## ANALYSIS OF MENU AND MENU ENGINEERING PLANNING IN PASTRY DEPARTMENTS IN MERCURE HOTEL JAKARTA SIMATUPANG

Rahma Ramzani<sup>1</sup>, Diaz Pranita<sup>2</sup>, Annisatul Auliya<sup>3</sup>

<sup>1,2,3</sup>Tourism Study Program, Vocational Education Program University of Indonesia

Email: rahmarmzn@yahoo.com

## ABSTRACT

This journal discusses about the analysis of menu planning and menu engineering in the pastry department at Mercure Hotel Jakarta Simatupang. The type of research used in this assignment is a descriptive research. The data collection techniques derived from interviews, observations and literature study through the online book. Those source of data becomes an element of description on the subject. The final research recommends Mercure Hotel Jakarta Simatupang to improve the strategy of menu planning and analysis on Karumba! Rooftop restaurant, which intended to improve the effectiveness and efficiency.

Keyword: Menu Planning, menu engineering, effective, efficient

## ABSTRAK

Jurnal ini membahas tentang analisa perencanaan menu dan menu engineering pada departemen pastry di Hotel Mercure Jakarta Simatupang. Jenis penelitian yang digunakan dalam penelitian ini adalah penelitian deskriptif. Teknik pengumpulan data berasal dari wawancara, observasi, dan kestudi pustakaan melalui buku online. Sumber data tersebut menjadi unsur deskripsi pada pokok pembahasan. Hasil penelitian menganjurkan Hotel Mercure Jakarta Simatupang untuk meningkatkan strategi perencanaan dan analisa menu pastry pada restoran Karumba! Rooftop, yang dilakukan agar operasionalnya berjalan lebih efektif dan efisien.

Kata Kunci: Perencanaan Menu, menu engineering, efektif, efisien

## **INTRODUCTION**

The tourism sector is able to contribute significantly to a country's economy. That is due to the technical operation of the tourism sector which involves other sectors. The data states that the average annual growth in the 2017-2027 period is estimated to reach 4.0%. while the total contribution of this sector in 2016 was US \$ 7.61 trillion, equivalent to 10.2% of global GDP, and will increase by 3.9% to US \$ 11.51 trillion in 2027. (World Travel & Tourism Council, 2017). The development of the tourism sector in Indonesia continues to increase every year. According to data taken based on the official report of the World Economic Forum (2017), after gaining an increase from rank 70 in 2013 to rank 50 in 2015, Indonesia's competitiveness index again shot up 8 places to rank 42 in 2017. In this regard, Tourism Minister Arief Yahya said that Indonesia's tourism sector could become the country's largest foreign exchange earner and also be the best tourism destination at the regional and global level.

Sinaga (2010) states that tourism is a planned trip, which is carried out individually or in groups from one place to another in order to get a form of satisfaction and pleasure. One area in the tourism sector is the hospitality industry. The hotel becomes a residence as well as a provider of facilities and services as long as tourists leave their homes, and is one of the businesses in the field of tourism that is managed commercially. A hotel must try to manage its operations to run effectively and efficiently. According to Martoyo (2000) effectiveness is a condition or condition, where in choosing the objectives to be achieved and the means or equipment used, accompanied by objectives that can be achieved with satisfactory results. While efficiency is the achievement of maximum output from the use of certain resources. If the output produced is greater than the resources used, the higher the level of efficiency achieved. (Marsaulina, 2014).

The hotel industry consists of several departments that provide services in different fields. The main services offered are accommodation and food and beverages or commonly referred to as Food and Beverage (F&B). F&B is a department that plays an important role in hotels, because the sustainability of hotel operations is supported by the needs of food and beverages from the F&B Department. F&B Department consists of 2 sub divisions namely F&B Service and F&B Production. F&B Production or Kitchen itself is divided into several sub-divisions, this can be adjusted to the size of the hotel. There are 5 sub divisions in Kitchen at the Mercure Jakarta Simatupang Hotel, namely Hot Kitchen, Garde Manger, Butcher, Preparation and Pastry. Pastry is a subdivision where the writer conducts training. According to Bartono (2005: 164) in his book Food Product Management in Hotels and Restaurants said that pastry is part of the kitchen which specifically produces various types of bread, cake, and dessert.

Each sub division contained in the kitchen aims to provide products to every guest needs. In order to obtain the desired income, the entire F&B Department must operate. its operations effectively and efficiently, and has a good management system and strategy. While following work practices, writers often find products that are wasted so that it becomes a waste product. Something that is wasted (waste product) will bring down costs so that if it is not controlled it can cause high food costs, which in turn will indirectly affect the profitability of the hotel. To recover unnecessary costs (waste), food and beverage services must adopt menu engineering analysis.

