in Danau Teluk and Pelayangan Districts, Jambi City, with 35 respondents selected using purposive sampling based on the criteria of active batik businesses that had been operating for at least one year. This selection was based on the consideration that business experience plays a crucial role in representing entrepreneurial competence and business success (Husna, 2024; Nabilah, 2024).

The data sources consist of primary data obtained through questionnaires and secondary data from scientific journals, previous research, and relevant agency data. In the context of batik MSMEs, this data is relevant because the sector is part of a culture-based creative industry that contributes to the local economy (Sari et al., 2022; Eko Haryansyah & Zairina, 2024).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The data analysis technique used Structural Equation Modeling based on Partial Least Squares (SEM-PLS) to analyze the relationships between latent variables simultaneously. This method was chosen because it is suitable for small sample sizes and does not require a normal distribution of the data. The analysis was conducted through evaluation of the outer model (validity and reliability) and the inner model to test the relationships between variables (Soomro et al., 2024; Rahmawati et al., 2024).

Hypothesis testing was conducted using bootstrapping to test the significance of the influence between variables. Furthermore, the coefficient of determination (R^2) was used to measure the model's ability to explain the dependent variable, while the effect size (f^2) was used to assess the contribution of each variable to the research model. This approach follows the practice of PLS-SEM analysis in modern entrepreneurship research (Tiaradewi & Ismunawan, 2023; Umniyyah & Handoyo, 2025).

RESULTS AND DISCUSSION

Respondent Characteristics

The characteristics of the respondents in this study describe the general conditions of batik Micro, Small, and Medium Enterprises (MSMEs) in the Danau Teluk and Pelayangan Districts of Jambi City, which are the objects of the study. Respondents numbered 35 batik MSMEs obtained through direct questionnaire distribution. Respondent characteristics are presented to provide a comprehensive picture of the identity and background of the entrepreneurs, thereby supporting a more accurate interpretation of the research results. The characteristics analyzed include gender, age, education level, and length of business run based on respondents' answers in the questionnaire. This presentation aims to provide an understanding of the profile of batik MSMEs related to entrepreneurial knowledge, entrepreneurial characteristics, entrepreneurial skills, and the success of the businesses studied. Furthermore, respondent characteristics are presented in detail in tabular form based on each research indicator.

Table 1. Respondent Characteristics Based on Gender

No	Gender	Frequency	Percentage (%)
1	Man	22	62.9
2	Woman	13	37.1
Total		35	100

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Based on the characteristics of respondents by gender, it is known that 22 male respondents (62.9%), while 13 female respondents (37.1%). These results indicate that batik MSMEs in Danau Teluk and Pelayangan Districts are predominantly male, so that most of the batik businesses in this study are managed by male entrepreneurs.

Table 2. Respondent Characteristics Based on Age

No	Age	Frequency	Percentage (%)
1	< 20 Years	0	0
2	20 – 30 Years	0	0
3	31 – 40 Years	9	25.7
4	>40 Years	26	74.3
Total		35	100

Based on the characteristics of respondents by age, the majority of respondents were in the age group above 40 years old, as many as 26 people (74.3%), while respondents aged 31–40 years old numbered 9 people (25.7%). There were no respondents in the age group under 30 years old. These results indicate that batik MSMEs in Danau Teluk and Pelayangan Districts are dominated by the mature age group, which indicates that most business actors have experience and long involvement in running a batik business.

Table 3. Respondent Characteristics Based on Education

No	Education	Frequency	Percentage (%)
1	Elementary School	0	0
2	JUNIOR HIGH SCHOOL	4	11.4
3	High School/Vocational School	20	57.1
4	D3	0	0
5	S1	11	31.4
6	Other	0	0
Total		35	100

Based on the characteristics of respondents based on education level, the majority of respondents had a high school/vocational high school education of 20 people (57.1%), followed by a bachelor's degree of 11 people (31.4%) and junior high school of 4 people

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

(11.4%). Meanwhile, there were no respondents with elementary school, diploma 3, or other educational levels. These results indicate that the majority of batik MSME actors in Danau Teluk and Pelayangan Districts have a high school/vocational high school educational background, indicating that respondents have sufficient formal education to support the management and development of batik businesses.

