



Entrepreneurial Ecosystem Model Based on Digital Innovation in Building MSME Resilience in Bandung City

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Abstract. This study aims to identify the determinant factors in increasing the resilience of MSME businesses in Bandung. Previous research related to relevant environmental factors in building business resilience has been widely carried out, but the research conducted to build MSME business resilience has not been sufficient and has been studied holistically. This research was conducted on a sample of 186 MSMEs in Bandung engaged in the culinary industry. By using multiple regression analysis, the effect of Entrepreneurial Ecosystem, Digital Transformation, and Collaboration Capability variables were analyzed on SMES Resilience. The results show that the entrepreneurial ecosystem has the most significant influence in increasing SMEs' Resilience.

Keywords: Entrepreneurial Ecosystem · Digital Transformation · Collaboration Capability · SMES Resilience

1 Introduction

MSMEs are one of the pillars of the economy that are considered to have the best resistance to the crisis. Since the monetary crisis in 1998 and 2008, MSMEs have been considered capable of surviving compared to large companies. However, in 2020, during the crisis caused by the Covid-19 Pandemic, it turned out that MSMEs were one of the businesses that had the biggest impact. Based on data from Bank Indonesia, as many as 90.10% of MSMEs experienced a decline in sales, 47.40% of MSMEs lowered their selling prices to increase buyer interest, 59.60% of MSMEs acknowledged that the availability of raw materials had decreased due to the limited distribution process, 49.20% of MSMEs were laid off, and 86.20% of MSMEs are less able to pay installments. In addition, data released by the Kemenkop MSMEs shows that 949 MSME cooperative actors were affected by the pandemic. Most (68%) of the problems MSMEs face are declining sales, 12% have issues with capital difficulties, 10% are hampered distribution problems, and the rest are due to raw material difficulties and production delays.

Almost all MSMEs experience the inability of businesses to survive during the pandemic in various parts of Indonesia, one of which is in the city of Bandung. As stated by the Head of the Bandung City MSMEs Service, the number of MSME actors

in Bandung City is around 6,000, 900 of whom are affected by the Covid-19 pandemic, mainly dominated by non-culinary MSME groups.

The ability to survive, recover and bounce back when faced with threatening external events such as crises is an essential issue for entrepreneurship research and strategic management, especially for micro, small and medium enterprises (MSMEs) [1];[2]. The concept of resilience (resilience) was first introduced by an ecologist named Holling in 1973 [3]. Resilience indicates the ability of an ecosystem to respond to sudden environmental changes and immediately return to its original state. Although the concept of resilience was first developed in the field of ecology, currently, the concept of resilience is used in various fields (multi-faceted and multi-dimensional concepts) [3] such as engineering, ecology, psychology [4], sociology [5], disaster management and business administration. Even resilience is more widely applied in business, as revealed by based on research results using the Systematic Literature Review (SLR) method where out of 144 articles that discuss resilience from various multidisciplinary sciences, as many as 92 articles related to business research and management and the rest from other disciplines.

The resilience of MSMEs through digital transformation strategies, collaboration capabilities, and flexibility will certainly be realized if the entrepreneurial ecosystem is strong. It deliberately builds a solid ecosystem that can help organizations become more adaptive and resilient. The entrepreneurial ecosystem approach has occurred for several years over the past few years since the introduction of the definition of the entrepreneurial ecosystem concept, which refers to the interactions that occur between various institutional and individual stakeholders so that they can encourage entrepreneurship, innovation, and the growth of MSMEs. With the birth of an entrepreneurial ecosystem, it states that business is not born from an empty space, and in business, some interactions occur between actors with interest in company growth. New businesses have more opportunities to grow and generate jobs in a dynamic ecosystem than existing businesses.

Based on the description above regarding the importance of MSME resilience as the backbone of the economy of a country or region, the researchers feel the need to conduct research related to building an entrepreneurial ecosystem through digital transformation, collaboration capabilities, and flexibility so that MSMEs in Bandung City can innovate in increasing their resilience, especially resilience, in times of crisis. This research provided updates, especially the innovation based MSME resilience model through the digital entrepreneurial ecosystem.

2 Methods

The research method used was descriptive and verification research. In this study, using 4 variables, the independent variables are part of the eco-input consisting of the entrepreneurial ecosystem, digital transformation, and collaboration capability. The dependent variable is the resilience of SMEs, which consists of choosing a business path rather than working for others, choosing a career as an entrepreneur, and making plans to start a business. The sample in this study is the owner of culinary SMEs in Bandung, with as many as 186 people. The data analysis technique used is multiple regression analysis.

3 Results and Discussion

Based on the research results, the description of the entrepreneurial ecosystem variable has an average score of 3.9 or good. The description of the digital transformation variable has an average score of 4.02 or good. The description of the collaboration capability variable has an average score of 4.04 or a good category. Furthermore, the description of MSME resilience has an average score of 4.06 or a good category. In testing the hypothesis, this study used multiple linear regression analysis techniques.

Based on Table 1, it can be seen that the value of the coefficient of determination (R²) is 0.500. The model's ability to explain variations in the MSME resilience variable is quite good. Furthermore, to test the feasibility of the resulting model can be seen in the following table.

In Table 2 above, it can be seen that the Fcount value is 60.648 with a significance level of $0.000 < 0.05$. This means that the overall influence model of the entrepreneurial ecosystem, digital transformation, and collaboration capability on MSME resilience is feasible to use.

To see the effect of each variable partially, it can be seen using the t-test. Entrepreneurial Ecosystem Affects MSME Resilience Entrepreneurial ecosystem affects

Table 1. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.707a	.500	.492	2.37222

Table 2. Anova

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1023.874	3	341.291	60.648	.000 ^b
	Residual	1024.190	182	5.627		
	Total	2048.065	185			

Table 3. Coefficient

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.860	2.162		4.099	.000
	EE	.191	.032	.393	5.984	.000
	DT	.173	.066	.174	2.635	.009
	CC	.311	.084	.269	3.696	.000

the resilience of MSMEs. This can be seen from the tcount value of 5,984 with a significance level of $0.000 < 0.05$ (Table 3). This means that the higher the Entrepreneurial ecosystem, the higher the interest in entrepreneurship. Digital Transformation Affects MSME Resilience Digital transformation affects the resilience of MSMEs. This can be seen from the tcount value of 2.635 with a significance level of $0.009 < 0.05$ (Table 3). This means that the higher the digital transformation, the higher the resilience of SMEs.

Collaboration Capability affects MSME resilience Collaboration capability affects the resilience of MSMEs. This can be seen from the tcount value of 3.696 with a significance level of $0.000 < 0.05$ (Table 3). This means that the higher the Collaboration capability, the higher the resilience of MSMEs.

4 Conclusions

The results show that the entrepreneurial ecosystem has the highest influence in increasing SMEs' Resilience.

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