

The Influence of Fabric Residue Utilization and Production Cost Efficiency on Business Sustainability in Muslim Fashion MSMEs from the Perspective of Female Entrepreneurs in Bandung City

Rima Melati¹, Ali Maddinsyah²

¹² International Women's University

Corresponding Author e-mail: melatiima83@gmail.com, ali.maddinsyah@iwu.ac.id

Article History:

Received: 23-07-2026

Revised: 25-08-2026

Accepted: 25-08-2026

Keywords:

Business Sustainability, Cost Efficiency, Muslim Fashion SMEs, Textile Waste Utilization, Women Entrepreneurship

Abstract: *The growth of the fashion industry has increased the volume of textile waste generated during production activities, particularly fabric scraps that are often underutilized by small businesses. Utilizing fabric scraps and improving production cost efficiency may support the long-term sustainability of micro, small, and medium enterprises (MSMEs). This study examines the effects of fabric scrap utilization and production cost efficiency on business sustainability among women entrepreneurs operating Muslim fashion MSMEs in Bandung City. The study employed a quantitative approach with descriptive and verificative research designs. The population consisted of 30 women entrepreneurs managing Muslim fashion MSMEs in Bandung City, all of whom were selected through saturated sampling. Data were collected using a Likert-scale questionnaire, supported by observation, interviews, and a literature review. The data were analyzed using descriptive statistics, validity and reliability tests, classical assumption tests, multiple linear regression analysis, t-tests, F-tests, and the coefficient of determination. The findings show that fabric scrap utilization, production cost efficiency, and business sustainability were categorized as high to very high. Fabric scrap utilization had a positive and significant effect on business sustainability ($\beta = 0.190$, $t = 2.170$, $p = 0.039$). Production cost efficiency also had a positive and significant effect on business sustainability ($\beta = 0.223$, $t = 2.534$, $p = 0.017$). Simultaneously, both variables significantly influenced business sustainability ($F = 12.262$, $R^2 = 0.476$). These findings indicate that optimizing fabric scrap utilization and implementing efficient production cost management can strengthen the competitiveness and sustainability of Muslim fashion MSMEs.*

How to Cite: Rima melati, Ali Maddinsyah (2026). Perceptions of MSMEs Actors Regarding the Use of Social Media as a Marketing Tool in Pematang Baih Pasir Pengaraian. 4(3). pp. 480-490 <https://doi.org/10.61536/escalate.v4i3.579>



Introduction



The fashion industry is growing rapidly in the era of globalization, driven by technological advancements and increasing societal needs. This situation encourages businesses to continuously innovate to produce quality products at efficient production costs to maintain business sustainability. However, increased production activity also results in increased textile waste generated during the production process.

According to 2023 data from the Ministry of Environment and Forestry (KLHK), Indonesia produces approximately 1.75 million tons of textile waste annually, or 2.87% of the total national waste. Meanwhile, data from the National Waste Management Information System (SIPSN) in 2021 recorded textile waste reaching 2.3 million tons, or 12% of total household waste. West Java contributes approximately 45% of the national textile waste and has the Cigondewah Fabric Market in Bandung City as a trading center for leftover fabric, supporting recycling activities and the creative industry.

Despite its potential for processing into value-added products, much of the remaining fabric remains underutilized. This leads to waste of raw materials, even though fabric waste management can reduce environmental impact, increase production efficiency, and open up new economic opportunities.

This problem also occurs in Muslim fashion MSMEs in Bandung. A pre-survey of 30 business owners showed that 59.3% of leftover fabrics are still considered inadequate, while 69.3% of production cost control is considered adequate. However, most respondents believe that utilizing leftover fabrics can reduce production costs and that cost efficiency can support long-term business sustainability.

Research on the utilization of fabric scraps and production cost efficiency for business sustainability in the local fashion industry remains relatively limited, as most studies focus on waste management and sustainability. Yet, female entrepreneurs are required to manage business resources effectively and efficiently to ensure their businesses survive and thrive.

Based on these conditions, this study aims to analyze the influence of fabric waste utilization and production cost efficiency on business sustainability in Muslim fashion MSMEs from the perspective of female entrepreneurs in Bandung City. This research is expected to contribute to more efficient production resource management, with the novelty of simultaneously examining both variables within the context of female entrepreneurs.

