The Influence Of The Production Control System And Marketing Mix On Post Covid 19 Income Levels In UMKM Selling Wet Cakes In Kampung Melayu Village, Banyuwangi District

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Abstract

This study aims to determine the effect of the production control system and marketing mix on income levels during the pandemic at the UMK Sales of Wet Cake Products in Kampung Melayu Village, Banyuwangi District. In this study, researchers used primary data. Primary data in this study were obtained by distributing questionnaires. This study used 5 sellers of wet cake products as samples. The analytical techniques used include instrument testing, classical assumption test, multiple linear regression analysis, coefficient of determination and hypothesis testing. The results showed that (1) the production control system partially significantly affected the level of income, (2) the marketing mix partially significantly affected the level of income, (3) and simultaneously the production control system and marketing mix had an effect on the level of income.

Keywords: Production Control System, Marketing Mix and Income Level

INTRODUCTION

Indonesia is a country that is developing and trying to catch up in the competitive growth of the world economy. This can be seen in the increasing development of the economy and the use of technology today. The Covid-19 pandemic which has hit almost all corners of the world emphasizes again that the application of the digital era must absolutely be applied to various areas of human life, including the educational, economic, health, social and religious sectors, and even more are involved. One of the main highlights is the economic factor, many of the economic aspects that have been paralyzed by the Covid-19 pandemic have not seen the types of large, medium and even small to micro businesses that have also been greatly affected. Many micro and small businesses have gone out of business, medium and large businesses have collapsed and have even begun to lay off most of their staff and employees, which has an

impact on increasing unemployment. Now the pandemic has passed and slowly the government has declared an endemic, meaning it is time to start and recover from the blow of the disaster that has hit most aspects of life.

UMKM have several problems even though UMKM continue to increase and increase. One of them is related to Marketing Management in terms of income level. There are many factors that need to be considered to increase income. In this research, factors that can influence income levels are the production control system and marketing mix. This is based on the conditions that occur in MSEs selling wet cake products in Kampung Melayu village, Banyuwangi district. Kampung Melayu village, Banyuwangi subdistrict, is a village that has small and medium businesses. Many businesses sell wet cakes because most of the residents in Kampung Melayu villages have the ability to make cakes. In this way, the Malay village community chose the wet cake business. Even though Malay villagers sell their products at home, the income generated by business actors is able to meet their living needs. Where consumers who buy products can directly visit the business actor's house. Unfortunately, during a pandemic like this, many UMKM selling wet cake products in Kmapung Melayu Village, Bnayuwangi District, have not been able to control the production system well, so there has been a decline in sales of wet cakes. MSEs selling wet cake products in Kampung Melayu Village are trying to recover after Covid-19. Current conditions make UMKM selling wet cake products in Kampung Melayu villages try to get up and look forward to new hopes for new conditions. MSEs selling wet cake products in Kampung Melayu villages use various methods to start their business units by improving product quality, price and product suitability so that they meet consumer desires. MSEs selling wet cake products in Kampung Melayu Village, Banyuwangi District are also developing their business not by selling at home but also by selling wet cakes in traditional markets and also via the internet network. There are several UMKM selling wet cake products in Kampung Melayu Village, Banyuwangi District who do not understand how to use the internet network, but this does not prevent business actors from continuing to market wet cakes because business actors can be helped by their biological children, relatives or neighbors so that business actors continue to sell wet cakes. can sell these wet cakes. Especially nowadays, competition is very tight and business actors have to work hard to be able to face this competition and maintain their business.

RESEARCH METHODS

The object of this research is UMKM selling wet cake products located in Kampung Melayu Village, Banyuwangi District, Banyuwangi Regency, East Java. In this research, the population in question is consumers of wet cake snacks in Kampung Melayu, Banyuwangi District.

The sampling technique used by the author is*probability sampling*. Type*probability sampling* used in this research is random sampling,carried out randomly without paying attention to the strata in the population. Therefore, the number of respondents can be known from the number of variable sub-indicators, namely the number of variable sub-indicators multiplied by 9 (12 variable sub-indicators X 9). So the number of respondents used was 108 people.

In this research there are two variables, namely: Free variable (independent) and dependent variable (dependent). The independent variables in this research are Production Control System (X1) and Marketing Mix (X2). The dependent variable in this research is Income Level (Y).

