

CHAPTER 6

ABC ANALYSIS

Chapter 6 discussed the ABC Analysis on the data taken from this retailer. The medicine category is analyzed based on its sales rate. This chapter is divided into two major parts, namely data collection and ABC Analysis of medicine category.

6.1. Data Collection

ABC analysis can be performed on sales data. Therefore, this study uses sales data from the period January - September 2020. The essential attribute of sales data is the demand for each product. Therefore, data collection was carried out periodically in October 2020.

6.2. ABC Analysis of Medicine Category

ABC analysis is used for one product category that has been selected to be transferred to an unused rack, namely the medicine category. The medicine category was selected because the placement of the category is still messy, and the medical products are divided into two different racks. The results from ABC Analysis are used to determine which products should be increased in sales. Therefore, the increase in sales will focus on the medicine category. ABC Analysis was used to arrange the product placement of medicine products. There are classes A, B, and C that helps see each product's revenue contribution. In the ABC Analysis, the revenue contribution of each product will be seen. The calculation of ABC Analysis starts by calculating the revenue. Revenue was obtained from calculating the demand per product in nine months multiplied by the selling price. And then, the second step is to find the revenue contribution obtained from calculating revenue per product in nine months divided by the total revenue. Cumulative revenue can be calculated for each product from the revenue contribution, which can be seen in the class plot. The contribution of each item and each class is also calculated in this ABC Analysis.

According to Sutardi and Budiasih (2011), each product needs to be sorted based on the revenue from the highest to the smallest. After being sorted, the classification can be started. For example, for the ANTANGIN CAIR +MADU 15ML product, the product demand for January - September 2020 is 81.

Furthermore, the selling price for this product is Rp 3000. Therefore, the calculation of the revenue will be:

$$\begin{aligned} \text{Revenue} &= \text{Product Demand} \times \text{Selling Price} & (5.1.) \\ \text{Revenue} &= 81 \times 3000 = 243000 \end{aligned}$$

After getting the revenue, the next step is to calculate the revenue contribution for the ANTANGIN CAIR +MADU 15ML product. Therefore, the calculation of the revenue contribution will be:

$$\begin{aligned} \text{Revenue Contribution} &= \frac{\text{Revenue for Each Product}}{\text{Total Revenue}} \times 100\% & (5.1.) \\ \text{Revenue Contribution} &= \frac{\text{Rp } 243000}{\text{Rp } 2138900} \times 100\% = 11.36\% \end{aligned}$$

After getting the revenue contribution, the next step is to calculate the cumulative revenue for the ANTANGIN CAIR +MADU 15ML product. Therefore, the calculation of the cumulative demand will be:

$$\begin{aligned} \text{Cum. Revenue} &= \text{Cumulative Revenue of Previous Product} & (5.2.) \\ &+ \text{Revenue Contribution of Selected Product} \\ \text{Cum. Demand} &= 23.56\% + 11.36\% = 34.9\% \end{aligned}$$

Then the next step is to classify the class for every product. Each product can be classified in one class based on the cumulative revenue that has been calculated. The classification process is already explained in Table 2.1. Then for the class contribution, it can be obtained from calculating the total product classified in every class, divided by the total existing product. The calculation example below is the class contribution for Class A. The results of the class division and class contribution can be used as retail evaluation in product placement.

$$\begin{aligned} \text{Class Contribution} &= \frac{\text{Total Product in Class A}}{\text{Total Existing Product}} \times 100\% & (5.3.) \\ \text{Class Contribution} &= \frac{14}{47} \times 100\% = 30\% \end{aligned}$$

