

Empirical Analysis of the Impact of Smart Economy Through Entrepreneurial Credit Program (KURNIA) on Empowering SMEs in Kediri City

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ABSTRACT

In today's globalized world, Information Technology (IT) is advancing rapidly, with a strong public interest in information systems. Information Technology (IT) helps governments and organizations process data effectively. The goal of the Smart Economy is to create an ecosystem supporting local economies and adapting to disruptions. To achieve this, financial literacy programs are essential, focusing on three elements: ecosystem, community welfare improvement, and financial transactions. The strategy emphasizes a creative and cooperative industrial environment, benefiting all parties, which ultimately enhances people's well-being. The "KURNIA" initiative offers low-interest business capital loans, benefiting micro-businesses and cooperatives, especially during the COVID-19 pandemic. This quantitative study explores the causal relationship between the KURNIA program and the empowerment of MSMEs in Kediri City, confirming a significant positive impact.

INTRODUCTION

In today's globalized era, Information Technology (IT) is rapidly advancing, with the public keenly interested in gathering information through robust information systems (Nurdiansyah, Syamsuar, et al. 2018). IT plays a vital role in helping governments and organizations process, store, and transform data into useful information. Governments must now meet society's demands, including accessible, trustworthy, and interactive public services across regions (Herdiansyah, Kunang et al. 2014). To achieve this, governments need to develop management systems and leverage advances in information and communication technology. One such example is electronic government (e-government), which Kediri and other regions use to enhance public services.

The smart city concept emphasizes efficiency and encompasses various aspects, such as facilities, the economy, mobility, and society, to enhance public services while aligning with the city's needs. Smart cities efficiently manage resources and provide information for community and institutional activities. Smart city implementation aims to create safe, comfortable, and accessible cities while enhancing economic, social, technological, and environmental aspects, ultimately striving for sustainability, as per the United Nations' goals. This trend is not limited to developed countries; it's inspiring decision-makers worldwide. Cities like Barcelona, Amsterdam, Tokyo, and others offer valuable examples of successful smart city development.

Smart Economy, or smart economic governance, seeks to create an ecosystem that adapts to the challenges of an era where economic activities increasingly shift from the physical to the virtual world. It aims to support community economic activities aligned with regional economic strategies, bolstered by financial literacy programs and three core elements: ecosystem development, community welfare enhancement, and financial transaction improvements. The Smart Economy strategy fosters a creative and mutually beneficial industrial environment, promoting production, promotion, and financial transactions to improve people's well-being. In summary, the smart economy aims to support digital economic activities within communities through various programs:

Table 1. Empowerment Programs

Sub Pillar Dimensions	Strategy
Competitive Industry (Industry)	<ol style="list-style-type: none"> 1. Development of industrial players and small businesses by improving the quality of production and post-production 2. Expansion of local product marketing networks 3. Development of MSMEs with business incubation and digital entrepreneurship through online marketing networks (marketplaces) and local and national modern shops
People's Welfare	Empowering the local economy through improving the

(Welfare)	management of Village-Owned Enterprises (BUMDes)
Financial Transactions (Transactions)	<ol style="list-style-type: none"> 1. Increasing the capacity of e-commerce players 2. Implementation of government transactions using non-cash mechanisms, especially for regional taxes and regional levies

In response to the economic challenges posed by the COVID-19 pandemic, the Kediri City government is focusing on improving public financial access and literacy. One of their initiatives is the "KURNIA" program, which offers micro-businesses and cooperatives a low-interest business capital loan at just 2% per year. This program, known as one of the nation's most affordable, aims to support and empower local businesses, especially during these tough times when informal businesses and Micro, Small, and Medium Enterprise Cooperatives (KUMKM) have been severely affected by the pandemic.

Kediri City currently has around 5,470 MSMEs, and these businesses play a crucial role in the city's economy. However, they face challenges in accessing financing, receiving only 19% of banking financing from third parties according to Indonesian banking statistics in 2019 (Bisnis Indonesia, 30 June 2020). Given this situation, the government needs to implement pro-MSME policies to protect and empower these businesses. In light of these circumstances, the author is analyzing to determine how the "KURNIA" program, as part of the Smart Economy approach, influences the growth and empowerment of MSMEs in Kediri City.

