



Analysis of Product Development in Efforts to Increase Coffee Sales Volume

Mukhlis, Zainuddin Mukhsin, Wahyuni □

DOI: 10.15294/eeaj.v10i1.44646

Economic Education Study Program, Faculty of Economics, Sekolah Tinggi Keguruan dan Ilmu Pendidikan, Nusa Tenggara Barat, Indonesia

Sejarah Artikel

Received January 20, 2021
Approved January 30, 2021
Published February 27, 2021

Keywords

Diversification; Product Development; Sales Volume

Abstrak

Tujuan penelitian ini untuk menganalisis pengaruh pengembangan produk terhadap volume penjualan pada UD. HASYIMAH Kelurahan Potu Kabupaten Dompu. Penelitian ini menggunakan pendekatan kuantitatif. Subyek dalam penelitian ini sebanyak 40 orang konsumen yang diambil berdasarkan tehnik random sampling dipilih menjadi anggota sampel yang selanjutnya diberikan kuesioner untuk mengukur persepsi mereka. Berdasarkan hasil analisis data tersebut di atas menunjukkan bahwa nilai rata-rata jawaban responden dapat disimpulkan bahwa pengembangan produk pada perusahaan jati piri jati wangi cukup tinggi dengan rata sebesar 3,476 sedangkan tingkat volume penjualan cukup tinggi yaitu sebesar 3,5119. Sedangkan hasil perhitungan koefisien regresi menjelaskan pengaruh variabel bebas pengembangan produk cukup tinggi yaitu diperoleh nilai koefisien regresi pengembangan produk sebesar 0,752. Hasil perhitungan nilai korelasi pengembangan produk terhadap volume penjualan dalam penelitian ini cukup besar yaitu sebesar 0,736 atau 73,6% sedangkan hasil koefisien determinasi sebesar 0,541 atau 54,1% menjelaskan bahwa peranan variabel bebas pengembangan produk dalam mempengaruhi volume penjualan sedangkan sisanya sebesar 45,9% dipengaruhi oleh variabel lain. Hasil uji t menunjukkan nilai t-hitung sebesar 6,866 > sehingga menolak Ho dan menerima Ha yang menyatakan ada pengaruh antara pengembangan produk terhadap peningkatan volume penjualan.

Abstract

This study aimed to analyze the effect of product development on sales volume at UD. HASYIMAH Potu Village, Dompu Regency. This study used a quantitative approach. The subjects in this study were 40 consumers who were taken based on random sampling techniques and were selected as members of the sample who were then given a questionnaire to measure their perceptions. Based on the results of the data analysis above, it showed that the average value of the respondents' answers can be concluded that the product development of Jati Piri Jatiwangi company was quite high with an average of 3.476 while the level of sales volume was quite high, namely at 3.5119. While the results of the calculation of regression coefficients explaining the influence of the independent variable on product development were quite high, namely the product development regression coefficient value was 0.752. The results of the calculation of the correlation value of product development on sales volume in this study were quite large, amounting to 0.736 or 73.6%, while the results of the determination coefficient were 0.541 or 54.1% explaining the role of product development independent variables in influencing sales volume while the remaining 45.9% was influenced by other variables. The t-test results showed the t-value value of 6.866 > so that Ho rejected and accepted Ha which states that there is an influence between product development on an increase in sales volume.

How to Cite

Mukhsin, M., Mukhsin, Z., & Wahyuni, W. (2021). Analysis of Product Development in Efforts to Increase Coffee Sales Volume. *Economic Education Analysis Journal*, 10(1), 82-92.

© 2021 Universitas Negeri Semarang

✉ Correspondence Author:

Jl. Piere Tendean, Mpunda, Nusa Tenggara Bar., Mande, Mpunda, Bima, Nusa Tenggara Bar. 84111
Email:

p-ISSN 2252-6544
e-ISSN 2502-356X

INTRODUCTION

A product is a combination of goods and services offered by a person or institution to meet market needs and desires (Angipora, 2004: 26). Meanwhile, Kotler (2006: 54) states that a product is something that can be offered to the market to be noticed, owned, used, or consumed so that it can satisfy wants or needs. Sondang (2007) states that product development is an effort to attract customers to buy and use new products produced by these companies because they are satisfied with products that have been launched, promoted and sold in the company concerned.