The data collection method in this research uses several methods, including: observation, interviews, questionnaires, documentation and literature study

Data analysis methods in this research are: 1). Research Instrument Test (Validity Test and Reliability Test), 2). Classic Assumption Test (Normality Test, Multicollinearity Test and Heteroscedasticity Test), 3). Multiple Linear Regression Analysis, 4). Hypothesis Testing (t Test and f Test), 5). Coefficient of Determination (R2).

RESULT AND DISCUSSION

Based on a review of theoretical studies and previous research, a framework for thinking in this research can be prepared, as presented in the following figure:
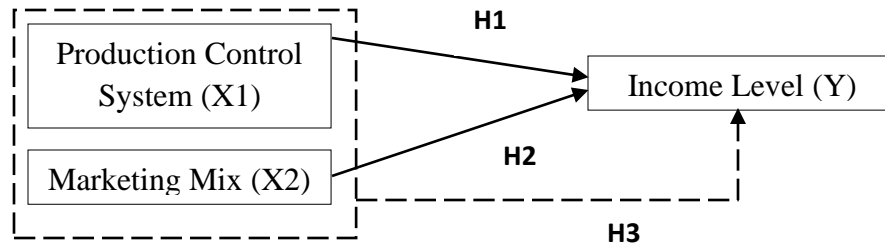
Fig. 1. Research Conceptual Framework

1. Data Instrument Test

    1.1 Data Validity Test

The validity test in this study used item analysis, namely correlating the score of each item with the total score which is the sum of each item score. The validity test is used to measure whether a questionnaire is valid or not. The correlation coefficient obtained still has to be tested for significance by comparing it with the r table. The question item is valid if the value of r count > r table or $p < 0.05$.

Table 1.1 Data Validity Test

Variable	Item	R_{table}	R_{count}	Sig	Note
Production Control System (X1)	X1.1	0.1891	0.748079	0,000	Valid
	X1.2	0.1891	0.673898	0,000	Valid
	X1.3	0.1891	0.520028	0,000	Valid
	X1.4	0.1891	0.671183	0,000	Valid
	X1.5	0.1891	0.722433	0,000	Valid
Marketing Mix (X2)	X2.1	0.1891	0.672529	0,000	Valid
	X2.2	0.1891	0.642208	0,000	Valid
	X2.3	0.1891	0.634947	0,000	Valid
	X2.4	0.1891	0.62008	0,000	Valid
Income Level (Y)	Y1	0.1891	0.664307	0,000	Valid
	Y2	0.1891	0.627655	0,000	Valid
	Y3	0.1891	0.630984	0,000	Valid

Source : data is processed

The table above shows that the correlation between each variable indicator Production Control System (X1), Marketing Mix (X2) and Income Level (Y) shows that R_count > R_tabel and Sig < 0.05. It can be concluded that all question items for the variables Production Control System (X1), Marketing Mix (X2) and Income Level (Y) are declared valid.

1.2 Reliability Test

Reliability testing is a tool for measuring a questionnaire which is an indicator of a variable or construct. Data is said to be reliable if it has a Cronbach Alpha value. The Cronbach Alpha of a variable is said to be reliable if it has a Cronbach Alpha > 0.60, provided that if the Cronbach Alpha value exceeds 0.60 then the variable statement is reliable and if it is less than 0.60 then the statement is not reliable.

Table 1.2. Data Reliability Test

Research variable	Cronbach's Alpha if item deleted	Reliability standards	Note
Production Control System (X_1)	0,756	0,60	Reliable
Marketing Mix (X_2)	0,727	0,60	Reliable
Income Level (Y)	0,618	0,60	Reliable

Source : data is processed

Based on table 1.2 above, it shows that the Production Control System research variable is said to be reliable because the Cronbach's Alpha value is > 0.6, namely 0.756. The Marketing Mix variable is said to be reliable because the Cronbach's Alpha value is <0.6, namely 0.727. The Income Level variable is said to be reliable because the Cronbach's Alpha value is > 0.6, namely 0.618. This proves that the research instrument in the form of a questionnaire is reliable because the r alpha has a larger value.

2. Classic assumption test

2.1 Normality Test

The normality test aims to determine whether the data obtained is normally or not normally distributed. Normally distributed data can reduce the occurrence of bias. Data normality testing was carried out using the Kolmogrov-Sminov test (Ghozali, 2001: 83). The criteria for the normality test are as follows:

a. If the significant value is > 0.05 then the research data is normally distributed

b. If the significant value is <0.05 then the research data distribution is not normal

Table 2.1. One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		108
Normal Parameters[a,b]	Mean	,0000000
	Std. Deviation	1,29021811
Most Extreme Differences	Absolute	,076
	Positive	,076
	Negative	-,065
Test Statistic		,076
Asymp. Sig. (2-tailed)		,146[c]

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.