Table 4. Respondent Characteristics Based on Length of Business

No	Length of Business	Frequency	Percentage (%)
1	< 1 Year	0	0
2	13 years old	0	0
3	4 – 6 Years	3	8.6
4	>6 Years	32	91.4
Total		35	100

Based on the characteristics of respondents based on the length of business, it is known that the majority of respondents have run their business for more than 6 years, as many as 32 people (91.4%), while respondents with a business duration of 4–6 years numbered 3 people (8.6%). There were no respondents who had a business for less than 1 year or 1–3 years. These results indicate that the majority of batik MSMEs in Danau Teluk and Pelayangan Districts are business actors who have had considerable experience in running a business. This condition indicates that respondents have a good understanding of the production process, business management, and changes in market conditions, so they are able to provide relevant information related to the research variables.

Table 5. Respondent Characteristics Based on Number of Employees

No	Number of employees	Frequency	Percentage (%)
1	There isn't any	0	0
2	1 – 5 People	24	68.6
3	6 – 10 People	11	31.4
4	>10 People	0	0
Total		35	100

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Based on the characteristics of respondents based on the number of employees, it is known that the majority of respondents have 1–5 employees, amounting to 24 people (68.6%), while respondents with 6–10 employees amounted to 11 people (31.4%). There were no respondents who did not have employees or who had more than 10 employees. These results indicate that the majority of batik MSMEs in Danau Teluk and Pelayangan Districts are still on a small business scale with a limited number of workers. However, this condition does not hinder business continuity, because MSME actors have experience in managing business operations effectively.

Table 6. Respondent Characteristics Based on Monthly Turnover

No	Turnover per Month	Frequency	Percentage (%)
1	< 5 million	0	0
2	5 – 10 million	20	57.1
3	10 – 20 million	13	37.1
4	>20 million	2	5.7
Total		35	100

Based on the characteristics of respondents based on monthly turnover, it is known that the majority of respondents have a turnover of IDR 5–10 million as many as 20 people (57.1%), followed by a turnover of IDR 10–20 million as many as 13 people (37.1%), and a turnover of more than IDR 20 million as many as 2 people (5.7%). There were no respondents with a turnover of less than IDR 5 million. These results indicate that the majority of batik MSMEs in Danau Teluk and Pelayangan Districts have had the ability to generate a fairly stable income. The variation in turnover obtained by respondents also shows differences in the level of business development, where some MSMEs have been able to achieve a higher income scale. In general, the characteristics of the turnover illustrate that the batik businesses run by respondents have developed and have sustainability in their business activities.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Table 7. Respondent Characteristics Based on Business Location

No	Business Location	Frequency	Percentage (%)
1	Service	11	31.4
2	Bay Lake	24	68.6
Total		35	100

Based on the characteristics of respondents based on business location, it is known that of the 35 respondents, 24 respondents (68.6%) came from Danau Teluk District, while 11 respondents (31.4%) came from Pelayangan District. These results indicate that the majority of Jambi Batik MSMEs in this study are in Danau Teluk District. However, the involvement of respondents from both districts indicates that the study has covered the central area of batik MSMEs that are the object of study, so that the data obtained is able to describe the condition of batik business actors in Danau Teluk and Pelayangan Districts more comprehensively.

Validity Test

Validity testing is used to measure the extent to which each statement item in the questionnaire is able to accurately represent the research variables. In this study, testing was conducted on the variables of entrepreneurial knowledge (X1), entrepreneurial characteristics (X2), entrepreneurial skills (X3), and business success (Y). The test results show that all statement items have a significance value (Sig. 2-tailed) <0.001 (<0.05), so that all indicators are declared valid and suitable for use. This indicates that each item has been able to measure the research construct accurately and in accordance with the research objectives.