Research methods

This research employed quantitative methods with descriptive and verification approaches. The descriptive approach was used to describe the condition of fabric waste utilization, production cost efficiency, and business sustainability, while the verification approach was used to test the influence between variables. According to Sugiyono (2022), quantitative methods utilize research instruments and statistical analysis to test hypotheses.

The research instrument was a Likert-scale questionnaire supported by observations, interviews, and literature review. The instrument was tested using the Pearson Product Moment validity test and Cronbach's Alpha reliability test using SPSS. Data analysis included descriptive and verification analyses using classical assumption tests, multiple linear regression, coefficient of determination, correlation coefficient, t-test, and F-test (Sugiyono, 2022; Ghozali, 2021; Jonathan Sarwono, 2015; Sujarweni, 2023).

The study population consisted of 30 female Muslim fashion MSMEs in Bandung who operate independently. The sampling technique used saturated sampling, allowing the entire population to be sampled. According to Sugiyono (2022), this technique was used due to the relatively small population.

The research began with a literature review and instrument development, followed by validity and reliability testing, and then data collection through observation, interviews, questionnaires, and literature review. The data was then processed through editing, coding, and tabulation, then analyzed using descriptive and verification analysis to reach research conclusions.



Results and Discussion

Descriptive Analysis of Research Variables

Table 1 Validity Test of Variable X1 Utilization of Fabric Remains

R table df=n-2 0.361

No. Item	r. hitung	Keterangan
X1.1	0.437	Valid
X1.2	0.500	Valid
X1.3	0.648	Valid
X1.4	0.471	Valid
X1.5	0.655	Valid
X1.6	0.697	Valid
X1.7	0.683	Valid
X1.8	0.742	Valid
X1.9	0.736	Valid
X1.10	0.777	Valid
X1.11	0.724	Valid
X1.12	0.677	Valid
X1.13	0.576	Valid
X1.14	0.700	Valid
X1.15	0.690	Valid

Based on Table 1, all statements from the 15 items proposed for the variable of utilization of fabric scraps (X1) show a calculated r value that is greater than the table r. This means that the instruments for variable X1 used in this study are all valid and can be used as measuring tools in research.

Table 2 Validity Test of Variable X2 Production Cost Efficiency

R table df=n-2 0.361

No. Item	r. hitung	Keterangan
X2.1	0.570	Valid
X2.2	0.531	Valid
X2.3	0.752	Valid
X2.4	0.455	Valid
X2.5	0.518	Valid
X2.6	0.537	Valid
X2.7	0.717	Valid
X2.8	0.541	Valid
X2.9	0.704	Valid
X2.10	0.655	Valid
X2.11	0.456	Valid
X2.12	0.509	Valid
X2.13	0.759	Valid
X2.14	0.391	Valid
X2.15	0.547	Valid

Based on Table 2, all statements from the 15 items submitted related to the Production Cost Efficiency variable (X2) show a calculated r value that is greater than the table r. Therefore, it can be concluded that the X2 variable instruments used in this study are all valid and can be used as measuring tools in research.

Table 3 Validity Test of Variable X2 Production Cost Efficiency

R table df=n-2 0.361

No. Item	r. hitung	Keterangan
Y1	0.699	Valid
Y2	0.657	Valid
Y3	0.746	Valid
Y4	0.563	Valid
Y5	0.648	Valid
Y6	0.687	Valid
Y7	0.697	Valid
Y8	0.645	Valid

Based on Table 3, all statements from the eight items proposed for the Business Sustainability variable (Y) show a calculated r value greater than the table r. Therefore, it can be concluded that all Y variable instruments used in this study are valid and suitable as research measuring tools.

Table 4 Results of Reliability Test Standard Reliability Test 0.60

Variabel	Cronbach's Alpha	Keterangan
X1	0.908	Reliabel
X2	0.858	Reliabel
Y	0.806	Reliabel

Based on Table 4, it is known that the Cronbach Alpha value for each variable exceeds 0.60. Therefore, it can be concluded that the data meets the reliability requirements based on the Cronbach Alpha value.