Based on table 2.1, it is known that the asymp sig (2-tailed) significance value of 0.146 is greater than 0.05, so according to the basis for decision making in the Kolmogorov-Smirnov normality test above, this means that the data is normally distributed. In this way, the normality assumptions or requirements in the regression model have been fulfilled.

2.2 Heteroscedasticity Test

The heteroscedasticity test aims to test whether in the regression model there is an inequality of variance from the residuals of one observation to another.

There are several ways to detect the presence or absence of heteroscedasticity, one of which is by using the Glejser test (Ghozali, 2013: 142):

a.   If the significant value is > 0.05 then heteroscedasticity does not occur in the regression model.

b.   If the significant value is <0.05 then symptoms of heteroscedasticity occur in the regression model.

Table 2.2. Heteroscedasticity Test Results

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	t	Sig.
1 (Constant)	,480	,714		,672	,503
Production Control System	,076	,040	,240	1,895	,061
Marketing Mix	-,059	,050	-,149	-1,177	,242
a. Dependent Variable: ABS_RES					

Source : data is processed

Based on Table 2.2, the data from the Glejser results above can be interpreted that in the regression analysis there are no symptoms of heteroscedasticity because it shows a significant value (p-value) for the Production Control System variable with a value of 0.61, Marketing Mix with a value of 0.242, these results clearly show that none of the independent variables are significant because the significant probability value is above 0.05 or 5%. Thus, the two independent variables in the test, namely, the production control system and the marketing mix, do not have symptoms of heteroscedasticity between the independent variables in the regression model.

2.3 Multicollinearity Test

The multicollinearity test is used to test whether the regression model finds a correlation between the independent variables. Multicollinearity test criteria if the VIF value is < 10 and/or tolerance value > 0.1 then it can be concluded firmly that there is no multicollinearity problem. (Ghozali: 2003: 105). The results of the multicollinearity test can be seen as follows:

Table 2.3. Multicollinearity Test Results

Model	Collinearity Statistics		Note
	Tolerance	VIF	
Production Control System (X1)	0,573	1,746	Multicollinearity did not occur
Marketing Mix (X2)	0,573	1,746	Multicollinearity did not occur

Source : data is processed

Based on the results from table 2.3 above, it shows that there is no multicollinearity in all models or variables. This is indicated by a tolerance value ≥ 0.1 and a VIF value ≤ 10 on the independent variable.

Thus, the two independent variables in the test, namely, the production control system and the marketing mix, do not have symptoms of multicollinearity between the independent variables in the regression model.

3.   Multiple Linear Regression Analysis

Linear regression analysis is a process of systematically estimating what is most likely to happen in the future based on past and present information so that errors can be minimized. One of the uses of regression in this research is to predict the dependent variable (Y) if the independent variable (X) is known (Kuncoro Riduwan 2007: 83). The complete data processing results are in the attachment and are further explained in table 3.1 below:

Table 3.1. Multiple Linear Regression Analysis Test Results

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Std. Error	Beta	T	Sig.
1 (Constant)	,889	1,183		,752	,454

Production Control System	,298	,066	,424	4,482	,000
Marketing Mix	,281	,083	,321	3,397	,001
a. Dependent Variable: Income Level					

Source : data is processed

From table 3.1, the multiple regression formulation is as follows:

Y = 0.889 + 0.298 X1 + 0.281 X2

The interpretation of multiple linear regression can be explained as follows:

a. Constant Value

From the equation above, we get that the constant value is positive, which means that if the value of the dependent variable Production Control System (X1) and Marketing Mix (X2) is fixed or constant, then the Income Level (Y) value is still positive.

b. Production Control System (X1)

The coefficient value of the Production Control System variable is positive, this means that the higher the Production Control System that a Wet Cake Product has, the greater the income from selling wet cakes in the Kampung Melayu village of Banyuwangi.

c. Marketing Mix (X2)

The coefficient value of the Marketing Mix variable is positive, this means that the higher the Marketing Mix of the Wet Cake Product, the greater the income from selling wet cakes in the Kampung Melayu village of Banyuwangi.