Furthermore, validity testing using Pearson correlation (calculated r) compared to the table r of 0.334 shows that all items in each variable have a calculated r value greater than the table r. For the entrepreneurial knowledge variable, the calculated r value is in the range of 0.455–0.815; the entrepreneurial characteristics variable 0.451–0.619; the entrepreneurial skills variable 0.544–0.932; and the business success variable 0.512–0.912. These results indicate that all indicators in each variable have a good to very good level of validity. Thus, it can be concluded that all research instruments have met the validity criteria and are suitable for use in hypothesis testing in the next analysis stage.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Reliability Test

Reliability testing was conducted to determine the level of consistency and reliability of the research instrument in measuring the variables studied. An instrument is considered reliable if it has a Cronbach's Alpha value ≥ 0.60. Reliability testing in this study was conducted on the variables of entrepreneurial knowledge, entrepreneurial characteristics, entrepreneurial skills, and business success in batik MSMEs in Danau Teluk and Pelayangan Districts. This test aims to ensure that each statement item in the questionnaire has good internal consistency in measuring each research variable. The results of the research instrument reliability test are presented in the following table.

Table 2. Reliability Test

Reliability Statistics				
Variables	Cronbach's Alpha	Score Cronbach's Alpha	N Of Items	Information
Knowledge	0.777	≥ 0.60	10	Reliable
Characteristics	0.746	≥ 0.60	10	Reliable
Skills	0.938	≥ 0.60	10	Reliable

Based on the results of the reliability test, all research variables have a Cronbach's Alpha value above the minimum limit set, which is ≥ 0.60, so that all instruments are declared reliable. The entrepreneurial knowledge variable obtained a Cronbach's Alpha value of 0.777, indicating that the statement items have good internal consistency, so that the instrument is able to produce stable measurements and is suitable for use in research analysis. The entrepreneurial characteristics variable has a Cronbach's Alpha value of 0.746, which also indicates good internal consistency and the instrument's ability to measure the construct consistently.

Furthermore, the entrepreneurial skills variable obtained a Cronbach's Alpha value of 0.938, indicating a very high level of reliability, so that all statement items have very strong internal consistency in measuring the research variables. Meanwhile, the business success variable obtained a Cronbach's Alpha value of 0.928, which also indicates very high reliability, so that the instrument on this variable is able to provide stable and consistent measurement results. Thus, it can be concluded that all research instruments have met the reliability criteria and are suitable for further analysis.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Normality Test

The normality test was conducted to determine whether the residual data in the regression model was normally distributed. The test in this study used the One-Sample Kolmogorov-Smirnov method and was supported by a Normal P–P Plot graph. The results of the normality test are presented in the following table.

Table 3. Normality Test

One-Sample Kolmogorov-Smirnov Test		
		Unstandardized Residual
N		35
Normal Parametersa,b	Mean	0.0000000
	Standard Deviation	4.29857668
Most Extreme Differences	Absolute	0.099
	Positive	0.099
	Negative	-0.098
Test Statistics		0.099
Asymp. Sig. (2-tailed)		.200c,d
a. Test distribution is Normal.		
b. Calculated from data.		
c. Lilliefors Significance Correction.		
d. This is a lower bound of the true significance.		

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

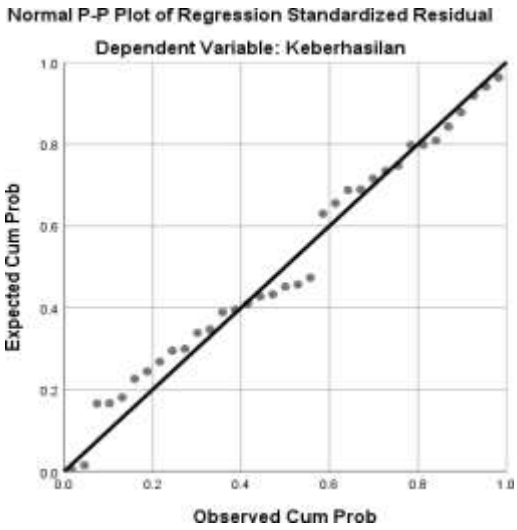


Figure 1. P-Plot of Regression Standardized Residual

Based on the results of the normality test using the One-Sample Kolmogorov-Smirnov Test, the Asymp. Sig. (2-tailed) value was obtained at 0.200. This value is greater than the significance level of 0.05, so it can be concluded that the residual data in this study is normally distributed. This indicates that the normality assumption in the regression model has been met. In addition, the results of the normality test are also strengthened through the Normal PP Plot of Regression Standardized Residual graph, where the data points are seen spreading around the diagonal line and following the direction of the line. This pattern indicates that the residual distribution is close to a normal distribution. Thus, it can be concluded that the research data has met the normality assumption, so it is suitable for use in regression analysis in the next testing stage.