Table 6.1. ABC Analysis of Medicine Category

Item Name	Total Demand	Selling Price	Revenue	Revenue Contribution	Revenue Cumulative	Class	Class Contribution
TOLAK ANGIN CAIR 15ML	168	Rp 3,000.00	Rp 504,000.00	23.56%	23.6%	A	30%
ANTANGIN CAIR +MADU 15ML	81	Rp 3,000.00	Rp 243,000.00	11.36%	34.9%	A	30%
VITACIMIN VIT C 500MG	67	Rp 2,500.00	Rp 167,500.00	7.83%	42.8%	A	30%
FRESHCARE STRONG 10 ML	8	Rp 13,000.00	Rp 104,000.00	4.86%	47.6%	A	30%
ANTANGIN CAIR MINT	32	Rp 3,000.00	Rp 96,000.00	4.49%	52.1%	A	30%
STREPSILE COOL 8'S	9	Rp 9,500.00	Rp 85,500.00	4.00%	56.1%	A	30%
ADEM SARI SAC 7G	36	Rp 2,000.00	Rp 72,000.00	3.37%	59.5%	A	30%
TOLAKANGIN FLU	20	Rp 3,500.00	Rp 70,000.00	3.27%	62.7%	A	30%
XON-C VIT C500MG	27	Rp 2,500.00	Rp 67,500.00	3.16%	65.9%	A	30%
FRESHCARE CITRUS 10 ML	5	Rp 13,000.00	Rp 65,000.00	3.04%	68.9%	A	30%
SLONPAS KOYO 5X2	7	Rp 8,000.00	Rp 56,000.00	2.62%	71.6%	A	30%
MINYAK KY PTH 15ML	9	Rp 6,000.00	Rp 54,000.00	2.52%	74.1%	A	30%
TOLAKANGIN ANAK	25	Rp 2,000.00	Rp 50,000.00	2.34%	76.4%	A	30%
EXTRA JOSS4GR	32	Rp 1,500.00	Rp 48,000.00	2.24%	78.7%	A	30%
MINYAK KAYU PTH CAP LANG30ML	5	Rp 9,500.00	Rp 47,500.00	2.22%	80.9%	B	32%
WOOD LEMON 15G	7	Rp 5,000.00	Rp 35,000.00	1.64%	82.5%	B	32%
ANTIMO ANAK JRK 5ML	19	Rp 1,500.00	Rp 28,500.00	1.33%	83.9%	B	32%
FRESHCARE LAV 10ML	2	Rp 13,000.00	Rp 26,000.00	1.22%	85.1%	B	32%
GELIGA 20GR	3	Rp 8,500.00	Rp 25,500.00	1.19%	86.3%	B	32%
HANSAPLAST KAIN	57	Rp 400.00	Rp 22,800.00	1.07%	87.3%	B	32%
BODREX EXTRA	7	Rp 3,000.00	Rp 21,000.00	0.98%	88.3%	B	32%
HANSAPLAS KOYO HANGAT	3	Rp 7,000.00	Rp 21,000.00	0.98%	89.3%	B	32%
OB HERBAL 15ML	8	Rp 2,500.00	Rp 20,000.00	0.94%	90.2%	B	32%
PROMAG TAB	28	Rp 600.00	Rp 16,800.00	0.79%	91.0%	B	32%

Table 6.1. Continued

Item Name	Total Demand	Selling Price	Revenue	Revenue Contribution	Revenue Cumulative	Class	Class Contribution
ANTIMO DWS TABLET	3	Rp 5,500.00	Rp 16,500.00	0.77%	91.8%	B	32%
SALONPAS KOYO HOT	2	Rp 8,000.00	Rp 16,000.00	0.75%	92.5%	B	32%
HANSAPLAS KOYO HNGAT RENTENG	10	Rp 1,500.00	Rp 15,000.00	0.70%	93.2%	B	32%
ANTANGIN TABLET	5	Rp 3,000.00	Rp 15,000.00	0.70%	93.9%	B	32%
FRESHCARE MKP 10ML	1	Rp 13,000.00	Rp 13,000.00	0.61%	94.5%	B	32%
VITACIMIN ORANGE	5	Rp 2,500.00	Rp 12,500.00	0.58%	95.1%	C	38%
PLOSSA BLUE MOUNTAIN 10ML	1	Rp 11,000.00	Rp 11,000.00	0.51%	95.6%	C	38%
PLOSSA REDHOT 10ML	1	Rp 11,000.00	Rp 11,000.00	0.51%	96.2%	C	38%
VICEE 500	6	Rp 1,600.00	Rp 9,600.00	0.45%	96.6%	C	38%
BODREX SKIT KPLA	19	Rp 500.00	Rp 9,500.00	0.44%	97.0%	C	38%
DIAPET 4S	3	Rp 3,000.00	Rp 9,000.00	0.42%	97.5%	C	38%
BODREX FLU&BATUK	3	Rp 3,000.00	Rp 9,000.00	0.42%	97.9%	C	38%
INTUNAL FORTE 4TAB	2	Rp 4,000.00	Rp 8,000.00	0.37%	98.3%	C	38%
MINYAK KAPAK 3ML	1	Rp 6,500.00	Rp 6,500.00	0.30%	98.6%	C	38%
KOMIX OBH CAIR	5	Rp 1,200.00	Rp 6,000.00	0.28%	98.8%	C	38%
PARAMEX SKIT KPALA	8	Rp 600.00	Rp 4,800.00	0.22%	99.1%	C	38%
DIAPET	7	Rp 600.00	Rp 4,200.00	0.20%	99.3%	C	38%
SARIDON 4S	1	Rp 4,000.00	Rp 4,000.00	0.19%	99.5%	C	38%
ENTRONSTOP TAB	6	Rp 600.00	Rp 3,600.00	0.17%	99.6%	C	38%
TOLAKLINU MINT 15 ML	1	Rp 3,000.00	Rp 3,000.00	0.14%	99.8%	C	38%
SOFFELL	2	Rp 1,200.00	Rp 2,400.00	0.11%	99.9%	C	38%
HEMAVITON STAMINA	1	Rp 1,500.00	Rp 1,500.00	0.07%	99.9%	C	38%
DECOLGEN	2	Rp 600.00	Rp 1,200.00	0.06%	100.0%	C	38%
TOTAL PRODUCT	47						
TOTAL REVENUE	Rp 2,138,900.00						