Menu engineering can be used as a strategy to increase the effectiveness and efficiency of product sales in the menu. Menu engineering according to Kasavana and Smith (1982) is a methodology for classifying menu items with the level of contribution margin and popularity, as well as categorizing each menu item into one of four categories namely star, plowhorse, puzzle and dog. The main objective in the analysis of menu engineering is to find a balance between menus with high food costing that causes waste products, and menus with low food costing that cause losses for restaurants. Identifying the categories for each item in the menu can determine what items must be maintained, removed or updated, so as to reduce the wasted product. Based on the thoughts above, this study was conducted to analyze the pastry menu offered by the Mercure Jakarta Simatupang Hotel.

## LITERATURE REVIEW

According to Adjab Subagjo, (2007:87) in his book Cake & Bread Processing Management, pastry is part of a food product or kitchen that is within the scope of the F&B Department which has the task of making desserts or desserts, snacks or food delivery drinks, such as cakes and bread. Meanwhile, according to Bartono (2005: 164) in his book Food Product Management in Hotels and Restaurants said that pastry is part of the kitchen that specifically produces various types of bread, cake, and dessert. Based on these two definitions, it can be concluded that the pastry in the world of hospitality is one part of the kitchen in charge of producing various kinds of dessert. In another sense, according to the processing of cakes and breads in Sudewi and Patriasih (2005) pastry is a dough that is layered with butter or fat in order to obtain a layered or coated result.

Pastry has an important role in a hotel, some pastry roles according to Adjab Subagio (2007:25), including:

- 1. Supporting the smooth operation of hotels in general, food and beverage in particular with their own production, cleanliness quality, price and time can be accounted
- 2. Increase revenue by selling products
- 3. Raise the image / good name of the hotel if the production is of high quality and satisfies consumers. Besides that, pastry for the general public can increase income and open job vacancies.

The role above is supported by the supply of pastry products, according to Bartono and Rufino in Food product Management (2005) pastry products can be distinguished according to their needs, including:

- 1. For the purposes of breakfast in the form of various breads
- 2. For the purposes of lunch in the form of various desserts
- 3. For dinner, like lunch
- 4. For the purposes of hot kitchen and cold kitchen
- 5. For the purposes of various events that require bread or dessert products as pastry products.
- 6. Non-food products such as decorations, butter carving, miniature buildings, for decoration and others.

In serving food, a well-prepared menu will help regulate food preparation. Therefore, menu planning is one of the main things that must be considered in running a restaurant business. The menu itself is the most important part in the concept of a restaurant, so the selection of menu items requires careful analysis. There are various factors that must be considered in planning a menu. According to John R. Walker (2011) the following are factors that must be considered in the menu planning process:

1. Capability of Cooks

The ability of chefs to produce products of the required quality and quantity is a basic consideration

2. Equipment Capacity and Layout Menu planning must think about the

equipment used in making each menu item, this is done to prevent excessive use of equipment

#### **3.** Availability of Menu Ingredients High quality ingredients produce high quality products. Therefore, a constant and reliable source of suppliers at reasonable prices must be maintained

4. Cost, Pricing Strategy dan Contribution Margin

Determination of food prices requires the right strategy, comparison between competitors must also be considered because it will create a perception of the guests of the products or services offered. Besides food cost and portion size are the best indicators in determining the price of a product

5. Nutritional Value

Some guests pay attention to the nutrients in the food consumed. This will increase the demand for healthy menu items, such as chicken and fish. Various methods are used in order to serve guests by choosing a healthy menu. Some restaurants even offer vegetarian items on the menu offered

#### 6. Accuracy in Menu

A restaurant must describe the menu items correctly and accurately. Because this factor can provide a bad experience for guests because of dissatisfaction with the products presented

## 7. Type of Menu

a. A'la Carte

According to Wojowasito and Poerwodarminto (Marsyangm, 1999:71) the A'la Carte menu is a restaurant that gets full permission to sell complete food with many variations where guests are free to choose their own food they want. Every food in this restaurant has its own prices

### b. Table D'Hote

Menu Table D'hote is a complete menu arrangement from appetizer to dessert and certain, with a predetermined price

c. Specialty

There are various forms of types of specialty menus, including daily special menus, chef's special or cycle menus that have set offer periods

## 8. Menu Analysis

Menu analysis can also be called menu engineering analysis. Analysis of menu engineering can conclude each menu item into a category that can determine which menus must be maintained, evaluated or excluded from the menu list.

#### 9. Menu Design and Layout

The menu is also referred to as a restaurant promotion tool. Menu design and layout is a selection of the restaurant manager itself, the menu must look attractive but still look simple and clearly understood. This menu is also usually adjusted to the theme of the restaurant.