METHODOLOGY

This study uses a quantitative approach. The type of research used in this research is a causal relationship or cause-effect relationship. Data was obtained from survey results by distributing questionnaires to respondents who were the objects of research. Causal research is research that aims to determine the cause-and-effect relationship between the independent variable and the dependent variable. This research aims to obtain evidence of a causal relationship between the independent variable, namely the KURNIA program (X), and the dependent variable, the empowerment of MSMEs in Kediri City (Y). In terms of method, it is survey research, namely research conducted on large or small populations, but the data studied is data from samples taken from that population, so that relative events, distributions, and relationships between sociological and psychological variables can be found.

Research variables are anything in any form that is determined by the researcher to be studied so that information about it is obtained, then conclusions are drawn (Sugiyono: 2018). There are several types of variables used in this research, these types of variables include:

1. Independent variable (independent)
Variables that influence or cause the emergence of the dependent (dependent) variable (Sugiyono: 2018). In this research, the independent variable is the KURNIA (X) program.
2. Dependent variable (dependent)
Variables that are influenced or that are a consequence, due to the existence of independent variables (Sugiyono: 2018). In this research, the dependent variable is MSME empowerment (Y).

The data collection technique used in this research is by using a questionnaire. In this study, researchers used a structured questionnaire, where the questionnaire in this study was distributed directly to respondents. The measurement scale used is the Likert scale. The Likert scale is a widely used scale that asks respondents to mark the degree of agreement or disagreement with each of a series of questions about an object. The population of this research is MSMEs whose credit applications will be realized in 2022, namely 274 people.

According to Sugiyono (2018), the sample is part of the number and characteristics of the population. Sampling was carried out with the consideration that the existing population was very large, so it was not possible to research the entire existing population. The sampling technique in this research was purposive sampling, namely, the author deliberately selected members of the population who were deemed able to provide the required information (Sugiyono, 2018). In this research, the author used a sampling technique formulated by Slovin.

$$\frac{N}{1 + Ne^2} \dots\dots\dots (1)$$

Information:

n = Sample size

N = Population Size

e = Error level of 0.01 (1%)

So to find out the research sample, use the following calculations:

$$n = \frac{N}{1 + Ne^2} = \frac{274}{1 + (274) \times 0,01} = 73,26 \text{ rounded up to } 73.$$

Data analysis techniques include the Validity and Reliability Instrument Test, Classical Assumption Test, Normality Test, Heteroscedasticity Test, Multicollinearity Test, Auto Correlation Test, Regression Analysis, Mode Test, Determination Coefficient Test (Adjust R Square), t Test.

RESULTS

The city of Kediri is located far southwest of the capital of East Java Province, Surabaya. The distance from the City of Heroes is around 130 km. For population records, Kediri City is the third largest city in East Java. The number one city is Surabaya. Followed by serial number 2 (two) Malang City. According to the East Java Central Statistics Agency (BPS), as of 2018, the

population of Kediri City was 292,768 people/person. The entire city area is surrounded by Kediri Regency. This is because the entire area borders Kediri Regency. Both the north, west, south, and east borders with Kediri Regency. The city of Kediri is also divided by an old river with great history and heroism, Kali Brantas.

The area of Kediri City is 67.2 km², administratively divided into three sub-districts, namely Mojoroto sub-district, Kota sub-district Islamic boarding school sub-district, and 46 sub-districts. Mojoroto District with an area of 26.93 km² consists of 14 sub-districts, Kota District consists of 17 sub-districts with an area of 15.95 km², and Pesantren District with an area of 24.32 km² consists of 15 sub-districts.

Kediri City consists of three sub-districts and 46 sub-districts. The three sub-districts are Mojoroto District, Kediri City District, and Islamic Boarding School District. In 2019, the administrative area of these three sub-districts consisted of 85 neighborhoods, 330 RWs and 1,478 RTs. In this case, the District includes 17 sub-districts and 20 neighborhoods. Next, the Islamic Boarding School District. This sub-district oversees 15 sub-districts, 29 neighborhoods, 126 RWs and 497 RTs. In contrast to its two neighboring sub-districts, the Mojoroto Sub-district includes 14 sub-districts, 36 neighborhoods, 100 RWs, and 486 RTs.

The city of Kediri received an award as the most conducive city for investment in an event related to community services and the quality of autonomy. The city of Kediri is a reference for investors who want to invest their capital in this city. Several private universities, Islamic boarding schools, and so on also have an impact on the city's economic sector. A smart economy is smart economic governance intended to create an economic ecosystem in the region that can meet the challenges of the disruptive information era and demands a rapid level of adaptation like today.