Based on the results of the ABC analysis in Table 6.1., there are 14 products classified as Class A, 15 products classified as Class B, and 18 products classified as Class C. The total revenue for all medicine products is Rp 2,138,900.00 in nine months. With 47 different medicine product variants, TOLAK ANGIN CAIR 15ML is the product with the highest revenue, with a value of Rp 504,000.00. Products in Class A have high revenue, so that these medicine products are in demand by customers. In contrast to Class C medicine products, which have low revenue, these medicine products are less attractive to customers. Therefore, medicine products in Class C will be placed in the most visible part to customers compared to Class A and Class B. It can be a trigger for Class C products to increase their sales. Unlike Class A, where the demand for Class A is already high, even if the product is placed in a bottom position, customers will keep looking for it. For the MINYAK KAYU PTH CAP LANG30ML product, it can be seen that this product belongs to Class B. However, the revenue generated by this product is close to the product in Class A. Therefore, this product will be placed on a par with class A products. Similar to the VITACIMIN ORANGE product classified as Class C, it will be parallel to its product placement with Class B because the revenue results are close to the product in Class B.

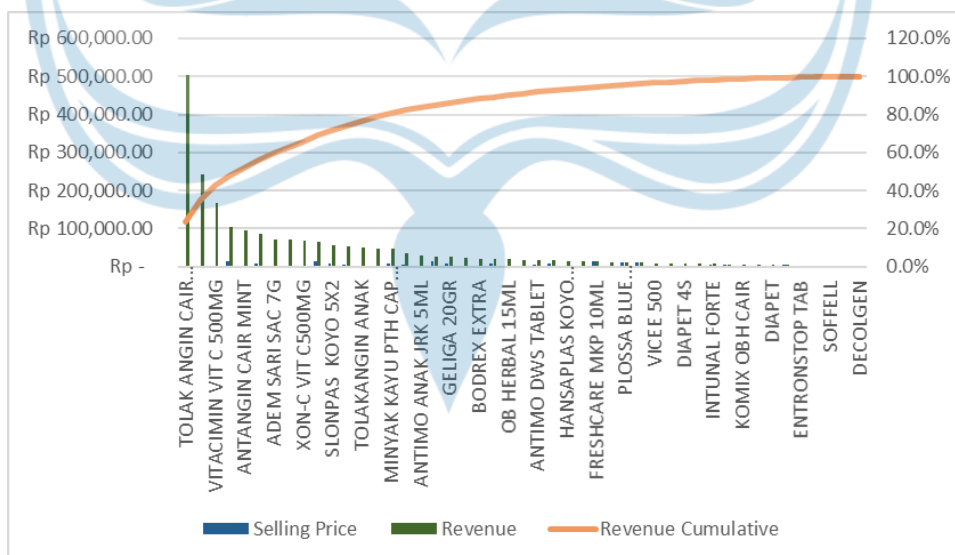


Figure 6.1. Pareto Chart of Medicine Category

Figure 6.1. shows the Pareto chart from the result of ABC Analysis. Class A has a cumulative revenue value of 78.7% and contributes 30% of the total number of products with total revenue of Rp 1,682,500.00. Class B has a cumulative revenue

value of 15.9% and contributes 32% of the total number of products with total revenue of Rp 339,600.00. Class C has a cumulative revenue value of 5.5% and contributes 38% of the total number of products with total revenue of Rp 116,800.00.



CHAPTER 7 MERCHANDISE HIERARCHY

Chapter 7 discusses the merchandise hierarchy based on customer preference. The merchandise hierarchy was carried out using an instrument in the form of a questionnaire that is distributed online. The target respondents for this questionnaire are people who have shopped at retail gas stations. This merchandise hierarchy questionnaire can help determine which criteria are most preferred by customers in choosing products when shopping. This chapter is divided into two major parts, namely questionnaire result and merchandise hierarchy of medicine category.

7.1. Merchandise Hierarchy Analysis

Based on the distribution of questionnaires through digital platforms, 186 respondents participated. This section includes questions about where respondents get the questionnaire link. Details of the total number of respondents can be shown in Table 7.1.

Table 7.1. Respondent Total Actual

Period	Instagram	LINE	Total Per Period	Total
	Actual	Actual		
Period 1 (10-12 April 2021)	38	55	93	186
Period 2 (13-15 April 2021)	46	47	93	

The second section is about the merchandise hierarchy for the medicine category. The merchandise hierarchy result for both periods can be shown in Table 7.2 and Table 7.3. The way to read the table is from left to right according to the number level from 1-5, which shows the priority scale.

Table 7.2. Merchandise Hierarchy Period 1

Rank	Price	Brand	Flavor/Aroma	Package	Size
1	11	50	15	4	13
2	34	6	11	23	19
3	17	9	17	31	19
4	14	13	18	24	24
5	17	15	32	11	18

In questionnaire period 1, the most prioritized criteria by respondents were brand with 50 voters. The second most prioritized criterion was price with 34 voters. The third most prioritized criteria were package with 31 voters. The fourth most

prioritized criterion was size, with 24 voters. The fifth most prioritized criteria were flavor/aroma, with 32 voters.