Research Data Analysis Techniques

Table 5 Presentation Criteria for Population Response Scores Against Ideal Scores

No.	Percentage (%)	Information
1.	<21%	Very Low
2.	21%-40%	Low
3.	41%-60%	Enough
4.	61%-80%	Tall
5.	81%-100%	Very high

This descriptive analysis was carried out by referring to the indicators in each variable studied.

Table 6 Description of Variables for Utilization of Fabric Remains (X1)

Variabel	N	Item	Jawaban Responden					Mean	Std Deviation	%	Kategori
			1	2	3	4	5				
Pemanfaatan Sisa Bahan Kain	30	X1.1	0	0	0	13	17	4.57	0.504	91.33%	Sangat Tinggi
	30	X1.2	0	0	0	8	22	4.73	0.450	94.67%	Sangat Tinggi
	30	X1.3	0	1	5	11	13	4.20	0.847	84.00%	Sangat Tinggi
	30	X1.4	0	0	2	12	16	4.47	0.629	89.33%	Sangat Tinggi
	30	X1.5	0	0	0	15	15	4.50	0.509	90.00%	Sangat Tinggi
	30	X1.6	0	1	5	16	8	4.03	0.765	80.67%	Tinggi
	30	X1.7	0	0	2	17	11	4.30	0.596	86.00%	Sangat Tinggi
	29	X1.8	0	0	1	19	9	4.28	0.528	82.67%	Sangat Tinggi
	30	X1.9	0	1	2	16	11	4.23	0.728	84.67%	Sangat Tinggi
	30	X1.10	0	0	3	17	10	8.33	0.636	84.67%	Sangat Tinggi
	30	X1.11	0	0	3	17	10	8.45	0.630	84.67%	Sangat Tinggi
	30	X1.12	0	0	10	12	8	8.37	0.808	78.67%	Sangat Tinggi
	30	X1.13	0	0	2	20	8	8.53	0.587	84.00%	Sangat Tinggi
	30	X1.14	0	0	3	18	9	8.38	0.476	84.00%	Sangat Tinggi
	30	X1.15	0	0	2	18	10	8.25	0.624	69.04%	Tinggi
RATA-RATA VARIABEL								2.6206	0.418	85.64%	Sangat Tinggi

With a total of 30 respondents, the variable of fabric waste utilization is in the very high category with a percentage of 85.30%, an average value (mean) of 64.00, and a standard deviation (standard deviation) of 4.605. A mean value greater than the standard deviation indicates that the data distribution tends to be even and the level of data variation is low.

Based on the analysis results, the dimensions of the remaining fabric materials being reused obtained the highest percentage of 94.60%, with a mean value of 4.73 and a standard deviation of 0.469, which indicates a relatively even distribution of data. On the other hand, the indicator of processed products from remaining fabric materials being in demand (X1.12) obtained the lowest percentage of 78.60% with a high category, a mean value of 3.93, and a standard deviation of 1.302, which also indicates a relatively low data variation.

Table 7 Description of Production Cost Efficiency Variables (X2)

Variabel	N	Item	Jawaban Responden					Mean	Std Deviation	%	Kategori
			1	2	3	4	5				
Efisiensi Biaya Produksi	30	X2.1	0	0	4	18	8	4.13	0.629	82.67%	Sangat Tinggi
	30	X2.2	0	1	2	16	11	4.23	0.728	84.67%	Sangat Tinggi
	30	X2.3	0	0	3	19	8	4.17	0.592	83.33%	Sangat Tinggi
	30	X2.4	0	0	4	15	11	4.23	0.679	84.67%	Sangat Tinggi
	30	X2.5	0	1	2	19	8	4.13	0.681	82.67%	Sangat Tinggi
	30	X2.6	0	0	4	15	11	4.23	0.679	84.67%	Sangat Tinggi
	30	X2.7	0	2	5	15	8	3.97	0.850	79.33%	Tinggi
	30	X2.8	0	2	1	20	7	4.07	0.740	81.33%	Sangat Tinggi
	30	X2.9	0	3	8	12	7	3.77	0.935	75.33%	Tinggi
	30	X2.10	0	1	8	16	5	3.83	0.747	76.67%	Tinggi
	30	X2.11	0	2	6	19	3	3.57	0.743	75.33%	Tinggi
	30	X2.12	0	1	8	17	4	3.72	0.737	76.00%	Tinggi
	30	X2.13	0	2	3	20	5	3.61	0.751	78.67%	Tinggi
	30	X2.14	0	0	2	21	7	3.78	0.744	83.33%	Sangat Tinggi
	30	X2.15	0	1	7	17	5	3.73	0.645	77.33%	Tinggi
RATA-RATA VARIABEL								4.02	6.238	81.53%	Sangat Tinggi