Product development is basically an effort made to improve products that are running or add types of products that do not yet exist (Sa'diyah, 2016). Product development is an activity carried out by a company in perfecting its products in order to meet the needs and desires of consumers which always change from time to time. Product development can be done by using a diversification strategy. Diversification strategy is an expansion of the company's market share, where the company develops its business into diverse business or more than one business segment (Sulastri, 2015).

The product development stage must be attempted as early as possible so that there is no saturation among customers. Thus, the various kinds of existing products are expected to arouse consumer interest in buying products produced by companies (Astik, 2017). Product development activities can be done well if the company always interacts with consumers to find out the wants and needs of consumers. Product development is carried out in the form of quality development, design, packaging and services provided to consumers (Ato'illah, 2015).

This condition is an indicator of the success or failure of a product launched in the market. Consumer response to the product can be seen from the size of the sales volume achieved by the company in the next period. Sales are the final stage of company activities

in order to facilitate the running of a business. The increase in sales volume means that the company's profitability will also increase. These efforts allow the company to survive amid increasingly fierce business competition. Not all companies are able to make optimal sales. Therefore, a company will evaluate the expected product in order to increase sales volume.

UD. HASYIMAH is a company that seeks to increase its sales volume by prioritizing the product side. The company is located at RT.07 RW.04 Potu Village, Dompu District, Dompu Regency, at a residence of Abdul Hasyim, SE. It is one of the home coffee industries which initially only focused on making coffee grounds. Robusta Tambora ground coffee has a unique texture and taste, has quite a lot of flavors and shapes. This coffee powder has long durability (expiration period).

The more this coffee powder is popular, the more home industry companies have sprung up with the same products, types and motifs. After five years, sales have decreased due to the increasing number of competitors. To maintain its position, UD HASYIMAH made efforts to increase sales volume, namely by applying aspects of the marketing mix, from the four aspects including product, price, distribution and promotion. Product development efforts through diversification are carried out by adding types of coffee powder and flavor variants that are estimated to arouse consumer interest in buying these products.

Based on the pre-survey conducted, it was revealed that the addition of coffee powder types took place gradually. The first product launched was to make ordinary coffee powder then it was felt that it was still necessary to try for other types and flavors of coffee, UD. HASYIMAH added its product type, namely coffee powder with various flavors to increase the stamina of the audience. Steps taken by UD HASYIMAH showed good results, sales were increasing, although not very significant. It was not too significant because although there were many product types and flavors diversification, there were some pro-

ducts that were only a few enthusiasts. This study aimed to analyze the effect of product development on sales volume at UD. HASYIMAH Potu Village, Dompu Regency.

METHOD

This study used a quantitative approach, namely research that analyzes the value of the independent variables. Descriptive research is research conducted to determine the value of the independent variable, either one independent variable without making comparisons, or not to connect one variable to another. (Sugiono, 2013). The research design in this study is an empirical design that seeks to describe the symptoms of events occurring now and the characteristics of the population in certain areas. The population in this study were all consumers of UD. HASYIMAH. The subjects of this study were 40 consumers who were taken based on random sampling techniques.

The data collection technique used a questionnaire. Filling questionnaire by UD HASYIMAH consumers is intended to obtain data in the form of answers to questions or

statements written on the questionnaire, one form of filling out the questionnaire in this study uses a checklist and makes it easier for consumers to fill in. The data analysis technique consists of comparative descriptive analysis, namely the data that the author obtains will then be described in detail and systematically so that it can fully and clearly understand the final conclusion, validity analysis and statistical correlation analysis and regression analysis used the help of the SPSS program 24.

RESULTS AND DISCUSSION

Produk Consumer Responses to Product Development

The approach used to interpret the research variable indicators used the average count statistics of 40 respondents, namely the heads of families in the RT 04 of Potu Village. The use of calculated average statistics can be applied because the data / numbers generated in this study are in the measurement of variables including the type of interval so that mathematical operations can be used to analyze this type of data.