Table 7.3. Merchandise Hierarchy Period 2

Rank	Price	Brand	Flavor/Aroma	Package	Size
1	17	47	12	11	6
2	26	10	20	17	20
3	16	9	20	27	21
4	10	15	15	28	25
5	24	12	26	10	21

In questionnaire period 2, the most prioritized criteria by respondents were brand with 47 voters. The second most prioritized criterion was price with 26 voters. The third most prioritized criteria were package with 27 voters. The fourth most prioritized criterion was size, with 25 voters. The fifth most prioritized criteria were flavor/aroma, with 26 voters.

Table 7.4. Merchandise Hierarchy Summary

Summary					
Rank	Price	Brand	Flavor/Aroma	Package	Size
1	28	97	27	15	19
2	60	16	31	40	39
3	33	18	37	58	40
4	24	28	33	52	49
5	41	27	58	21	39

Table 7.5. Criteria Priority Rank

Rank	Criteria Priority
1	Brand
2	Price
3	Package
4	Size
5	Flavor / Aroma

In the results of the two-period questionnaire, the priority criteria for both periods are the same. Respondents from both periods agree that Brand is the most prioritized criteria and followed by Price, Package, Size, Flavor / Aroma. Table 7.4. shows the summary from the results of the two-period questionnaire, then the detailed criteria priority rank can be shown in Table 7.5.

7.2. Merchandise Hierarchy of Medicine Category

The merchandise hierarchy is arranged based on the priority criteria obtained previously in the medicine category that have been selected to be transferred to unused racks. Each product in this category will be separated by segment according to the order of priority. The results of this classification will be used in

the preparation of product displays by prioritizing brand followed by price, package, size, flavor/aroma. The establishment of a merchandise hierarchy in the medicine category is shown in Table 7.6.

Table 7.6. Merchandise Hierarchy of Medicine Category

Sub-Class	Brand	Price (IDR)	Package	Size	Flavor / Aroma
Catching a Cold Medicine	TOLAKANGIN ANAK	2000	Sachet	10 ml	Honey
	TOLAK ANGIN CAIR 15ML	3000	Sachet	15 ml	Mint
	ANTANGIN CAIR MINT	3000	Sachet	15 ml	Mint
	ANTANGIN CAIR +MADU 15ML	3000	Sachet	15 ml	Honey
	ANTANGIN TABLET	3000	Tablet	650 mg	-
Flu and Cough Medicine	KOMIX OBH CAIR	1200	Sachet	7 ml	Mint
	OB HERBAL 15ML	2500	Bottle	60 ml	Mint
	BODREX FLU&BATUK	3000	Tablet	522 mg	-
	TOLAKANGIN FLU	3500	Sachet	15 ml	Mint
	INTUNAL FORTE 4TAB	4000	Tablet	562 mg	-
Headache Medicine	BODREX SKIT KPLA	500	Tablet	500 mg	-
	PARAMEX SKIT KPALA	600	Tablet	550 mg	-
	DECOLGEN	600	Tablet	500 mg	-
	BODREX EXTRA	3000	Tablet	600 mg	-
	SARIDON 4S	4000	Tablet	550 mg	-
Medicated Oil	MINYAK KY PTH 15ML	6000	Plastic Bottle	15 ml	Eucalyptus
	MINYAK KAPAK 3ML	6500	Plastic Bottle	3 ml	Eucalyptus
	MINYAK KAYU PTH CAP LANG30ML	9500	Plastic Bottle	30 ml	Eucalyptus
	PLOSSA BLUE MOUNTAIN 10ML	11000	Plastic Bottle	10 ml	Peppermint
	PLOSSA REDHOT 10ML	11000	Plastic Bottle	10 ml	Chili
	FRESHCARE LAV 10ML	13000	Glass Bottle	10 ml	Lavender
	FRESHCARE MKP 10ML	13000	Glass Bottle	10 ml	Eucalyptus
	FRESHCARE STRONG 10 ML	13000	Glass Bottle	10 ml	Menthol
FRESHCARE CITRUS 10 ML	13000	Glass Bottle	10 ml	Citrus	
Vitamin	VICEE 500	1500	Tablet	500 mg	Lemon
	HEMAVITON STAMINA	1600	Tablet	500 mg	-
	XON-C VIT C500MG	2500	Tablet	500 mg	Orange
	VITACIMIN ORANGE	2500	Tablet	500 mg	Orange
	VITACIMIN VIT C 500MG	2500	Tablet	500 mg	Lemon
Stiff Medicine	HANSAPLAS KOYO HNGAT RENTENG	1500	Sachet	10x7 cm	Mint
	TOLAKLINU MINT 15 ML	3000	Sachet	15 ml	Mint
	HANSAPLAS KOYO HANGAT	7000	Box	10x7 cm	Mint
	SALONPAS KOYO HOT	8000	Sachet	5x4 cm	Mint
	SLONPAS KOYO 5X2	8000	Sachet	5x4 cm	Mint
	GELIGA 20GR	8500	Bottle	20 gr	Mint
Sore Throat Candy	WOOD LEMON 15G	600	Sachet	50 gr	Lemon
	STREPSILE COOL 8'S	3000	Sachet	100 gr	Mint
Diarrhea Medicine	DIAPET	600	Tablet	20 gr	-
	DIAPET 4S	5000	Tablet	20 gr	-
	ENTRONSTOP TAB	9500	Tablet	20 gr	-
Nausea Medicine	ANTIMO ANAK JRK 5ML	1500	Sachet	5 ml	Orange
	ANTIMO DWS TABLET	5500	Tablet	50 mg	-
Energy Drink	EXTRA JOSS4GR	1500	Sachet	4 gr	Original
Mosquito Repellent	SOFFELL	1200	Sachet	5 ml	Geranium Flower
Stomach Medicine	PROMAG TAB	600	Tablet	400 mg	-
First-Aid Kit	HANSAPLAST KAIN	400	Sheet	5x1.25 cm	-
Cooling Water	ADEM SARI SAC 7G	2000	Sachet	310 gr	Citrus

