



MENU ENGINEERING ON FOOD TO INCREASE REVENUE AT LAKU CAFÉ, GADING SERPONG

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ABSTRACT

The Food and Beverage industry is an industry that has existed and developed for a long time until now. The Food and Beverage sector is engaged in the manufacture and serving of food and beverages and also provides services to customers. Merdeka (2022) emphasizes that Food and Beverage is a part of hospitality that is centered on food and beverage services which aims to achieve customer satisfaction. The method used is descriptive research with a qualitative approach. Research data collection was carried out using documentation studies to determine the level of menu profitability using a menu engineering system. Based on the results of the analysis, it can be concluded that among the menu items sold, there are several menu items that are less popular and there are also menus that bring low profits. There are many ways to increase revenue, including: increasing the attractiveness of the menu, increasing menu prices by switching to cheaper raw materials with the same quality, reducing portion sizes or creating combination packages with other menus that have low costs, removing several menus from the list. menu.

Keywords: Café, Menu, Menu Engineering

INTRODUCTION

Tourism is an activity of moving from place of origin to destination which involves individuals and groups (Hartman, 2023). Law of the Republic of Indonesia Number 10 of 2009 concerning tourism, regulates that tourism has the meaning of tourist activities supported by facilities and infrastructure supported by the community, entrepreneurs, government and local authorities (Brata et al., 2023). According to (Riadi et al., 2019), tourism is a travel activity undertaken by individuals or groups to a temporary area with the aim of seeking tranquility, happiness and peace (Purves & Wartmann, 2023).

Tourism is divided into several types of tourism, namely marine tourism, ethnic tourism, sports tourism, culinary tourism, cultural tourism and many other types of tourism. Currently, the type of tourism that is developing rapidly is culinary tourism (Alfiah & Wati, 2022). This trend provides great opportunities for new entrepreneurs, especially young entrepreneurs. Culinary tourism is part of the *Food and Beverage industry*.

Food and Beverage industry is an industrial sector that has existed and developed for a long time until now (Lloyd & Payne, 2023). The *Food and Beverage segment* is engaged in the production and serving of food and beverages as well as providing services to customers. Merdeka (2022) states that *Food and Beverage* is a part of hospitality that is centered on food and beverage services which aims to achieve customer satisfaction.

In the world of *food and beverage*, of course there are types of restaurants based on their management system (Carlbäck et al., 2023). There are formal restaurants and non-formal restaurants (Bogossian-Porto & Bogossian, 2023). Types of formal restaurants such as *Gourmet*, *Grilled Restaurant*, and *Main Dining Room* which serve food formally using *a table set-up* (Rahmi, 2023). Types of non-formal restaurants such as cafeterias, canteens, coffee shops and cafés. Café is a place that millennials like as a place to hang out or a *meeting place* for business people. According to (Philibert et al., 2023), a café is a place to eat that provides snacks and drinks such as bread, iced chocolate and coffee.

Laku café was founded in 2022 and offers several *menu choices* in the form of *pastries*, *snacks* and *main courses* that customers can enjoy (Dewi & Satyawan, 2023). The menu plays a very important role and is a product presentation at *Laku Café*. With so many menus being sold, it is possible to make a profit or a loss. The way to avoid losses is the importance of evaluating sales. To carry out analysis in anticipation of *menus* that are less popular with customers in sales, you can apply *menu engineering*.

According to Nenimeler (2013) in (Juliana et al., 2023) explains the meaning of *menu engineering* as a strategy in making an assessment of provisions related to prices and menu design now and in the future. From the menu offered, there are several possibilities that can occur in assessing profits. There are 4 assessment categories in *the engineering menu*, namely: *Star*, *Plow Horse*, *Puzzle*, and *dog* so that this classification method can make it easier to implement strategies related to food menus that will be sold in *cafes*.

According to (Juliana et al., 2023), there are 2 important elements in basic *menu engineering* which focuses on this analysis, namely: *Menu Mix (MM)* is an analysis to calculate the popularity of a menu sold within a certain time. To find out the popularity index of a *menu*, it is necessary to count the number of *menu types* sold with all existing *menus* (Man Him IP & Chark, 2023). *A menu can be said to be popular if the menu's sales results are at 70% of the targeted sales* (Özgür Göde & Ekerğil, 2023). The calculation of *the menu mix* percentage is obtained from the results of calculating a *menu item* sold by the total number of *menu items* sold multiplied by 100. *Contribution Margin (CM)* is a calculation of the difference between the selling price of food and the cost price which will determine the profit contribution of each *item* on *the menu*. The way to calculate *contribution margin* is the selling price minus the cost price. To get the average contribution level, it can be calculated from *the contribution margin* divided by the *total number of menu items* sold.