Multicollinearity Test

A multicollinearity test was conducted to determine whether there is a high correlation between independent variables in a regression model. A good regression model is expected to be free from multicollinearity symptoms so that each independent variable can independently explain its effect on the dependent variable. In this study, the test was conducted using Tolerance and Variance Inflation Factor (VIF) values as indicators. The test results showed that all independent variables had Tolerance values above the minimum limit and VIF values below the maximum limit set. Therefore, it can be concluded that there are no symptoms of multicollinearity in the research model. Thus,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

all independent variables are suitable for use in further regression analysis because there is no interfering relationship between the independent variables.

Table 4. Multicollinearity Test

Coefficientsa							
Model	Unstandardized Coefficients		Standardiz ed Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
(Constant)	17,999	0.180		99,892	0,000		
Knowledge	0.367	0.006	0.726	58,542	0,000	.771	1,296
Characteristics	0.159	0.006	0.302	24,554	0,000	.735	1,361
Entrepreneurship Skills	0.010	0.003	0.018	2,823	0.008	.944	1,059
a. Dependent Variable: Success							

Based on the results of multiple linear regression analysis, the entrepreneurial knowledge variable has a regression coefficient of 0.367 with a significance of 0.000 (<0.05), thus having a positive and significant effect on the success of batik MSMEs. This means that every increase in entrepreneurial knowledge will increase business success by 0.367 units assuming other variables are constant. The Standardized Beta value of 0.726 indicates that this variable has the most dominant influence compared to other variables, and the Tolerance value of 0.771 and VIF of 1.296 indicate there is no multicollinearity problem.

Furthermore, the entrepreneurial characteristics variable has a regression coefficient of 0.159 with a significance level of 0.000 (<0.05), indicating a positive and significant influence on business success. Each increase in entrepreneurial characteristics will increase business success by 0.159 units. The Tolerance value of 0.735 and VIF of 1.361 indicate no symptoms of multicollinearity. Meanwhile, the entrepreneurial skills variable has a regression coefficient of 0.010 with a significance level of 0.008 (<0.05), so it still has a positive and significant influence even though its contribution is relatively small compared to other variables. The Tolerance value of 0.944 and VIF of 1.059 also indicate no multicollinearity problem. The constant of 17.999 indicates the baseline value of business success when all independent variables are zero.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Overall, entrepreneurial knowledge is the most dominant variable in influencing the success of batik MSMEs in Danau Teluk and Pelayangan Districts.

Heteroscedasticity Test

The heteroscedasticity test was conducted to determine whether there is inequality in the residual variance between observations in the regression model. A good regression model should have a constant residual variance (homoscedasticity), so that the resulting parameter estimates are BLUE (Best Linear Unbiased Estimator). In this study, the heteroscedasticity test was conducted using a scatterplot graph method between the residual values (ZRESID) and predicted values (ZPRED). Based on the results of observations on the scatterplot graph, it can be seen that the data points are randomly distributed and do not form a specific pattern, either a conical pattern, widening, or wavy pattern. In addition, the distribution of points is also balanced above and below the zero axis. This indicates that there are no symptoms of heteroscedasticity in the regression model of this study. Thus, it can be concluded that the regression model meets the classical assumptions and is therefore suitable for use in regression analysis in the next testing stage.