CHAPTER 8 PRODUCT DISPLAY ARRANGEMENT

Chapter 8 discusses the product display arrangement based on Category Management, Observation, ABC Analysis, and Merchandise Hierarchy that has been done. This chapter is divided into two major parts, namely planogram arrangement planning, and the final proposed planogram.

8.1. Product Display Arrangement Planning

The placement of the product display is grouped and arranged according to the category management evaluation, observation on customer preference, ABC Analysis, and merchandise hierarchy. It aims to make it easier for customers who come to find the medicine products they want. In addition, this is also expected to be useful for Hi-Bizz Minimarket. The improvement of the planogram is focused on the medicine category.

The preparation of the product display arrangement was also based on the results of a questionnaire regarding the difficulties in finding medicine products at retail gas stations. This fact was experienced by 127 respondents who filled out the questionnaire that can be shown in Table 8.1. It can happen because the majority of respondents agree that shopping at retail gas stations takes time. Therefore, product placement is essential to make it easier for customers to find the product they are looking for, as shown in Table 8.2.

Table 8.1. Questionnaire Result of Product Display

Easy to Find Products	Total
Yes	59
No	127

Table 8.2. Questionnaire Result of Product Display

Time Spent	Total
Less than 5 minutes	43
5 - 10 minutes	86
10 - 15 minutes	35
15 - 20 minutes	14
More than 20 minutes	8

8.1.1. Proposed Layout

Based on the observation of customer behavior conducted in retail, the proposed retail layout can be designed to increase sales.

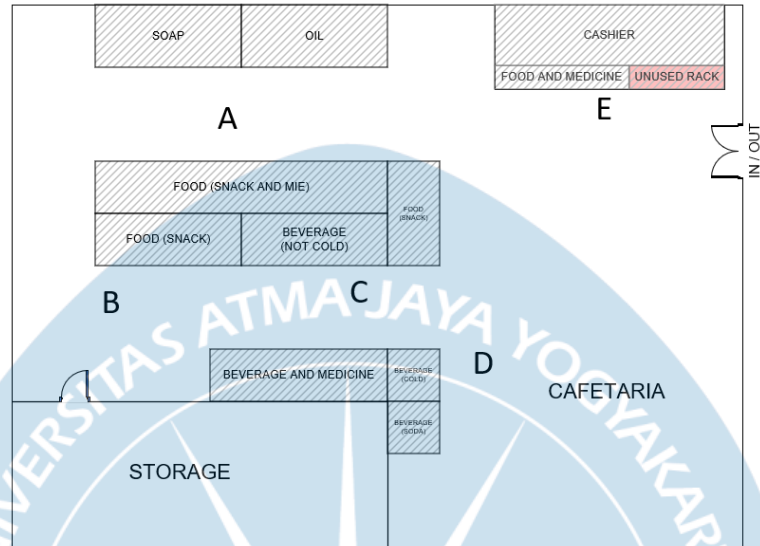


Figure 8.1. Current Retail Layout

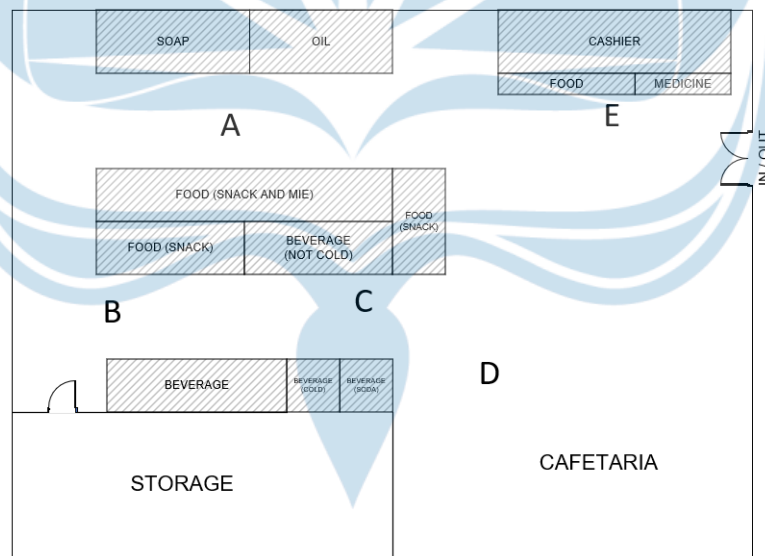


Figure 8.2. Proposed Retail Layout

Figure 8.1. shows the current retail layout that still has an unused rack in front of the cashier. The difference can be seen in the proposed retail layout shown in Figure 8.2. The layout used regulates the grid layout because the cash register is located at the entrance or exit of the store, and the tendency of gas station retail customers to want a fast time in shopping. There have been several evaluations