4.   Coefficient of Determination

According to Ghozali (2011: 87) the coefficient of determination (R^2) is used to determine the percentage contribution of the simultaneous influence of the independent variables on the dependent variable. The R^2 results can be seen below:

Table 4.1. Coefficient of Determination Test Results (R^2)

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	,679[a]	,461	,451	1,30245

a. Predictors: (Constant), Marketing Mix, Production Control System

Source : data is processed

Based on the calculations in table 4.1 above, it shows that the coefficient of determination (adjusted R^2) obtained is 0.451. This means that the level of income contributes 45.1% by the production control system (X1) and marketing mix (X2), while the remaining 54.9% is influenced by other variables not included in this research model such as price, promotion, quality , location, product innovation, consumer satisfaction and design.

5.   Hypothesis Test

5.1   t Test

The partial influence test (t test) in multiple linear regression analysis aims to determine whether the independent variable (X) partially has a significant effect on the independent variable (Y). The basis for decision making in the t test is as follows:

a. If the sig value < 0.05 or tcount > ttable, then Ho is rejected.

b. If the sig value is > 0.05 or tcount < ttable, then Ho is accepted.

The test hypothesis in this research is:

H01 = the production control system has a partial effect on the income level of MSEs selling wet cake products in Kampung Melayu Village, Banyuwangi District.

H02 = the marketing mix has a partial effect on the income level of MSEs selling wet cake products in Kampung Melayu Village, Banyuwangi District.

Table 5.1. t Test Table

	Coefficients[a]					
		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	,889	1,183		,752	,454
	Production Control System	,298	,066	,424	4,482	,000
	Marketing Mix	,281	,083	,321	3,397	,001
a. Dependent Variable: Income Level						

Source : data is processed

Based on table 5.1 and t table, it can be seen the magnitude of the influence of each independent variable on the dependent variable as follows:

1. Production Control System (X1) on the Income Level variable (Y)

    The results of the multiple regression analysis of the t test show that the t_count for the Production Control System variable (X1) is 4,482 and the t_table is 1,982. This shows that t_count 4,482 > t_table 1,982 and can be seen in the table Sig 0.000 < 0.05 (95% confidence level). Thus, there is a linear influence between the independent variable and the dependent variable, so that partially the Production Control System variable has a significant effect on the income level of wet cake products in the village of Kampung Melayu Banyuwangi.

2. M

    arketing Mix (X2) to the Income Level variable (Y)

    The results of the multiple regression analysis of the t test show that t_count for the Marketing Mix variable (X2) is 3,397 and t_table is 1,982. This shows that t_count 3.397> t_table 1.982 and can be seen in the table Sig 0.001 < 0.05 (95% confidence level). Thus, there is a linear influence between the independent variable and the dependent variable, so that partially the Marketing Mix variable has a significant effect on the income level of wet cake products in the village of Kampung Melayu Banyuwangi.

5.2 F Test

The F test is used to test whether the coefficient of the independent variable simultaneously has a real influence on the dependent variable or not. If the independent variable has a simultaneous influence on the dependent variable. This test is carried out by comparing the significance of the calculated F value > F table, so the model formulated is correct. If the calculated F value > F table then it can be interpreted that the regression model is correct, meaning the joint influence, by looking at F table = df1= (k-1) df2= (n-k), df1=(2-1) df2 = (108- 1), F table = (1;107) = 3.93 with an error rate of 5%. The results of the F test can be seen in table 5.2 below:

Table 5.2. F Test Table

ANOVAª						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	152,650	2	76,325	44,993	,000[b]
	Residual	178,119	105	1,696		
	Total	330,769	107			
a. Dependent Variable: Tingkat Pendapatan						
b. Predictors: (Constant), Bauran Pemasaran, Sistem Pengendalian Produksi						

Source : data is processed

Based on the results of table 5.2, it can be explained that the f test (simultaneous) shows that the significance value of the influence of the Production Control System (X1) and Marketing Mix (X2) on Income Level (Y) is 0.000 < 0.05 and the calculated f value is 44.993 > value f table 3.93. This means that statistically it can be proven that the independent variables Production Control System (X1) and Marketing Mix (X2), simultaneously have a significant and positive effect on the income level of wet cake products in the village of Kampung Melayu Banyuwangi.

6. Interpretation

6.1 The Influence of the Production Control System on the Income Level of UMKM for Wet Cake Products in Kampung Melayu Village, Banyuwangi.

The results of multiple regression analysis in the t test on the first hypothesis (H1) show that the Production Control System has a significant and positive effect on Income Levels, meaning that the higher the Production Control System provided, the more Income Levels will increase (H1 is accepted).