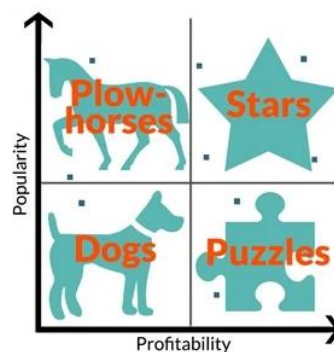


Figure 1 – Engineering menu

From the explanation above, the researcher will explain this problem in detail in the form of written work or scientific work with the title " *Menu Engineering on Food to Increase Revenue at Laku Café, Gading Serpong*" with the aim of maximizing income from *menu engineering* to keep the business running smoothly and develop. From the results of the analysis above, it can be seen which menus should be improved, what menus should be maintained, what menus can be profitable and detrimental, and which

menus should be deleted. It can be concluded that *menu engineering* is an appropriate and implementable way to find solutions and answers in determining a *menu* in a restaurant.

METHOD

To write this journal, the author used a qualitative descriptive method. Descriptive research. Sugiarto in Tysara (2023) states that qualitative research is used to study the status of objects with the researcher's position as the key instrument, data collection techniques are followed by triangulation, data analysis is qualitative and research results emphasize meaning rather than generalization. Data collection in the research was carried out with a documentation study to determine the level of profitability of the Laku Café menu using *a menu engineering system* / menu engineering from data obtained in the form of food menu sales data for 3 months starting from January to March 2023.

Menu engineering techniques are used to evaluate each menu by evaluating the level of income and *contribution margin* for each menu item. According to (Oktaviani & Anggraeni, 2023), menu items that are worth maintaining can be seen from the classification results on the menu. Based on the data that has been obtained, there are 3 menu categories, namely, *Pastry, Snacks, Main course*. The research results from the data have been calculated using *menu engineering techniques* to determine *the popularity index* of what menu items are popular, unpopular, worth maintaining or not. With the popularity index calculation, it can be seen from Figure 1 which is attached to all the results for the food menu items and Figure 2 shows the *popularity index results* per category. To find out *the popularity index*, it can be formulated as follows.

a. Menu Mix Percentage

To get the percentage from *the mix menu*, *the percentage* can be calculated by dividing *the mix menu* by *the total mix menu*, multiplied by 100%.

Formula:

$$\frac{\text{Menu Mix (MM)} \times 100\%}{\text{Total Menu Mix}}$$

b. Menu Mix Category

To get *the Mix Category Menu*, multiply the number of menus by 70%, then multiply by *the total menu mix*.

Formula:

$$\frac{1 \times 70\% \times \text{Total Menu Mix}}{\text{Total Menu}}$$

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NO	Menu	Januari	February	Maret	Total	Popularity Index
1	Chocolate Danish	10	6	6	22	5%
2	Ham & Cheseee	9	7	6	22	5%
3	Almound Croissant	11	9	12	32	8%
4	Hazelnut Bomb	11	13	8	32	8%
5	Crispy Pork Rice Bowl	21	20	21	62	15%
6	Nasi Goreng Laku	14	18	8	40	10%
7	Indomie Kuah Laku	2	3	4	9	2%
8	Indomie Goreng Laku	4	3	3	10	2%
9	Indomie Crispy Pork	4	14	13	31	7%
10	Nasi Rendang	2	5	0	7	2%
11	Nasi Ayam Goreng Laku	0	3	0	3	1%
12	Kari Bihun	1	2	1	4	1%
13	French Fries	6	9	6	21	5%
14	Cireng	11	18	14	43	10%
15	Truffle Cheseee Fries	9	8	5	22	5%
16	Pisang Goreng	12	12	10	34	8%
17	Tahu Bakso	8	2	4	14	3%
18	Bakso Goreng	6	6	0	12	3%
	Total	141	158	121	420	100%

Figure 2. Calculation of Menu Popularity Index for All Items in the Period of January – March 2023
Source: Author (2023)

No	Menu Category	Item	Popularity Index
1	Pastry	108	26%
2	Snack	146	35%
3	Maincours	166	40%
	Total	420	100%

Figure 3. Calculation of Menu Popularity Index Per Category in the Period of January – March 2023
Source: Author (2023)

The results of the *popularity* index shown in Figure 2 and Figure 3 are different because Figure 2 calculates the entire popularity index without dividing by category, by calculating the total number of portions of one menu item divided by the total number of menu portions sold. Meanwhile, Figure 3 is divided by category.