With a total of 30 respondents, the production cost efficiency variable is in the very high category with a percentage of 80.40%, an average value (mean) of 64.00, and a standard deviation (standard deviation) of 4.605. A mean value greater than the standard deviation indicates that the data distribution tends to be even with a low level of variation.

Based on the analysis results, the reuse of fabric scraps obtained the highest percentage of 86.00%, with a mean value of 4.30 and a standard deviation of 0.838. A mean value greater than the standard deviation indicates that the data deviation is relatively low so that the distribution of values among respondents tends to be even.

Table 8 Description of Business Sustainability Variables (Y)

Variabel	N	Item	Jawaban Responden					Mean	Std Deviation	%	Kategori
			1	2	3	4	5				
Keberlanjutan Usaha	30	Y1	0	3	4	16	7	3.90	0.885	78.00%	Tinggi
	30	Y2	0	0	3	20	7	4.13	0.571	82.67%	Sangat Tinggi
	30	Y3	0	0	2	21	7	4.17	0.531	83.33%	Sangat Tinggi
	30	Y4	0	1	5	17	7	4.00	0.743	80.00%	Tinggi
	30	Y5	0	1	0	20	9	4.23	0.626	84.67%	Sangat Tinggi
	30	Y6	0	0	2	21	7	4.17	0.531	83.33%	Sangat Tinggi
	30	Y7	0	0	0	19	11	4.37	0.490	87.33%	Sangat Tinggi
	30	Y8	0	0	4	20	6	4.07	0.583	81.33%	Sangat Tinggi
RATA-RATA VARIABEL								4.13	3.296	82.58%	

With a total of 30 respondents, the business sustainability variable was in the very high category with a percentage of 81.83%, a mean of 32.73, and a standard deviation of 6.65. A mean value greater than the standard deviation indicates that the data distribution tends to be even with a low level of variation.

Based on the analysis results, the indicator of improvement efforts made to increase business excellence (Y.7) obtained the highest percentage of 87.40%, with a mean value of 4.37 and a standard deviation of 0.544, which indicates a relatively even distribution of data. Meanwhile, the indicator of despite changes in market conditions, the business can still run (Y.1) obtained the lowest percentage of 78.00% with a high category, a mean value of 3.90, and a standard deviation of 1.240, which also indicates a relatively low data variation.

Verification Data Analysis Techniques

Table 9 Results of Data Normality Test (Kolmogorov-Smirnov Test)

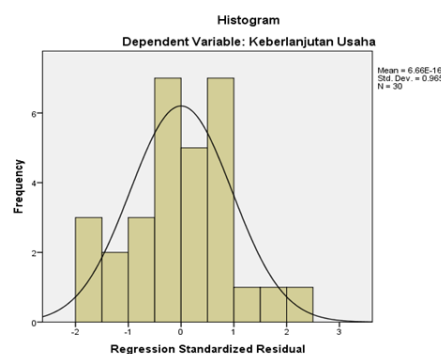
One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		30
Normal Parameters ^{a,b}	Mean	.0000000
	Standard Deviation	2.38567802
	Absolute	.071
Most Extreme Differences	Positive	.071
	Negative	-.069
Kolmogorov-Smirnov Z		.388
Asymp. Sig. (2-tailed)		.998

a. Test distribution is Normal.

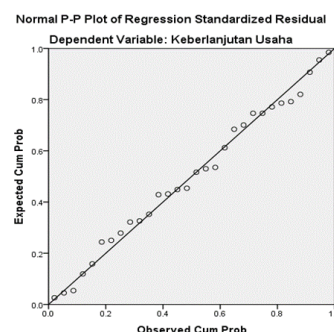
b. Calculated from data.

Based on the results of the data normality test using the Kolmogorov–Smirnov test as presented in Table 9, it is known that the number of data tested (N) is 30. The test results show a Monte Carlo Sig. (2-tailed) value of 0.998, which is greater than the specified significance level, which is 0.05.