Based on the research results obtained that there is a significant and positive influence of the Production Control System on Income Levels. This is in accordance with the research results of Fahmi, Erwin (2019), Ramazani (2015) and Azhari M.A, (2020), which states that there is an influence significant and positive impact of the Production Control System on Income Levels, because consumers of Wet Cake Products in the village of Kampung Melayu Banyuwangi strongly agree if sellers implement a production control system.

6.2   The Influence of Marketing Mix on the Income Level of UMKM for Wet Cake Products in Kampung Melayu Village, Banyuwangi.

The results of multiple regression analysis in the t test on the second hypothesis (H2) show that the Marketing Mix has a significant and positive effect on the Income Level, meaning that the higher the Marketing Mix provided, the Income Level will increase (H2 is accepted).

Based on the research results, it was found that there was a significant and positive influence of the Marketing Mix on Income Levels. This is in accordance with research results from Khoiria Rizky Tanjung (2018), Sepfito Aditya Bayu (2019) and Hanny Mariani (2018), which stated that there is a significant and positive influence of the Marketing Mix on Income Levels. Factors that cause the marketing mix can have a significant and positive effect on income levels, because consumers of Wet Cake Products in the village of Kampung Melayu Banyuwangi strongly agree if sellers use the marketing mix.

6.3   The Influence of the Production Control System and Marketing Mix on the Income Level of UMKM for Wet Cake Products in Kampung Melayu Village, Banyuwangi.

The results of multiple regression analysis in the F Test on the third hypothesis (H3) show that the Production Control System and Marketing Mix simultaneously have a significant and positive effect on the Income Level, meaning that the higher the Production Control System and Marketing Mix, the Income Level will increase (H3 is accepted).

Based on the research results, it was found that there was a significant and positive influence of the production control system and marketing mix on income levels. This is in accordance with research results from Yonnade Arga Putra (2014), Walia Nabila Sa'ad (2017) and Robby Satriawan (2017/2018), which stated that there is a significant and positive influence of the production control system and marketing mix on income levels. . Based on several variables that influence the level of income, including the Production Control System and Marketing Mix, these two variables simultaneously influence the level of income from selling wet cake products in the village of Kampung Melayu, Banyuwangi.

CONCLUSION

Based on the general research discussion regarding "The Influence of Production Control Systems and Marketing Mix on Post-Covid 19 Income Levels in MSMEs Selling Wet Cake Products in Kampung Melayu Village, Banyuwangi District" it can be concluded that:

1. Production control system variables have a significant effect on the income level of MSMEs selling wet cake products.
2. Marketing mix variables have a significant effect on the income level of MSMEs selling wet cake products
3. The variables of the production control system and marketing mix simultaneously have a significant effect on the level of income in MSMEs selling wet cake products.

Implications

The results of this research show that the two variables have a partially significant effect on the income level of wet cake products in Kampung Melayu Village, Banyuwangi. This shows that the variables of the production control system and marketing mix play a role in the marketing strategy as well as the recommended production costs in marketing wet cake products because wet cake products that have a delicious taste, product quality that suits consumers and an attractive appearance can increase income at selling wet cake products in Kampung Melayu Village, Banyuwangi, so that consumers are interested and buy wet cake products. And the two variables, namely the production control system and marketing mix, are the most important things in selling wet cake products. After conducting research on a case study of Income Levels in the Sales of Wet Cake Products in the village of Kampung Melayu Banyuwangi, we determined whether the independent variables Production Control System and Marketing Mix influenced the Income Level as a dependent variable simultaneously. With the results that have been tested, it can be stated that the independent variables Production Control System and Marketing Mix simultaneously influence the level of income from the sale of wet cake products in Kampung Melayu village, Banyuwangi. This proves that the production control system and marketing mix increase income for UMKM selling wet cakes in Kampung Melayu Village, Banyuwangi. Considering post-pandemic

conditions like these, people in Kampung Melayu villages such as Ibu Sukmawati, Ibu Mariyani, Ibu Susiati, Ibu Ratna and Ibu Holisah must be able to turn the wheels of their economy by implementing a production control system and also a marketing mix to increase income from selling the wet cakes they sell. . And there are also some people in Malay villages who still don't understand how to use the internet network. Most of these people are helped by their biological children, relatives and neighbors to use social media applications to sell wet cake products. With this research, it can provide ways and directions for using social media themselves to the community or sellers in Kampung Melayu village, especially during the current pandemic, all activities are using internet networking technology.

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