by moving the cold drink and soda racks to the side of the drink rack. Therefore, the point D is eliminated, and they moved to the point B and C. They can also help increase sales of these products because point C is the highest point always to be visited based on observations.



Figure 8.3. Unused Rack in Front of Cashier

Based on the observation, the unused rack will be filled with products from the medicine category. The Medicine category is moved to the same rack to make it easier for customers to find these products. It will take advantage of the unused rack, which is right in front of the cashier, and increase the sense of impulse buying shown in Figure 8.3. Then it has the dimensions shown in Table 8.3.

Table 8.3. Rack Dimension

Rack	Position	Dimension (cm)		
		Length	Width	Height
Wood Rack	Top	12.5	114	9
	Middle	18.5	114	28.5
	Bottom	22	114	28.5

The rack dimension affects the product placement. This rack has a wooden base material that has a different height in each position. The top position is 12.5 cm long and 9 cm high. The middle position is 18.5 cm long and 28.5 cm high. Furthermore, the bottom position has a length of 22 cm and a height of 28.5 cm. The width of each position is the same, which is 114 cm.

8.1.2. Product Placement

The result of merchandise hierarchy in the medicine category influenced how to arrange the products in the rack. The Brand is the most important thing that chosen by respondents. Therefore, the arrangement of the products is categorized by the

brand that has the same function. For example, the placement of medicinal products that treat diarrhea will be placed in a row. The product placement is arranged by paying attention to the class contribution in ABC Analysis, which has been analyzed. Top position filled with products with a majority of class C/B and C. Middle position filled with products with a majority of class A and C/B and C. While bottom position filled with products with most class A. Class C is placed in the top position because demand is low. With this placement, it is expected to increase the sales for Class C. Different from Class A, where the demand for Class A is already high, so even if the product is placed in a bottom position, customers will keep looking for it. The most important thing is that the medicine category is already on one rack. For example, for Sub-Class Catching a Cold Medicine with 80% class contribution will fill the bottom position. The class contribution can be obtained from calculating the total product classified in each class divided by the total product in their Sub-Class (Function) shown in Table 8.4.

Table 8.4. Product Placement

Sub-Class	Sub-Brand	Class	Class Contribution			Pos.
			A	B	C	
Catching a Cold Medicine	TOLAKANGIN ANAK	A	80%	20%	0%	Bottom
	TOLAK ANGIN CAIR 15ML	A				
	ANTANGIN CAIR MINT	A				
	ANTANGIN CAIR +MADU 15ML	A				
	ANTANGIN TABLET	B				
Flu and Cough Medicine	BODREX FLU&BATUK	C	20%	20%	60%	Top
	TOLAKANGIN FLU	A				
	KOMIX OBH CAIR	C				
	OB HERBAL 15ML	B				
	INTUNAL FORTE	C				
Headache Medicine	BODREX EXTRA	B	0%	20%	80%	Top
	BODREX SKIT KPLA	C				
	PARAMEX SKIT KPALA	C				
	SARIDON 4S	C				
	DECOLGEN	C				
Medicated Oil	FRESHCARE CITRUS 10 ML	A	44%	22%	33%	Bottom
	FRESHCARE LAV 10ML	B				
	FRESHCARE MKP 10ML	B				
	FRESHCARE STRONG 10 ML	A				
	MINYAK KAPAK 3ML	C				
	MINYAK KAYU PTH CAP LANG30ML	A				
	MINYAK KY PTH 15ML	A				
	PLOSSA BLUE MOUNTAIN 10ML	C				
	PLOSSA REDHOT 10ML	C				