Table 1. Respondents' Responses to Product Quality Aspects

Respondents' Responses	Quality Frequency			
	Product Quality	Percent (%)	Raw material	Percent (%)
Very low	3	7.5 %	2	5%
Low	4	10%	3	7,5%
Enough	15	37,5%	17	42,5%
High	12	30%	10	25%
Very high	6	15%	8	20%
Total	40	100%	40	100%

Source : Primary data processed

Table 2. Respondents' Responses to Product Diversification Aspect

Respodents' Responses	Product Diversification Frequency			
	Diversification	Percent (%)	Segmentation	Percent (%)
Very low	3	7,5 %	2	5%
Low	5	12,5%	12	31.0%
Enough	16	40.5%	10	26.2%
High	12	31.0%	9	21.4%
Very high	4	9.5%	7	16.7%
Total	40	100%	40	100%

Source : Primary data processed

Table 3. Respondents' Responses to Production Speed Aspect

Respondents' Responses	Production Speed Frequency			
	Order time	Percent (%)	Time standard	Percent (%)
Very low	2	4.8 %	2	4.8%
Low	4	9.5%	5	11.9%
Enough	16	38.1%	16	38.1%
High	17	40.5%	11	26.2%
Very high	3	7.1%	8	19.0%
Total	42	100%	42	100%

Source : Primary data processed

Table 4. Respondents' Responses to Product Improvement Aspect

Respondents' Responses	Product Improvement Frequency			
	Product Utilization	Percent (%)	Product Satisfaction	Percent (%)
Very low	1	2.4 %	3	7.1%
Low	9	21.4%	5	11.9%
Enough	10	23.8%	17	40.5%
High	11	26.2%	10	23.8%
Very high	11	26.2%	7	16.7%
Total	42	100%	42	100%

Source : Primary data processed

Table 5. Respondents' Responses to Product Durability Aspect

Respondents' Responses	Product Durability Frequency			
	Product strength	Percent (%)	Product Life	Percent (%)
Very low	1	2.4 %	1	2.4%
Low	6	14.3%	7	16.7%
Enough	20	47.6%	12	28.6%
High	6	14.3%	16	38.1%
Very high	9	21.4%	6	14.3%
Total	42	100%	42	100%

Source : Primary data processed

Table 6. Recapitulation Value of Respondents' Responses for Product Development Variables

No.	Indicator	Total Score	Ideal Score	Percent
1.	Product quality	279	420	66.43%
2.	Product Diversification	268	420	63.81%
3.	Product Speed	285	420	67.86%
4.	Product Improvement	287	420	68.33%
5.	Product Durability	287	420	68.33%
	Total	1406	2100	66.95%

Source : Data tabulation compiled and processed

Table 1 explained that the perception of the quality indicator on product quality of UD. HASYIMAH in general was quite good with the most respondents' answer scores in the Enough category, namely 15 people or 37.5% and there were 17 respondents or 42.5% for the quality of raw materials. This was due to maintaining the quality of UD. HASYIMAH in looking for raw materials, especially coffee, always uses the best quality, namely robusta coffee, which is old and natural around the Tambora area.

Table 2 explained that the perception of the product diversification indicator of UD HASYIMAH in general was quite good, either it was seen from the making and development of the model with the most respondents' score in the Enough category, namely 17 people or 40.5% and there were 10 people or 26.2%

for adjustments to market segmentation, especially those related to consumer income. The results that had various forms and price adjustments in terms of market segmentation adjustments were expected to expand the market, especially from the middle to lower income groups.

Table 3 explained that the perception of the production speed indicator of UD. HASYIMAH in general was quite good, either it was seen from the effectiveness of the product standardization time of the company with the highest answer score in the high category, namely 17 people, 40.5% and for the effectiveness of the order time, there were 18 people who answered quite well or 38.1%. The results of this production speed were expected to improve service and customer satisfaction with the guaranteed order time which can inc-

rease the company's sales volume.

Table 4 explained that the perceptions of the product improvement indicator of UD HASYIMAH aimed to provide more value and function to consumers in general which was quite good, either it was seen from product satisfaction and product utilization, as for giving value and benefits to consumers, it had the highest answer score in the Very High category, namely 11 people or 26.2% and while customer satisfaction can also be said to be good enough with a score of 17 people or 40.5% in the Enough category.

Table 5 explained that the perception of the product durability indicator of UD HASYIMAH in general was quite good, either it was seen from the strength of the product with a score of 20 people who answered in the Enough category or 47.6% and the ability to endure the product life was quite good and able to last a long time with the highest score of 16 people or 38.1 % in the High category. The results of this product durability were expected to increase the durability of UD HASYIMAH products and at the same time can provide consumer satisfaction with guaranteed product durability if it can increase the company's sales volume.

The results of the recapitulation value of respondents' responses for product development variables can be seen on Table 6.