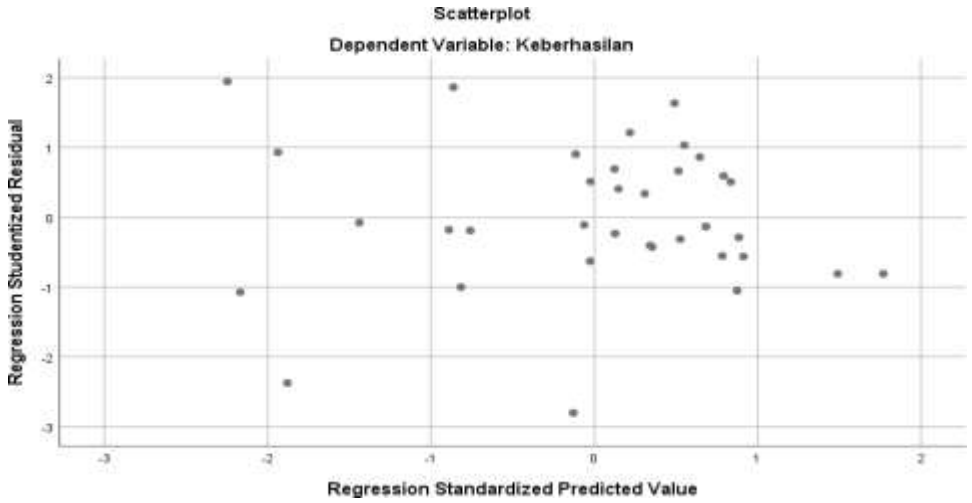


Figure 2. Results of Heteroscedasticity Test

Based on the results of the heteroscedasticity test using a scatterplot, it can be seen that the data points are randomly distributed around the number 0 on the Y-axis and do not form a specific pattern. The distribution of the points also appears to be evenly distributed above and below the number 0, without forming a tapered, widening, or wavy

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

pattern. This indicates that there are no symptoms of heteroscedasticity in the regression model used in this study. Thus, it can be concluded that the regression model meets the assumption of homoscedasticity and is therefore suitable for use in regression analysis in the next testing stage.

Result Description

Analysis of the average respondent response

The analysis of the average respondent responses was conducted to determine the perceptions of batik MSMEs towards the research variables, namely entrepreneurial knowledge, entrepreneurial characteristics, entrepreneurial skills, and business success based on a Likert scale. The results of the analysis showed that the entrepreneurial knowledge variable obtained an average value of 4.15 (high category), which indicates that respondents have a good understanding in managing a batik business, starting from identifying opportunities, understanding the market, business planning, to evaluating business feasibility. The entrepreneurial characteristics variable obtained an average value of 4.02 (high category), which indicates that respondents have good entrepreneurial characteristics such as confidence, optimism, and innovation, although there is still a tendency to be cautious in taking business risks. The entrepreneurial skills variable obtained an average value of 4.06 (high category), which reflects that respondents have good abilities in the aspects of production, business management, marketing, and decision making. Furthermore, the business success variable obtained an average value of 3.93 (high category), which indicates that respondents' batik businesses have experienced quite good development, marked by an increase in income, profits, sales, number of customers, and business sustainability. Overall, the results of the descriptive analysis show that all research variables are in the high category, which indicates that batik MSME actors have good entrepreneurial knowledge, characteristics, and skills, and are able to achieve relatively optimal business success.

Multiple Linear Regression Analysis

Multiple linear regression analysis was conducted to determine the influence of independent variables, namely entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills, on the dependent variable, namely the success of batik MSME businesses. This analysis was used to test the causal relationship between variables in the research model simultaneously and partially. The results of the multiple linear regression analysis are presented in tabular form to facilitate interpretation

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

and provide a clearer picture of the influence of each independent variable on the dependent variable, so that it can be used as a basis for discussion and drawing research conclusions.

Table 5. Multiple Linear Regression Analysis

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,999	0.180		99,892	0,000
	Knowledge	0.367	0.006	0.726	58,542	0,000
	Characteristics	0.159	0.006	0.302	24,554	0,000
	Skills	0.010	0.003	0.018	2,823	0.008
a. Dependent Variable: Business Success						

Based on the results of multiple linear regression analysis, the regression equation obtained is:

Information

$$Y=a+b1X1 +b2X2 +b3x3 +e$$

$$Y= 9.408 + 0.109X1 + 0.029X2 + 0.881X3 +e$$

Y	: Business Success
A	: Constant
b1 b2 b3	: Regression coefficient of each independent variable
X_1	: Entrepreneurial knowledge
X2	: Characteristics of entrepreneurs
X3	: Entrepreneurship Skills
E	: Error (Error Rate 5%)

Based on the results of the multiple linear regression analysis, a constant value of 17.999 was obtained, indicating the baseline value of business success if the variables of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills are zero. This constant value is statistically significant with a significance value of 0.000

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

(<0.05), so business success still has a baseline value even without the influence of the independent variables.