Contribution Margin

Contribution margin is a calculation of the gross profit obtained from the sale of each menu item. According to Wiyasha in (Wardani et al., 2023) *contribution margin* is the difference between the selling price and the variable budget per unit. Based on the definition above, the contribution margin results are obtained by subtracting the sales of menu items from the sales price. The higher the contribution margin, the higher the profits obtained. To find out the profit obtained, you can look at the *contribution margin* compared to the average *contribution margin*.

The way to calculate the average *contribution margin* is the total profit divided by the total number sold. It can be understood that if the *contribution margin level* of an item is below average, then the menu item is called "low" and if the *contribution margin level* is above average it is called "high". From the explanation above, *Contribution Margin* and *Average Contribution Margin* can be calculated as follows:

- CM (Contribution Margin)* = Selling Price – Base price
- ACM (Average Contribution Margin)* = Total Profit: Number Sold
- Percentage Contribution Margin*

Obtained by dividing the total *contribution margin* per item by the total *contribution margin*, and multiplying by 100%

Formula:

$$\text{Contribution Margin (items)} \times 100\%$$

Total Contribution Margin

RESULTS AND DISCUSSION

The menu can be classified into 4 categories namely: *Star*, *Plowhorse*, *Puzzle*, and *Dog*. All classifications are categorized based on menu popularity and contribution margin.

MENU ITEM CLASS	Total Item	Percentage
Puzzle	2	11%
Star	6	33%
Plowhorse	5	28%
Dog	5	28%
Total	18	100%

Figure 4. Menu Item Class Percentage

Source: Author (2023)

The percentage results from the data above show *the menu item class* in the entire menu. A very popular and profitable menu is “*Star*”. The menu included in the *star category* contains 6 menu items or 33%. A menu with a high level of popularity but low profits is “*plowhorse*”. Menus that fall into the *plowhorse category* contain 5 menu items or 28%. A menu with low popularity but high profits is “*puzzle*”. The menu includes *the puzzle category* there are 2 menu items or 11%. and finally “*dog*” which is a menu with low popularity and profits. The menu that includes the *dog category* contains 5 menu items or 28%.

Apart from that, the level of popularity of the menu can also be calculated at the same time as the profit obtained. The following are the results of data analysis for the Engineering Worksheet Menu in the Period January-March 2023.

PASTRY																
No	Menu	Januari	Februari	Maret	Total	Popularity Index	ITEM FOOD COST	ITEM SELL PRICE	ITEM PROFIT	TOTAL COST	TOTAL REVENUE	TOTAL PROFIT	PROFIT CATEGORY	POPULARITY CATEGORY	MENU ITEM CLASS	CATEGORY
1	Chocolate Danish	10	6	6	22	20%	10.000	22.000	12.000	220.000	484.000	264.000	LOW	HIGH	Plowhorse	C
2	Ham & Chese	9	7	6	22	20%	13.000	26.000	13.000	286.000	572.000	286.000	HIGH	HIGH	Star	B
3	Almound Croissant	11	9	12	32	30%	15.000	29.000	14.000	480.000	928.000	448.000	HIGH	HIGH	Star	B
4	Hazelnut Bomb	11	13	8	32	30%	8.000	18.000	10.000	256.000	576.000	320.000	LOW	HIGH	Plowhorse	C
TOTAL					108		46.000	95.000	49.000	1.242.000	2.560.000	1.318.000				

Food Cost Percentage(Total Cost/Total Revenue) **49%**
 Average Item Profit(Total Profit/Number Sold) **12.204**
 Menu Popularity Factor(1/Number Sold)*0.7 **18%**

Figure 5. Data Analysis Results of the Engineering of Pastry Worksheet Menu in the Period January-March 2023

Source: Author (2023)

Results in figure 5 above shows that of the 4 types of *pastry menus*, there are 2 menus in the item class "plowhorse" with a high level of popularity but low profits. The menu in the "plowhorse" category is *Chocolate Danish* and *Hazelnut Bomb*. In order not to experience losses, one strategy that can be used to increase sales is by increasing menu prices by exchanging cheaper raw materials but of equal quality.