The target of the smart economy dimension in a smart city is to create an ecosystem that supports community economic activities that are in line with superior regional economic sectors that are adaptive to changes occurring in the current information era, as well as increasing community financial literacy through various programs, including realizing less-cash society. The market has not escaped attention either.

Table 2. Indicators of Smart Economy

SMART ECONOMY	
TARGET	GOAL INDICATORS
Increase in gross regional domestic product	Value of Increased GDP
Increase in regional superior products	Percentage growth of regional superior products
Increasing the creative economy	Creative economic growth

GIFT is Business Credit Serving Residents of the City of Kediri Warga (Kurnia), namely a revolving fund program for business actors in the City of Kediri which is lent and managed for business capital. The KURNIA program is a manifestation of Kediri City Regional Regulation Number 7 of 2019 concerning the Empowerment and Development of Micro Enterprises. The government provides a very low-interest rate of only 2 percent per year with a repayment period of 3 (three) years. The respondents who were sampled in this research were 73 respondents who were MSMEs in Kediri City who took out the "Kurnia" revolving fund loan in 2022. To get an idea of the respondents as the objects of this research, a questionnaire was used as a tool to obtain primary data.

1. Description of Respondents Based on Gender

A description of the respondents who became the research sample according to the respondent's gender is as follows:

Table 3. Description of Respondents

Gender	Number of Respondents	Percentage %
Man	46	63
Woman	27	37
Total Respondents	73	100

Source: Processed primary data, 2023

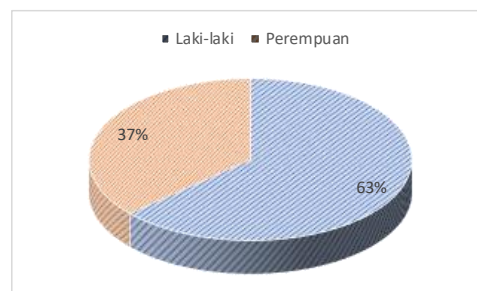


Figure 1. Diagram of Respondent Characteristics Based on Gender

Based on Table 3 and Figure 1 above, it can be explained that based on the gender of the 73 respondents who were research subjects, the percentage of subjects who were male was 46 people or 63% and those who were female were 27 people or 37% of respondents. This shows that as many as 63% of the "Kurnia" program participants are male.

Table 4. Level of Education of Respondents

Level of education	Number of Respondents	Percentage (%)
SENIOR HIGH SCHOOL	27	37
Diploma	10	14
Bachelor	36	49
Amount	73	100

Source: Primary data processed, 2023

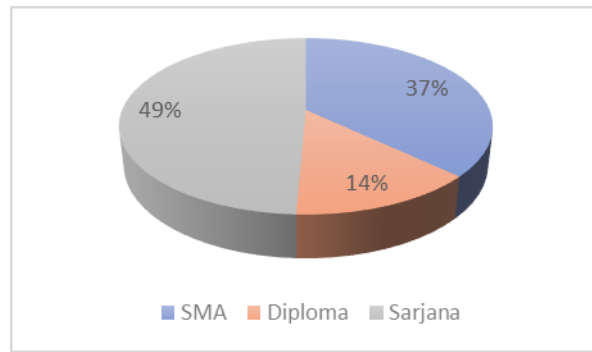


Figure 2. Diagram of Respondent Characteristics Based on Education Level

Based on Table 4 and Figure 2 above, it can be seen that based on the level of education, the majority of respondents had a bachelor's degree, 36 people, or 49%, 27 people or 37% had a high school education, and the remaining 10 people or 14% had a high school education. This shows that the participants in the "Kurnia" program are dominated by those with a bachelor's degree.

Validity and Reliability Test Results

Validity test

The purpose of conducting a validity test is to measure whether a questionnaire is valid or not. Measuring validity can be done by correlating between the question item scores and the total score of the construct or variable. Validity testing is carried out on each dimension using the method *product moment pearson correlation*. This analysis was carried out by correlating each item's score with the total score. The total score is the sum of all items. The test uses a two-sided test with a significance level of 0.05 which has an r-table value of 0.235 for a sample of 73 people. It is said to be valid if $r_{\text{count}} > r_{\text{table}}$, whereas if $r_{\text{count}} < r_{\text{table}}$ then the question is invalid. The results of the validity test on the five dimensions can be seen in the table.