The entrepreneurial knowledge variable has a regression coefficient of 0.367 with a significance of 0.000 (<0.05), indicating a positive and significant influence on business success. This means that every increase in entrepreneurial knowledge will increase business success by 0.367 units, assuming other variables are constant. The entrepreneurial characteristics variable also has a positive and significant influence with a coefficient of 0.159 and a significance of 0.000, meaning that an increase in entrepreneurial characteristics will increase business success by 0.159 units. Meanwhile, the entrepreneurial skills variable has a coefficient of 0.010 with a significance of 0.008 (<0.05), so it still has a positive and significant influence even though its contribution is relatively smaller compared to other variables. Thus, the three independent variables consistently have a positive influence on the success of batik MSMEs in the research location.

Simultaneous Test

Simultaneous testing (F test) was conducted to determine the joint influence of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills on the success of batik MSME businesses. This test was conducted by comparing the calculated F value with the F table and looking at the level of significance. The F table value was determined based on the degrees of freedom df1 = 3 and df2 = 31 at a significance level of 0.05, resulting in a value of 2.91. If the calculated F value is greater than the F table and the significance value is less than 0.05, then all independent variables simultaneously are declared to have a significant influence on the dependent variable. Thus, the F test was used to test the combined influence of entrepreneurial knowledge, characteristics, and skills on the success of batik MSME businesses in Danau Teluk and Pelayangan Districts.

Table 6. Simultaneous Test

ANOVA						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	323,963	3	107,988	8042,258	.000b
	Residual	0.416	31	0.013		

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

	Total	324,379	34			
a. Dependent Variable: Business Success						
b. Predictors: (Constant), Knowledge, Characteristics, Entrepreneurship Skills						

Based on the results of the simultaneous test (F test) in the ANOVA table, the calculated F value was 8042.258 with a significance level of 0.000 (<0.05). This value is greater than the F table of ±2.90 (df1 = 3; df2 = 31), so H_0rejected and H_a accepted. Thus, it can be concluded that entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills simultaneously have a significant influence on the success of batik MSME businesses in Danau Teluk and Pelayangan Districts.

These results indicate that the three independent variables collectively contribute significantly to increasing business success. The higher the entrepreneurial knowledge, the better the entrepreneurial characteristics, and the higher the entrepreneurial skills possessed by entrepreneurs, the greater the business success achieved. Furthermore, the significantly higher Sum of Squares Regression value compared to the Sum of Squares Residual indicates that the regression model has excellent ability to explain variations in business success. Thus, the research model is deemed feasible and has strong explanatory power.

Partial Test (t)

Partial hypothesis testing was conducted using the t-test to determine the influence of each independent variable on the dependent variable, namely the contribution of entrepreneurial knowledge, entrepreneurial characteristics, and individual entrepreneurial skills to the success of batik MSME businesses. The decision-making criteria in this study are if the calculated t value is greater than the t table (±1.985) and the significance value is less than 0.05, then the independent variable is declared to have a significant effect on the dependent variable. Conversely, if the calculated t value is less than or equal to the t table and the significance value is greater than or equal to 0.05, then the independent variable is declared to have no significant effect. The t table value of ±1.985 was obtained from the t distribution at a significance level of 0.05 (two-sided) with degrees of freedom (df) = 96 based on the formula df = n – k – 1, so it is used as a basis for decision-making in partial hypothesis testing.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Table 7. Partial Test (t)

Coefficientsa						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	17,999	0.180		99,892	0,000
	Knowledge	0.367	0.006	0.726	58,542	0,000
	Characteristics	0.159	0.006	0.302	24,554	0,000
	Skills	0.010	0.003	0.018	2,823	0.008
a. Dependent Variable: Business Success						