Respondents' Responses to Sales Volume Variable (Y)

Perceptions about the sales volume of UD HASYIMAH in this study was measured

from the respondents' assessment, namely the perception of the head of the family in the RT. 04 Potu Village for sales volume data for each product of UD HASYIMAH during 2015 to 2020 regarding the assessment of the increase in sales volume. From the calculated average value, the value of the sales volume of UD HASYIMAH was quite good and was increasing every year with a score of 3, 51.

The results of the data analysis above indicated that the average value of the respondents' answers can be concluded that the product development at UD HASYIMAH company was quite high with an average of 3.476 while the level of sales volume was quite high at 3.5119. While the result of the regression coefficient calculation explaining the effect of the independent variable on product development was quite high, namely the product development regression coefficient value was 0.752. The results of the calculation of the correlation value of product development on sales volume in this study were quite large, amounting to 0.736 or 73.6%, while the results of the determination coefficient of 0.541 or 54.1% explained that the role of product development independent variables in influencing sales volume while the remaining 45, 9% was influenced by other variables. The t-test results showed the t-value value of 6.866 > so that H_0 rejected and accepted H_a which states that there is an influence between product development on increasing sales volume. The results of data validity and variance and standard deviation of the results of this study are as follows.

Table 7. The results of data validity

Product Development (X)				Product Development (X)			
Item	Correlation	R Comparison	Inf	Item	Correlation	R Comparison	Inf
1.	0.692	0.300	Valid	1.	0.719	0.300	Valid
2.	0.671	0.300	Valid	2.	0.716	0.300	Valid
3.	0.569	0.300	Valid	3.	0.708	0.300	Valid
4.	0.530	0.300	Valid	4.	0.623	0.300	Valid
5.	0.773	0.300	Valid	5.	0.495	0.300	Valid
6.	0.745	0.300	Valid	6.	0.458	0.300	Valid
7.	0.652	0.300	Valid	7.	0.710	0.300	Valid
8.	0.589	0.300	Valid	8.	0.675	0.300	Valid
9.	0.572	0.300	Valid	9.	0.375	0.300	Valid
10.	0.569	0.300	Valid	10.	0.390	0.300	Valid
Mean	3.3476			Mean	3.5119		

Source : Primary data processed

Table 8. Variance and Standard Deviation

No	X	x	(X-x)	(X-x) ²
1	3.50	3.3476	0.15	0.02322576
2	3.30	3.3476	-0.05	0.00226576
3	2.20	3.3476	-1.15	1.31698576
4	2.60	3.3476	-0.75	0.55890576
5	3.60	3.3476	0.25	0.06370576
6	4.00	3.3476	0.65	0.42562576
7	4.30	3.3476	0.95	0.90706576
8	2.80	3.3476	-0.55	0.29986576
9	2.40	3.3476	-0.95	0.89794576
10	2.80	3.3476	-0.55	0.29986576
11	2.80	3.3476	-0.55	0.29986576
12	3.00	3.3476	-0.35	0.12082576
13	3.60	3.3476	0.25	0.06370576
14	2.60	3.3476	-0.75	0.55890576

15	2.40	3.3476	-0.95	0.89794576
16	3.50	3.3476	0.15	0.02322576
17	2.00	3.3476	-1.35	1.81602576
18	1.80	3.3476	-1.55	2.39506576
19	3.40	3.3476	0.05	0.00274576
20	3.60	3.3476	0.25	0.06370576
21	4.20	3.3476	0.85	0.72658576
22	3.80	3.3476	0.45	0.20466576
23	3.50	3.3476	0.15	0.02322576
24	3.20	3.3476	-0.15	0.02178576
25	3.60	3.3476	0.25	0.06370576
26	3.80	3.3476	0.45	0.20466576
27	4.70	3.3476	1.35	1.82898576
28	3.70	3.3476	0.35	0.12418576
29	3.50	3.3476	0.15	0.02322576
30	3.70	3.3476	0.35	0.12418576
31	3.30	3.3476	-0.05	0.00226576
32	4.00	3.3476	0.65	0.42562576
33	3.10	3.3476	-0.25	0.06130576
34	2.60	3.3476	-0.75	0.55890576
35	3.10	3.3476	-0.25	0.06130576
36	2.80	3.3476	-0.55	0.29986576
37	4.00	3.3476	0.65	0.42562576
38	4.40	3.3476	1.05	1.10754576
39	4.20	3.3476	0.85	0.72658576
40	4.20	3.3476	0.85	0.72658576
41	4.00	3.3476	0.65	0.42562576
42	3.00	3.3476	-0.35	0.12082576
Total		140.5992	0.00	19.32476192
Mean		3.3476		
Standard deviation		0.686538896		