Picture1Data normality test results (Histogram Graph)

Based on Figure 1, the normality test of the histogram graph depicts a distribution pattern that is not skewed to the right or left, but is right in the middle like a bell shape, so these results indicate that the data is normally distributed.



Picture2Data normality test results (P-Plot graph)

Based on Figure 2, to test the normality of the P-Plot graph, it can be detected by looking at the distribution of data or points on the diagonal axis of the graph, which means the data is normally distributed.

Table 10 Multicollinearity Test

Model		Coefficients ^a					Collinearity Statistics	
		Unstandardized Coefficients		Standardized Beta	t	Sig.		
		B	Std. Error				Tolerance	VIF
1	(Constant)	7.370	5.226		1.410	.170		
	Pemanfaatan Sisa Bahan	.190	.088	.361	2.170	.039	.700	1.429
	Efisiensi Biaya	.223	.088	.422	2.534	.017	.700	1.429

a. Dependent Variable: Keberlanjutan Usaha

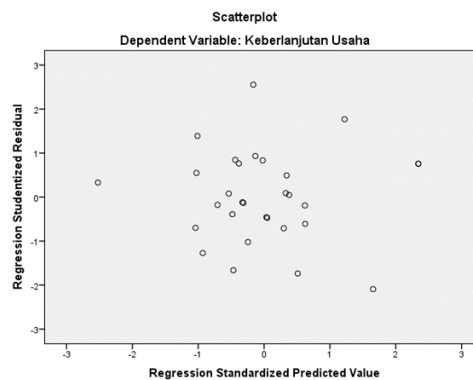
Based on Table 10, the tolerance value for the variable of fabric waste utilization (TotalX1) and production cost efficiency (TotalX2) is 0.700 or more than 0.10, while the Variance Inflation Factor (VIF) value is 1.429 or less than 10. These results indicate that the regression model does not experience symptoms of multicollinearity, so that the independent variables are not correlated with each other and meet the assumptions of the multicollinearity test.

Table 11 Heteroscedasticity Test

Model		Coefficients ^a			t	Sig.
		Unstandardized Coefficients		Standardized Beta		
		B	Std. Error			
1	(Constant)	-1.479	3.106		-.476	.638
	Pemanfaatan Sisa Bahan	.056	.052	.241	1.079	.290
	Efisiensi Biaya Produk	-.005	.052	-.019	-.086	.932

a. Dependent Variable: Abs_RES

The table above shows that there is no heteroscedasticity in the regression model because the tax amnesty policy data (TotalX1) has a significance value of 0.249 > 0.05 and the tax fairness perception data (TotalX2) has a significance value of 0.361 > 0.05.

**Picture3 Heteroscedasticity Test Results**

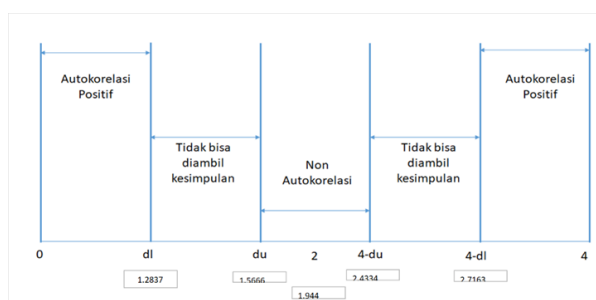
The heteroscedasticity test results in Figure 3 show no indication of heteroscedasticity in the regression model. The points are randomly distributed above and below the number 0 on the Y-axis and do not form a specific pattern. This indicates that the regression model is suitable for predicting the level of business sustainability based on the input of independent variables, namely the utilization of fabric scraps and production cost efficiency, because it does not show heteroscedasticity.