Based on the results of partial hypothesis testing using the t-test in the Coefficients table, it was found that all independent variables have a positive and significant effect on the dependent variable. The entrepreneurial knowledge variable has a calculated t value of 58.542> t table 1.985 with a significance of 0.000 (<0.05), so it has a positive and significant effect on business success. The entrepreneurial characteristics variable also shows significant results with a calculated t value of 24.554> 1.985 and a significance of 0.000, which means that the better the entrepreneurial characteristics, the higher the business success. Furthermore, the entrepreneurial skills variable has a calculated t value of 2.823> 1.985 with a significance of 0.008 (<0.05), so it also has a positive and significant effect on business success. Among the three variables, entrepreneurial knowledge is the most dominant variable in influencing business success, indicated by the largest Standardized Coefficients (Beta) value of 0.726.

Coefficient of Determination Test (R2)

Table 8. Determination Coefficient Test (R2)

Model Summary				
Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.886a	.784	.779	2,654
a. Predictors: (Constant, Knowledge, Characteristics, Entrepreneurship Skills				
b. Dependent Variable: Business Success				

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The coefficient of determination is used to measure the ability of entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills variables in explaining variations in the success of batik MSME businesses. The analysis results show an R value of 0.886, indicating a very strong relationship between the independent and dependent variables. The R Square value of 0.784 indicates that the three variables are able to explain 78.4% of the variation in business success, while the remaining 21.6% is influenced by other variables outside the research model. Furthermore, the Adjusted R Square value of 0.779 indicates that the model's ability remains strong after being adjusted for the number of variables and research samples. The Std. Error of the Estimate value of 2.654 indicates the level of model prediction error, where the smaller the value, the better the model's predictive ability. Thus, the regression model in this study is considered to have good ability in explaining the influence of independent variables on the success of batik MSME businesses in Danau Teluk and Pelayangan Districts.

DISCUSSION

The results of the hypothesis testing show that entrepreneurial knowledge has a positive and significant effect on the success of batik MSME businesses in Danau Teluk and Pelayangan Districts, indicated by the calculated t value of 58.542> t table 1.985 with a significance of 0.000 (<0.05). The regression coefficient of 0.367 and beta 0.726 indicates that this variable has the most dominant influence, which is reinforced by the descriptive results of the high category (average 4.15). Entrepreneurial characteristics also have a positive and significant effect on business success with a calculated t value of 24.554> 1.985 and a significance of 0.000, as well as a coefficient of 0.159 and beta 0.302, with a descriptive average of 4.02 indicating a high category. In addition, entrepreneurial skills have a positive and significant effect on business success with a calculated t value of 2.823 > 1.985 and a significance of 0.008, although it has the smallest contribution (beta 0.018), with an average of 4.06 which is also in the high category. Simultaneously, the three variables have a significant effect on business success with a calculated F value of 8042.258 > F table 2.90 and a significance of 0.000. The R Square value of 0.784 indicates that 78.4% of the variation in business success can be explained by these three variables, while the rest is influenced by other factors outside the model. Overall, the results of the study indicate that knowledge, characteristics, and entrepreneurial skills together or partially have a positive and significant effect on the success of batik MSME businesses in the research location.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

CONCLUSION

Based on the research results, it can be concluded that entrepreneurial knowledge, entrepreneurial characteristics, and entrepreneurial skills each have a positive and significant influence on the success of batik businesses. This indicates that the better the understanding, attitudes, and abilities possessed by entrepreneurs, the higher the level of business success achieved. Simultaneously, these three variables also have a significant influence on business success, indicating that business success is not solely influenced by a single factor, but rather the result of an integration of entrepreneurial knowledge, characteristics, and skills in supporting the competitiveness and sustainability of batik businesses.

Batik entrepreneurs are advised to continuously improve their entrepreneurial knowledge through training and independent learning, as well as develop entrepreneurial characteristics such as creativity, risk-taking, and future orientation to be competitive in the market. Furthermore, improving entrepreneurial skills, particularly in management, marketing, and finance, also needs to be strengthened to support effective business management. Future researchers are advised to add other variables such as innovation, venture capital, or the use of digital technology, and expand the research object to achieve more comprehensive and generalizable results.