Source : Secondary data processed

From the table above it is known that the variance value:

$$\begin{aligned} S^2 &= \sum \frac{(x - \bar{x})^2}{N - 1} \\ &= \frac{19.32476192}{41} \\ &= 0.471336 \end{aligned}$$

For that, the Standard Deviation value (S) is :

$$\begin{aligned} S &= \sqrt{S^2} \\ &= \sqrt{0,471336} \\ &= 0,68654 \end{aligned}$$

By using the one-sample t-test where it is found that the t-calculated value is as follows:

$$t = \frac{\bar{X} - LLO}{\frac{S}{\sqrt{n}}}$$

$$\begin{aligned} T_{Hit} &= \frac{3,3476 - 3,75}{0,68654} \\ &= -3.798 \end{aligned}$$

From the results of the above calculations, it is known that the t-value of -3,798 is smaller than the t-table value of = 1.665, so in this study it is accepted Ha which states product development at UD HASYIMAH is less than 75% of the expected. For more details, will be presented on Figure 1.

Product development at UD. HASYIMAH did not carry out product development less than expected, this was because the company did not understand the importance of product development strategies both in terms of models, quality and product value, therefor

the company needs to improve product development in order to satisfy consumers. Based on the results of the data analysis above, it showed that the average value of the respondents' answers can be concluded that the product development at UD HASYIMAH Company was quite high with an average of 3.476 while the level of sales volume was quite high at 3.5119.

The results of the calculation of the correlation value of product development on sales volume in this study were quite large, amounting to 0.736 or 73.6% while the results of the determination coefficient of 0.541 or 54.1% explained that the role of product development independent variables in influencing sales volume while the remaining 45.9 % was influenced by other variables. The t-test results showed the t-value of 6.866 > so that Ho rejected and accepted Ha which states that there is a positive and significant effect between product development on increasing sales volume

The results of this study were in line with Suprpto's (2019) research that when product development was continuously carried out and in accordance with consumer needs and satisfaction, consumers would feel their needs and satisfaction were met, at this stage consumers would make purchases or re-consumption and did not rule out the possibility of willing to be loyal customers. The more satisfied consumers, the more products would be sold. It was reinforced by Kotler and Garry (2012) that sales volume was something that indicated the ups and downs of sales. Sales indicators consist of: product price, product information, distribution channels, product quality and company profits.

Other research that supports this research was Verdika, Nursanti & Priyasmanu (2016), which explained that if product development increased, sales results would be more optimal. Yunsepa's research (2018) provided similar results that the number of existing competitors made the Songket Craft Business must be able and precise in determining product models and patterns, and other factors in increasing sales volume, namely by creating

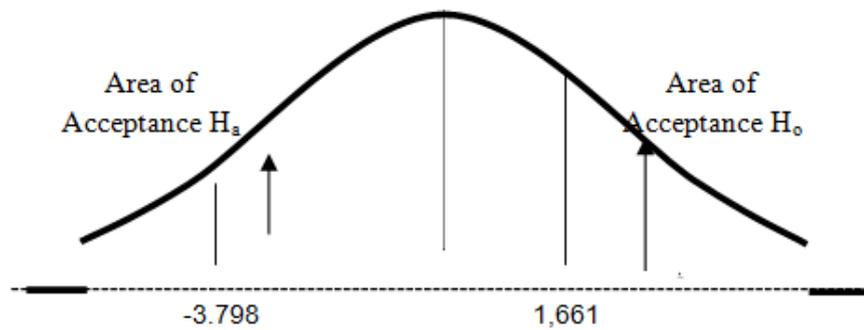


Figure 1. T-Test Significance Test with One-sample Test

products that were in accordance with the wishes and tastes of consumers or buyers so that by doing so it can increase sales volume and obtain optimal profit or profit.

Furthermore, Jasmani (2019) in his research found that the analysis of the correlation coefficient of product development on sales results obtained a value of 0.532, which means that the two variables had a positive relationship with a moderate level of relationship with a contribution of 28.30% to increase sales results. Saribu & Maranatha (2020) added that based on their research where partial test results showed product development had a positive and significant effect on sales of PT. Astragraphia Medan with the t-value for the product development variable (3.206) greater than the t-table value. Simultaneous testing of results showed product development, product quality, and marketing strategies had a positive and significant effect on sales of PT Astra-grapia Medan.