Table 5. Validity Test

Items	t-count	t-table	information
X1.1	0.534	0.235	Valid
X1.2	0.460		Valid
X1.3	0.696		Valid
X1.4	0.736		Valid
X1.5	0.508		Valid
X1.6	0.637		Valid
X1.7	0.488		Valid
X1.8	0.522		Valid
X1.9	0.496		Valid

Source: processed primary data, 2023

Based on the table above, the program variable "Kurnia" (X) consists of 3 indicators with 9 statements, and the results of the analysis obtained a t-count $>$ t-table value so that it can be concluded that all statement items of the smart

economy variable with the "Kurnia" program are declared valid and can be used or is suitable for processing as research data.

Table 6. Validity Test

Items	t-count	t-table	Information
Y1.1	0.497	0.235	Valid
Y1.2	0.455		Valid
Y1.3	0.622		Valid
Y1.4	0.439		Valid
Y1.5	0.625		Valid
Y1.6	0.465		Valid
Y1.7	0.627		Valid
Y1.8	0.539		Valid
Y1.9	0.551		Valid

Source: processed primary data, 2023

Based on the table above, the MSME empowerment variable (Y) consists of 5 indicators with 15 statements, and the results of the analysis obtained a t-count > t-table value so that it can be concluded that all customer satisfaction variable statement items are declared valid and can be used or are suitable for processing as research data.

Reliability Test

Reliability measurement in this research was carried out using Cronbach's alpha. This test is often used to test the reliability of question instruments whose answers are scaled, but can also be used to test the reliability of used questions. An instrument is said to be reliable if the r obtained is > 0.60. The results of the reliability test calculations in this research are as follows:

Table 7. Reliability Test

Variable	Cronbach's Alpha	Test results	Information
"Kurnia" Program (X)	0.60	0.717	Reliable
Empowerment of MSMEs (Y)	0.60	0.725	Reliable

Source: processed primary data, 2023

Table 7 above, shows that all variables have a larger Alpha coefficient, namely above 0.60, so it can be said that all the concepts that measure each variable from the questionnaire are reliable so that in the future the items in each variable concept can be used. as a measuring tool.

Classic Assumption Test Results

Analysis of the data used. The classic assumptions used are normality, heteroscedasticity, and multicollinearity tests. The stages and results of classical assumption testing are as follows:

a. Normality Test Results

Data is said to have a normal distribution if the Skewness Ratio and Kurtosis Ratio values are between -1.96 and +1.96 (95% confidence level or alpha = 0.05)

Skewness Ratio = Skewness Statistical Value / Std.Error

Kurtosis Ratio = Kurtosis Statistical Value / Std.Error

Based on the results of statistical analysis with SPSS, the Skewness and Kurtosis values are obtained as follows:

Table 8. Normality Test Results
 Descriptive Statistics

	Skewness		Kurtosis	
	Statistic	Std. Error	Statistic	Std. Error
Unstandardized Residuals Valid N (listwise)	-,023	,281	-,044	,555

From Table 8 above, the Skewness Ratio value = -0.081 Kurtosis Ratio= -0.080. The skewness and kurtosis ratio values are <1.96 so it can be concluded that the data is normally distributed.

b. Heteroscedasticity Test

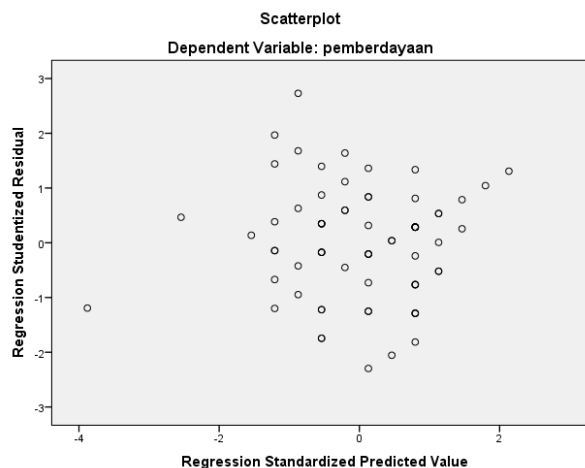


Figure 3. Heteroscedasticity Test Results

Based on the scatterplots output above, it is known that:

- 1) Dots spread above and below or around the number 0
- 2) The dots don't just collect at the bottom or top