SNACKS																
No	Menu	Januari	Februari	Maret	Total	Popularity Index	ITEM FOOD COST	ITEM SELL PRICE	ITEM PROFIT	TOTAL COST	TOTAL REVENUE	TOTAL PROFIT	PROFIT CATEGORY	POPULARITY CATEGORY	MENU ITEM CLASS	CATEGORY
1	French Fries	6	9	6	21	14%	8.000	27.000	19.000	168.000	567.000	399.000	LOW	HIGH	Plowhorse	C
2	Cireng	11	18	14	43	29%	6.000	27.000	21.000	258.000	1.161.000	903.000	HIGH	HIGH	Star	B
3	Truffle Cheseee Fries	9	8	5	22	15%	12.000	34.000	22.000	264.000	748.000	484.000	HIGH	HIGH	Star	B
4	Pisang Goreng	12	12	10	34	23%	7.000	30.000	23.000	238.000	1.020.000	782.000	HIGH	HIGH	Star	B
5	Tahu Bakso	8	2	4	14	10%	10.000	27.000	17.000	140.000	378.000	238.000	LOW	LOW	Dog	D
6	Bakso Goreng	6	6	0	12	8%	10.000	27.000	17.000	120.000	324.000	204.000	LOW	LOW	Dog	D
TOTAL					146		53.000	172.000	119.000	1.188.000	4.198.000	3.010.000				

Food Cost Percentage(Total Cost/Total Revenue) **28%**
 Average Item Profit(Total Profit/Number Sold) **20.616**
 Menu Popularity Factor(1/Number Sold)*0.7 **12%**

Figure 6. Data Analysis Results of Menu Engineering of Snacks Worksheet in the Period January-March 2023

Source: Author (2023)

The results in Figure 6 above show that of the 6 types of snacks menus sold, there is 1 menu in the "plowhorse" item class and 2 menus in the "dog" item class with low levels of popularity and low profits. The menu in the "plowhorse" category is *French fries*, while the menu in the "dog" category is *Tofu Meatballs* and *Fried Meatballs*. The strategy that can be implemented in the "plowhorse" category is to increase menu prices. Strategies that can be implemented in the "dog" category include removing menus or lowering prices.

MAIN COURES																
No	Menu	Januari	Februari	Maret	Total	Popularity Index	ITEM FOOD COST	ITEM SELL PRICE	ITEM PROFIT	TOTAL COST	TOTAL REVENUE	TOTAL PROFIT	PROFIT CATEGORY	POPULARITY CATEGORY	MENU ITEM CLASS	CATEGORY
1	Crispy Pork Rice Bowl	21	20	21	62	37%	25.000	62.000	37.000	1.550.000	3.844.000	2.294.000	HIGH	HIGH	Star	B
2	Nasi Goreng Laku	14	18	8	40	24%	15.000	38.000	23.000	600.000	1.520.000	920.000	LOW	HIGH	Plowhorse	C
3	Indomie Kuah Laku	2	3	4	9	5%	8.000	19.000	11.000	72.000	171.000	99.000	LOW	LOW	Dog	D
4	Indomie Goreng Laku	4	3	3	10	6%	8.000	19.000	11.000	80.000	190.000	110.000	HIGH	LOW	Puzzle	A
5	Indomie Crispy Pork	4	14	13	31	19%	13.000	35.000	22.000	403.000	1.085.000	682.000	LOW	HIGH	Plowhorse	C
6	Nasi Rendang	2	5	0	7	4%	18.000	38.000	20.000	126.000	266.000	140.000	LOW	LOW	Dog	D
7	Nasi Ayam Goreng	0	3	0	3	2%	14.000	39.000	25.000	42.000	117.000	75.000	LOW	LOW	Dog	D
8	Kari Bihun	1	2	1	4	2%	20.000	47.000	27.000	80.000	188.000	108.000	HIGH	LOW	Puzzle	A
TOTAL					166		121.000	297.000	176.000	2.953.000	7.381.000	4.428.000				

Food Cost Percentage(Total Cost/Total Revenue) **40%**
 Average Item Profit(Total Profit/Number Sold) **26.675**
 Menu Popularity Factor(1/Number Sold)*0.7 **9%**

Figure 7. Data Analysis Results of the Engineering Menu of Main course Worksheet in the Period January-March 2023

Source: Author (2023)

The results in Figure 7 above show that there are 8 types of *main course menus*. There are 3 types of menus that fall into the "dog" category, namely Indomie Kuah Laku, Nasi Rendang, and Fried Chicken Rice. Efforts that can be made to avoid losses are by eliminating several menus in the "dog" category or reducing prices and reducing food portions.

CONCLUSION

Based on the results of the analysis, it can be concluded that several menu items can be maintained and also eliminated. Of the 18 types of menus sold, there are 6 types of *snacks* and There are 2 types of menus that must be eliminated, namely tofu meatballs and fried meatballs. There are 8 types of *main courses* being sold, there are 3 *main courses* that must be removed, namely Indomie Kuah Laku, rendang rice and fried chicken rice. In total, there are 5 menu types that will be deleted which are classified as the "dog" menu item class.

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