Table 12 Durbin-Watson (DW) Values

Model Summary ^b					
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.690 ^a	.476	.437	2.472	2.280

a. Predictors: (Constant), Efisiensi Biaya Produksi (X2), Pemanfaatan

b. Dependent Variable: Keberlanjutan Usaha (Y)



Picture4Autocorrelation

Table 13 Multiple Linear Regression Analysis

Coefficientsa

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	7,370	5,226		1,410	.170
1 Utilization of Fabric Remains	.190	.088	.361	2,170	.039
Production Cost Efficiency	.223	.088	.422	2,534	.017

a. Dependent Variable: Business Sustainability

Based on Table 14, the regression equation $Y = 7.370 + 0.190X_1 + 0.223X_2 + e$ is obtained. This equation shows that the utilization of fabric waste (X_1) and production cost efficiency (X_2) have a positive effect on business sustainability (Y) in Muslim fashion MSMEs in Bandung City. The constant value of 7.370 indicates that business sustainability remains at 7.370 when the utilization of fabric scraps and production cost efficiency are considered constant. Meanwhile, the regression coefficient of fabric scraps utilization of 0.190 indicates that each increase in this variable will increase business sustainability by 0.190, assuming other variables remain constant. The regression coefficient of production cost efficiency of 0.223 indicates that each increase in production cost efficiency will increase business sustainability by 0.223, assuming other variables remain constant.

Table 14 Value of Determination Coefficient
Model Summary

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	.690a	.476	.437	2,472

a. Predictors: (Constant), Production Cost Efficiency, Utilization of Fabric Remains

b. Dependent Variable: Business Sustainability

Based on the analysis results presented in Table 14, the coefficient of determination (R Square) is 0.476. This indicates that the utilization of fabric scraps and production cost efficiency can contribute 47.6% to the sustainability of Muslim fashion MSMEs in Bandung City. The remaining 0.524, or 52.4%, of the utilization of fabric scraps and production cost efficiency in Muslim fashion MSMEs in Bandung City is influenced by variables not included in this study.

Table 15 Indicators of Correlation Coefficient Interpretation Guidelines

No.	Percentage (%)	Information
1.	<21%	Very Low
2.	21%-40%	Low
3.	41%-60%	Enough
4.	61%-80%	Tall
5.	81%-100%	Very high

Thus, the standard error value of the regression equation is 2.472. This value reflects the magnitude of the deviation or average error of the observation data from the resulting multiple linear regression equation line. The smaller the standard error value, the better the regression model's ability to represent the relationship between the independent and dependent variables in this study.

Hypothesis Testing

Table 16 Results of the t-test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	7.370	5.226		1.410	.170
	Pemanfaatan Sisa Bahan Kain (X1)	.190	.088	.361	2.170	.039
	Efisiensi Biaya Produksi (X2)	.223	.088	.422	2.534	.017

a. Dependent Variable: Keberlanjutan Usaha (Y)

Based on table 16, the t-test results obtained the calculation of $t_{count} = 2.170$. significant level (α) for two-tailed tests; df or dk = number of observation data-variables = $30-2 = 98$, so that $t_{table} = 2.048$ is obtained from the data above, $t_{count} \geq t_{table}$, then H_0 is rejected and H_a is accepted, meaning that it is proven that the use of leftover fabric has a significant effect on business sustainability in Muslim fashion MSMEs in Bandung City. $\alpha = 0,05$

Table 17 F Test Results

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	149.914	2	74.957	12.262	.000 ^b
	Residual	165.052	27	6.113		
	Total	314.967	29			

a. Dependent Variable: Keberlanjutan Usaha (Y)

b. Predictors: (Constant), Efisiensi Biaya Produksi (X2), Pemanfaatan Sisa Bahan Kain (X1)

Based on the F test results, the calculated F value was 12.262, greater than the F table of 3.354, so H_0 was rejected and H_a was accepted. These results indicate that the utilization of fabric scraps and production cost efficiency simultaneously have a significant effect on business sustainability in Muslim fashion MSMEs in Bandung City.

The test results also showed a significance value of 0.001, which is smaller than the significance level of 0.05 ($0.001 < 0.05$). Thus, H_0 is rejected and H_a is accepted, so it can be concluded that the utilization of leftover fabric and production cost efficiency simultaneously have a significant effect on business sustainability in Muslim fashion MSMEs in Bandung City.