Table 8.4. Continued

Sub-Class	Sub-Brand	Class	Class Contribution			Pos.
			A	B	C	
Vitamin	XON-C VIT C500MG	A	40%	20%	40%	Middle
	HEMAVITON STAMINA	C				
	VICEE 500	C				
	VITACIMIN ORANGE	B				
	VITACIMIN VIT C 500MG	A				
Stiff Medicine	GELIGA 20GR	B	17%	67%	17%	Middle
	HANSAPLAS KOYO HANGAT	B				
	HANSAPLAS KOYO HNGAT RENTENG	B				
	SALONPAS KOYO HOT	B				
	SLONPAS KOYO 5X2	A				
	TOLAKLINU MINT 15 ML	C				
Diarrhea Medicine	DIAPET	C	0%	0%	100%	Top
	DIAPET 4S	C				
	ENTRONSTOP TAB	C				
Sore Throat Candy	WOOD LEMON 15G	B	50%	50%	0%	Bottom
	STREPSILE COOL 8'S	A				
Nausea Medicine	ANTIMO ANAK JRK 5ML	B	0%	100%	0%	Middle
	ANTIMO DWS TABLET	B				
Energy Drink	EXTRA JOSS4GR	A	100%	0%	0%	Bottom
Mosquito Repellent	SOFFELL	C	0%	0%	100%	Top
Stomach Medicine	PROMAG TAB	B	0%	100%	0%	Middle
First-Aid Kit	HANSAPLAST KAIN	B	0%	100%	0%	Middle
Cooling Water	ADEM SARI SAC 7G	A	100%	0%	0%	Bottom

8.2. Final Proposed Planogram

There are three positions on the rack that will be filled with products from the medicine category. Figure 8.4. shows the final proposed planogram based on ABC Analysis and the function of each medicine. The arrangement of products on the racks has been adjusted in size. This arrangement was made using Microsoft Visio with a scale of 1:5. The implementation of product placement has also been adjusted to the results of the analysis. The division of products into several small categories, namely regarding Sub-Class (Function), has also been carried out.

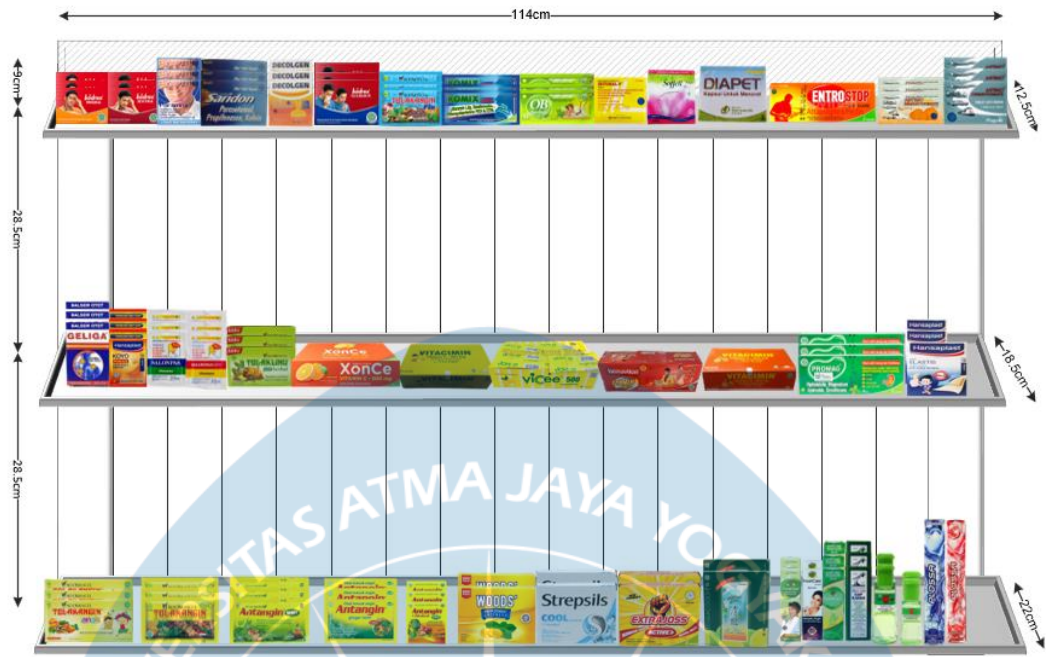


Figure 8.4. Final Proposed Planogram

CHAPTER 9

CONCLUSION AND SUGGESTION

Chapter 9 discusses the conclusion and suggestion of this research. The conclusion is obtained from the overall research results that lead to solving problems in this retail. At the same time, suggestions are things that can be used to maintain or improve this research.

9.1. Conclusion

The following is the conclusion of this research:

- a. One category that was moved to an unused rack is the medicine category because the product displays in this category are still arranged randomly and separated into two different racks.
- b. The transfer of medicine categories will make it easier for owners and cashiers to organize them because medicinal products are placed in one rack. It is related to the shortage of workers in retail.
- c. Customers will find it easier to find medicinal products because they are already on the same rack, and it is located in front of the cashier. Therefore, the rack can be a trigger for impulse buying.
- d. The arrangement of product displays for the medicine category will increase sales because this product placement is based on ABC Analysis, where the products with the low sales during January-September 2020 will be placed at the top so that customers will find it easier to find these products.

9.2. Suggestion

The suggestion for this research is that Hi-Bizz Minimarket categorizes products according to the existing categories so that there are no miscellaneous categories. This can simplify Hi-Bizz Minimarket in product display arrangement.