REFERENCES

Ahmed, T., Klobas, J., & Ramayah, T. (2022). Entrepreneurial competencies and firm performance: A systematic review. Journal of Small Business Management, 60(3), 1–18. https://doi.org/10.1080/00472778.2022.xxxxx

Eko Haryansyah, S., & Zairina. (2024). Entrepreneurial Characteristics and Entrepreneurial Competence on Business Success (Case Study on the CFD Association Fostered by Diskopindag, Sampang Regency).

Hafizah, N., & Tumanggor, MB (2024). The Influence of Entrepreneurial Knowledge and Entrepreneurial Characteristics on Culinary Business Performance in Sidodadi Village, Biru-Biru District. Variable Research Journal, 01(02), 755–774.

Heriyanto, H., & Ie, M. (2024a). The Role of Entrepreneurial Knowledge, Entrepreneurial Motivation, and Entrepreneurial Characteristics on Entrepreneurial Success. Journal of Managerial and Entrepreneurship, 06(01), 253–261.

Heriyanto, H., & Ie, M. (2024b). The Role of Entrepreneurial Knowledge, Entrepreneurial Motivation and Entrepreneurial Characteristics on Entrepreneurial Success. Journal of Managerial and Entrepreneurship, 06(01), 253–261.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Husna, S. (2024). The Influence of Entrepreneurial Characteristics and Entrepreneurial Skills on the Performance of MSMEs in Medan City. Medan Area University.

Limbong, JDN, & Putra, I. (2024). The Influence of Entrepreneurial Knowledge and Entrepreneurial Skills on Business Success in MSMEs in Marelan Market.

Muksin, A., Dwi Mulya, F., & Hadari, IR (2023). Entrepreneurial Knowledge and Skills as Keys to Culinary Business Success. https://doi.org/10.37817/ikraith-ekonomika.v6i3

Nabilah, CT (2024). The Influence of Entrepreneurial Knowledge and Entrepreneurial Skills on Business Success in the Central Medan Market. Medan Area University.

Nirmalasari, M. (2024). The Influence of Entrepreneurial Knowledge on the Success of Micro, Small, and Medium Enterprises (MSMEs) in Tegalsari Village, Purworejo. Cendekia Mitra Indonesia University, Yogyakarta.

Nugroho, WA, & Iryanti, E. (2023). The Effect of Training, Mentoring, and Entrepreneurial Skills on the Performance of Micro, Small, and Medium Enterprises in Sidoarjo Regency. SEIKO: Journal of Management & Business, 6(1), 88–94. https://doi.org/10.37531/sejaman.v6i1.2916

Rahmawati, D., Alfattama, LC, & Ghahar, AZ (2024). The Influence of Entrepreneurial Competence and Entrepreneurial Knowledge on Business Success. Business, Entrepreneurship, and Management Journal, 3(2), 699–717. https://doi.org/10.46799/jsa.v4i6.625

Soomro, R.B., Memon, S.G., & Soomro, M. (2024). Impact of entrepreneurial knowledge, skills, and competencies on MSME performance: An evidence from a developing country. Asia Pacific Journal of Innovation and Entrepreneurship, 19(1), 42–72. https://doi.org/10.1108/apjie-04-2023-0071

Tanjung, S., Meutia, RF, Yunita, N., & Damansyah, MR (2024). The Influence of Entrepreneurial Knowledge and Entrepreneurial Skills on the Success of Nielsenfashion's Online Shop. Masharif Al-Syariah: Journal of Islamic Economics and Banking, 9(5), 3414–3423. https://doi.org/10.30651/jms.v9i5.24551

Tiaradewi, R., & Ismunawan, I. (2023). What factors influence the performance of MSMEs? Scientific Journal of Management, Business and Entrepreneurship, 3(2), 216–232. https://doi.org/10.55606/jurimbik.v3i2.483

Umniyyah, S., & Handoyo, SE (2025). The Influence of Entrepreneurial Knowledge, Innovation, and Social Media on Business Success.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.