Discussion

1. The Impact of Utilizing Fabric Waste on Business Sustainability

Based on the hypothesis analysis using the t-test (partial), the variable related to the utilization of fabric scraps (X1) shows a t-value of 2.170 which is greater than the t-table of 2.048 at a significance level of 5% ($\alpha = 0.05$) and a significance value of 0.0017 which is smaller than $\alpha = 0.05$. Thus, H_{01} is rejected and H_{a1} is accepted. This indicates that business continuity in Muslim fashion MSMEs in Bandung is highly dependent on the utilization of fabric scraps. This finding confirms that to increase business continuity in Muslim fashion MSMEs in Bandung, it is necessary to implement effective utilization of fabric scraps, where the more successful the implementation,

the higher the level of business continuity. Conversely, business continuity will tend to decrease if the utilization of fabric scraps is not carried out optimally.

The theory proposed by Astina Nur Inayah (2024) is in line with the empirical findings on the variable of utilization of fabric waste in this study, which is measured through three main dimensions, namely recycled fabric waste reduces waste disposal, the purpose and benefits of implementation, and implementation and socialization, reflected in the high assessment of respondents on most indicators. The indicator with the highest percentage shows that Reuse reduces waste disposal and really feels the real benefits of utilizing fabric waste.

2. The Influence of Production Cost Efficiency on Business Sustainability

The results of the t-test (partial), the tax fairness perception variable (X2) produces a t-value of $2.534 < t\text{-table } 2.048$ At a significance level of $\alpha = 0.05$, as well as a significance level greater than the 5% error rate ($\alpha = 0.05$) which is $0.039 > 0.05$ This means that H_0 is rejected and H_a is accepted. These results indicate that there is a statistically significant influence between production cost efficiency in Muslim fashion MSMEs in Bandung. These results indicate that business continuity in Muslim fashion MSMEs in Bandung is highly dependent on production cost efficiency. This finding confirms that to improve business continuity in Muslim fashion MSMEs in Bandung, it is necessary to implement effective production cost efficiency, where the more successful the implementation, the higher the level of business continuity. Conversely, business continuity will tend to decrease if production cost efficiency is not carried out optimally.

3. Women's Entrepreneurship Perspective on the Utilization of Fabric Waste and Production Cost Efficiency in Supporting Business Sustainability

Based on the research results, the utilization of fabric scraps and production cost efficiency impact the sustainability of Muslim fashion MSMEs. From the perspective of female entrepreneurs, business owners are not only focused on achieving profits but also on utilizing resources effectively, including processing fabric scraps into value-added products. These efforts not only reduce production waste but also increase cost efficiency, thus supporting business sustainability.

Female entrepreneurs also demonstrated the ability to innovate, make decisions, and optimally manage resources to maintain business competitiveness. Therefore, the results of this study indicate that utilizing leftover fabric and efficient production costs are strategies that support business sustainability. This reflects the practices of female entrepreneurs in Muslim fashion MSMEs in Bandung.

Conclusion

Based on the research results, the utilization of fabric scraps, production cost efficiency, and business sustainability in Muslim fashion MSMEs from the perspective of female entrepreneurs in Bandung City are in the very high category. The analysis results show that the utilization of fabric scraps and production cost efficiency, both partially and simultaneously, have a positive and significant impact on business sustainability. These findings indicate that optimal management of fabric scraps and the implementation of production cost efficiency can increase competitiveness and support business sustainability. The practical implication of this research is the need for MSMEs to develop innovations in utilizing fabric scraps into value-added products and implement more effective production cost management so that businesses can survive and grow sustainably.

This study has limitations because it only involved 30 respondents who were female Muslim fashion MSMEs in Bandung City, so the results cannot be generalized to other regions or business sectors. Furthermore, this study only examined two independent variables: fabric waste utilization and production cost efficiency, while other factors potentially influence business sustainability. Therefore, further research is recommended using a larger sample size and a wider coverage area, as well as adding other relevant variables to obtain a more comprehensive understanding of the factors influencing MSME business sustainability.

Bibliography

Ghozali, I. (2021). Multivariate analysis applications with the IBM SPSS program (10th ed.). Diponegoro University Publishing Agency.

- Inayah, AN (2024). Textbook of industrial waste processing and utilization technology. CV Media Sains Indonesia.
- Jonathan Sarwono. (2015). Popular formulas in SPSS 22 for thesis research. Andi.
- Sugiyono. (2022). Quantitative, qualitative, and R&D research methods (2nd ed.). Alfabeta.