- 3) The distribution of data points does not form a wavy pattern
 - 4) widens then widens and narrows again
- Thus it can be concluded that this did not happen heteroskedasticity, so that a good and ideal regression model can be fulfilled.

c. Autocorrelation Test Results

Table 9. Autocorrelation Test
Model Summary b

Model	Change Statistics					Durbin-Watson
	R Square Change	F Change	df1	df2	Sig. F Change	
1	,408	48,919	1	71	,000	1,720

- a. Predictors: (Constant), service
- b. Dependent Variable: satisfaction

The Durbin Watson value in Table 9 above is the calculated Durbin Watson value which will later be compared with the Table Durbin Watson (DW) value, both the DU (Durbin Upper) value and the DL (Durbin Lower) value. Based on the Durbin-Watson table with the independent variable (k) = 1 and several observations (n) = 73, it is known that the DL value = 1.594 and DU = 1.6479, so the DW value (1.720) > DU so there is no autocorrelation problem.

Table 10. Correlation Test

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	16,233	2,863		5,671	,000
	service	,531	,076	,639	6,994	,000

- a. Dependent Variable: satisfaction

Correlation analysis is a statistical technique used to analyze the relationship between two or more quantitative variables. That a change in a variable is caused or will be followed by changes in other variables. The results of product-moment correlation analysis are obtained as follows:

Table 11. Correlation Variables

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,639a	,408	,400	1,927

a. Predictors: (Constant), empowerment

The correlation coefficient value ranges from -1 to 1. If the correlation coefficient is -1, it means that the correlation has a perfect negative linear relationship. Meanwhile, if the correlation coefficient is +1, it means the correlation coefficient has a perfect positive linear relationship. The results of the analysis above obtained a correlation coefficient value of 0.639 (close to +1 and positive), meaning that variables X (the "Kurnia" program) and Y (empowerment of MSMEs) have a strong and unidirectional relationship. This means that if the "Kurnia" program is continued continuously it will massively increase the empowerment of MSMEs.

Regression Analysis

Regression analysis is an approach method for modeling the relationship between one dependent variable and one independent variable. In simple regression analysis, the relationship between variables is linear, where changes in variable. Based on the results of the simple linear regression test in the table above, you can take the following equation:

$$Y = 16.233 + 0.531$$

From this equation, the following things can be explained:

- a. The constant value (a) is 16.233
 The constant value a has a positive value of 13,665 states that if there was no influence of the "Kurnia" (X) program, the amount of empowerment for MSME customers would be 16,233 units.
- b. The regression coefficient value (b) is 0.531
 The coefficient b value is positive 0.822 states that for every additional factor in the "Kurnia" program by 1 unit, there will be an increase in the empowerment of MSMEs in Kediri City by 0.531 units.

Partial Hypothesis Testing (t-Test)

The partial test (t test) aims to determine the effect of the independent variable, namely the "Kurnia" program variable (X) on the empowerment of MSMEs (Y), namely by looking at the significance value. If the significant value is below 0.05 (5%), then partially the independent variable has a significant relationship to the dependent variable, and vice versa. The t-test refers to the results of the output coefficient.

Based on calculations from the partial test (t-test) in Table 11 above, the t-test results for the "Kurnia" program variable (X) on the empowerment of

MSMEs (Y) produce a t-significance value of 0.000. The test results show that $\text{Sig.t} < \alpha$ (0.05), so there is a significant influence between the smart economy variable and the program on the MSME empowerment variable in Kediri City. So it can be concluded that H_0 is rejected and H_a is accepted.

CONCLUSIONS AND RECOMMENDATIONS

Based on the results of the research and discussion in the previous chapter, the following conclusions can be drawn:

1. The Kediri City Government through the Department of Cooperatives, Micro Enterprises, and Manpower of the City of Kediri has implemented a Smart Economy by providing capital to MSMEs through the "Kurnia" program, namely Business Credit Serving Citizens.
2. The research results show that there is a significant influence between the smart economy variable and the "Kurnia" program on the MSME empowerment variable in Kediri City, which means that the "Kurnia" program can massively empower MSMEs in Kediri City.

Suggestions

1. The "Kurnia" program must be continued by the Mayor of Kediri for the next period with greater value so that MSMEs have more competitiveness in terms of capital
2. *A smart economy* is part of a smart city, which in theory is very good to implement in a small city like Kediri City, but the regional government (Mayor) must seriously regulate the regulations so that the program can run as expected.

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