REFERENCES

- CEIC Data (2020, August 2nd). *Indonesia pertumbuhan penjualan ritel*. Accessed on September 8th, 2020 from <https://cutt.ly/bhLpS9u>.
- Devarajan, D., & Jayamohan, M. (2015). Stock control in a chemical firm: combined FSN and XYZ analysis. *Procedia Technology*, 24. 562-567.
- Dreze, X., Hoch, S.J., & Purk, M.E. (1994). Rack management and space elasticity. *Journal of Retailing*, 70(4), 301-326.
- Ebster, C., & Garaus, M. (2015) *Store design & visual merchandising: Creating store space that encourages buying* (2nd ed.). New York: Business Expert Press.
- Egan, D. (2009). Method and apparatus for remote merchandise planogram auditing and reporting. *United States Patent US8,049,621 B1*, 1-2.
- Elice. (2009). *Pengembangan rancangan penelitian planogram rak supermarket yang menarik atensi pembeli berbasis eye-tracking: Studi Kasus Pada Kemasan Shampoo*. (Bachelor Thesis). Universitas Indonesia.
- HaloDoc (2021). *Obat dan vitamin*. Accessed on April 5th, 2021 from <https://www.halodoc.com/obat-dan-vitamin>.
- Haryanto, R., Octavia, T., & Sugianto, R. (2018). Pengaruh peletakan display produk berdasarkan prinsip 5R dan planogram terhadap peningkatan penjualan: Studi kasus pada Ritel X di Lamongan. *Jurnal Tirta*, 6(2), 385-392.
- Hidayatno, A., Elice, & Komarudin. (2009). Eye-tracking research methodology for the planograms of supermarket rack that draw shopper's visual attention: A case study in shampoo packaging. *Proceeding, International Seminar on Industrial Engineering and Management*. ISSN: 1978-774X, A12.
- Hudson, M. (2019, November 21st). *How to create and use a retail planogram*. Accessed on October 2nd, 2020 from <https://cutt.ly/hhLd50i>
- Indrawati. (2019). *Usulan Planogram pada Ritel X di Kota Pontianak*. (Bachelor Thesis). Universitas Atma Jaya Yogyakarta.
- Kotler, P., & Keller, L. (2012). *Marketing management*. USA: PT Pearson Edition.

- Leolita, L. (2012). Perancangan layout toko dan planogram pada rak 16 di unit swalayan koperasi wanita. *Jurnal Ilmiah Mahasiswa Manajemen*, 1(6).
- Levy, M., & Weitz, B. A. (2011) *Retailing management* (8th ed.). McGraw-Hill / Irwin.
- Merriam-Webster's Collegiate Dictionary* (11th ed.). (2003). Springfield, MA: Merriam-Webster.
- Oxford English Dictionary* (2nd ed). (1989). UK, Oxford University Press.
- Piranti, A. (2018). *Penerapan data mining dengan mode classification pada Mini Market X*. (Bachelor Thesis). Universitas Atma Jaya Yogyakarta.
- Putri, N., & Iskandar, D. (2014). Analisis preferensi konsumen dalam penggunaan social messenger di Kota Bandung tahun 2014. *Jurnal Manajemen Indonesia*. 14(2).
- Rachmawati, V. (2011). Karakteristik & kategori barang dagangan. *Modul Pengelolaan Barang Dagangan*.
- Rahmasari, L. (2010). Menciptakan impulse buying. *Majalah Ilmiah INFORMATIKA*, 1(3), 57-62.
- Rapczynsky, C. (2017, November 2nd). *How to design a retail space in Boston*. Accessed on October 8th, 2020 from <https://cutt.ly/LhLfuY9>.
- Ray, R. (2010). *Supply Chain Management for Retailing*. McGraw Hill.
- Respatiningsih, H. (2008). Implementasi manajemen kategori dalam manajemen ritel modern. *Jurnal Manajemen dan Bisnis*, 1(1), 47-59.
- Restiana, M. (2016). *Perancangan perbaikan display berdasarkan karakteristik perilaku konsumen di Kota Singkawang*. (Bachelor Thesis). Universitas Atma Jaya Yogyakarta.
- Schroeder, Goldstein, & Rungtusanatham. (2010) *Operations Management: Contemporary Concepts and Cases* (5th ed.). McGraw-Hill.
- Soliha, E. (2008). Analisis industri ritel di Indonesia. *Jurnal Bisnis dan Ekonomi*, 15(2), 129-130.
- Sudjana, A. (2005). *Paradigma baru dalam manajemen ritel modern*. Yogyakarta: Graha Ilmu.

- Sutardi, A., & Budiasih, E. (2011). Pengolahan Data Penjualan Buku menggunakan Metode Klasifikasi ABC (Diagram pareto) untuk Mengidentifikasi Kategori Buku yang Banyak Diminati Pembaca. *Proceeding: Konferensi Nasional ICT-M Politeknik Telkom (KNIP)*. ISSN: 2088-8252.
- Tiwari, D., Dubey. S., Chopra., & Jain. M. (2015). Impact of merchandising on customer satisfaction and thereby on retailers' sale. *International Journal of Engineering and Applied Sciences*, 2(2), 1-5.
- Utami. C. W. (2017). *Manajemen ritel strategi dan implementasi bisnis ritel modern di Indonesia*. Jakarta: Salemba Empat.