CONCLUSION

Based on the results of data analysis, the following conclusions can be made: 1) the results of one sample t-test obtained t-count -3,798 was greater than the t-table of 1,665 so this research accepted the hypothesis (H_a) which suspects product development in UD HASYIMAH is less than 75% of expected; 2) From the results of the recapitulation of respondents' answers, it was found that in general the respondents answered that product

development was still lacking, because the total average was 66.95% and less than 75% of the expected, as for the indicators that had the highest score on product durability of 68.33% and the lowest on the product diversification indicator of 63.81% of the expected.

REFERENCES

- Angipora, T., Marius. 2002. *Dasar-Dasar Pemasaran*. PT. Raja Grafindo Persada. Jakarta.
- Astik, P. C. (2017). *Pengembangan Produk Melalui Diversifikasi dalam Upaya Meningkatkan Volume Penjualan (Studi pada Pabrik Roti Sari Asri Hadimulyo Timur Metro Pusat)* (Doctoral dissertation, IAIN Metro).
- Ato'illah, M. (2015). Analisis Pengembangan Produk Untuk Meningkatkan Volume Penjualan Pupuk. *WIGA: Jurnal Penelitian Ilmu Ekonomi*, 5(1), 68-73.
- Jasmani, J. (2019). Pengaruh Promosi Dan Pengembangan Produk Terhadap Peningkatan Hasil Penjualan. *Jurnal Semarang*, 1(3), 142-157.
- Kotler, Philip. 2006. *Manajemen Pemasaran – Analisis, Perencanaan, Implementasi dan Pengendalian Jilid 1* terjemahan. Jaka Wasana. Jakarta: Penerbit Erlangga
- Kotler, Philip and Garry Armstrong. 2012. *Principles of Marketing*. New Jersey: Pearson Education Limited. *Jurnal Riset Manajemen Sains Indonesia (JRMSI) | Vol. 3, No. 1, 2012.*
- Sa'diyah, M., & Arifin, M. (2016). *PENGEMBANGAN PRODUK-PRODUK LEM-*

- BAGA
KEUANGAN MIKRO SYARIAH. *Equilibrium: Jurnal Ekonomi Syariah*, 2(1). doi:<http://dx.doi.org/10.21043/equilibrium.v2i1.717>
- Saribu, H. D. T., & Maranatha, E. G. (2020). PENGARUH PENGEMBANGAN PRODUK, KUALITAS PRODUK DAN STRATEGI PEMASARAN TERHADAP PENJUALAN PADA PT ASTRAGRAPHIA MEDAN. *JURNAL MANAJEMEN*, 1(1), 1-6.
- Siagian Sondang, P. (2007). *Manajemen SDM. Edisi pertama, cetakan ketigabelas*. Jakarta: Bumi Aksara.
- Sulastri, U. (2015). Pengaruh Strategi Diversifikasi Terhadap Kinerja Keuangan Perusahaan Dengan Struktur Modal Sebagai Variabel Intervening (Pada Perusahaan Sektor Properti Dan Real Estate Di Bursa Efek Indonesia Periode 2009-2013). *Jurnal Akuntansi AKUNESA*, 3(2).
- Sugiono, 2003, *Metode penelitian administrasi*, PT Alfabeta – Bandung
- Suprpto, H. (2019). PENERAPAN STRATEGI PEMASARAN MELALUI PENDEKATAN PENGEMBANGAN PRODUK GUNA MENINGKATKAN VOLUME PENJUALAN P A D A CV. SILVI MN PARADILA PARENGAN LAMONGAN. *JPIM (Jurnal Penelitian Ilmu Manajemen)*, 4(2), 953-962.
- Verdika, P., Nursanti, E., & Priyasmanu, T. (2016). Pengembangan Desain Produk Teh Gelas Dengan Menggunakan Metode Quality Function Deployment Untuk Meningkatkan Penjualan Di CV. Tirta Indo Megah. *Jurnal Teknologi dan Manajemen Industri*, 2(1), 10-14.
- Yunsepa, Y. (2018). Strategi Pengembangan Songket Ibu Nilau dalam Usaha Meningkatkan Penjualan Songket di Kecamatan Tanjung