#### 10. Standard Recipes

Standard recipes are used to maintain the consistency of a food, both in terms of quality and quantity. Standardizing recipes can help chefs measure portions, determine ingredients, weight, production steps, cooking methods and even when cooking a product.

**11. Food Cost Precentage** 

Food cost percentage is a reflection of menu pricing. This percentage is intended to be a barometer of profitability targets of restaurants.

#### 12. Menu Trends

Every menu and even food items can be created so that it becomes a new innovation. As one of the fields engaged in the culinary business, hotels must continue to follow trends and be flexible to developments and changes

Over the years the concept of menu engineering has continued to be developed, but an important point in this concept is the balance between menus that have high food costs and low ones so as not to cause waste products or losses. Associated with the work of Kasavana and Smith (1982), states that menu engineering is a methodology that analyzes the popularity and contribution (profitability margins or profits) of individual menu items and provides labels for each of these individual menus for the purpose of future marketing planning and management activities. In addition, Bayou and Bennett (1992) propose an approach to menu analysis and techniques in which each item at each meal is analyzed. The breakfast, lunch, and dinner menu items are analyzed to calculate their profitability measures, so the main purpose of the menu engineering is maximize profits by encouraging to consumers to choose the menu items that produce the most profit and direct them to keep away from unfavorable menu items.

The main analysis of menu engineering is to find classifications based on the level of popularity and profitability of each individual menu item. The first thing to do is to look for the percentage of sales (percentage of sale) of each menu item, namely by dividing the number of items sold on the menu by the total number of sales of all menu items offered. The following formula from the explanation above

#### Percentage of Sales = total item sold/total menu item sold x 100%

The next step is to look for Average Popularity, by dividing 1 by the number of menu items in the overall menu offered.

#### Average Popularity = 1/total menu item x 100%

After finding the results of average popularity, then the high or low popularity of the menu can be determined by comparing the percentage of sales of a menu item with average popularity. And the percentage of menu items that are above average popularity is considered popular, and vice versa.

After determining the popularity as described above, then we must determine the profitability status of a menu item to classify the menu items offered. The first thing to do is to look for contribution margins (contribution margins) from each menu item, namely by reducing the sale price (menu price) with the food cost of each menu item. The following formula from the explanation above:

#### Contribution Margin = item menu priceitem food cost

The next step is to determine the average contribution margin, this average is obtained from the sum of the contribution margins of the entire menu divided by the total available menu.

The following formula from the explanation above:

## Average Contribution Margin = total contribution margin/total menu item

Then the profitability status can be determined by comparing the contribution margin with the average contribution margin of each menu item. The result is if the contribution margin of a menu item is higher than the average contribution margin, then the item is profitable, and vice versa.

Engineering menu classification is the conclusion of the calculation of menu engineering analysis, this classification aims to make menu sales run effectively and efficiently. In classifying the status of these menu items, we must determine the popularity and profitability status of each item on the menu as explained in the previous sub-chapter. Kasavana and Smith (1982) categorize engineering menus into four classifications, along with a matrix with an explanation of each classification: Cash gross profit contribution



**Picture 1. Engineering Menu Matrix** Source: Kasavana dan Smith (1982)

## METHODELOGY

This type of research used in this journal is descriptive research. According to Punaji Setyosari (2010) descriptive research is research that aims to explain or describe a situation, event, object whether a person, or everything related to variables that can be explained either by numbers or words. Therefore this research will describe the process of menu planning and menu engineering analysis. In addition, according to Sugiyono (2013:224) data collection techniques are the most strategic step in research, because the main purpose of research is to obtain data. The following data collection techniques used by the author:

#### 1. Interview

According to Esterberg in Sugiyono (2013:231) interview is a meeting of two people to exchange information and ideas through questions and answers, so that meaning can be constructed in a particular topic. In this method the authors conducted interviews with executive chef and sous chef kitchen as a source of discussion data.

#### 2. Observation

Sutrisno Hadi in Sugiyono (2013:145) argues that, observation is a complex process, a process that is composed of various biological and psychological processes. Two of the most important are the processes of observation and memory

#### **RESULT AND DISCUSSION**

A good menu planning, will have an impact on the success of a restaurant based on various factors. Next, the writer will describe the menu planning policy in the pastry department in one of the restaurants in the Mercure Jakarta Simatupang Hotel, Karumba! Rooftop. This menu planning analysis is based on understanding concepts compared to the author's observations during work practice.

#### 1. Capability of Cooks

The chefs in the pastry department are considered capable of producing products of the quality and quantity required by the hotel. It can be said that, because the pastry department is able to provide products according to demand. The ability of each individual is gained from work experience. In addition, the chefs in the pastry department also participated in training programs and workshops on learning about the pastry world.

## 2. Equipment Capacity and Layout

The equipment available in the pastry department is still limited, but the chefs can make use of every tool available and use it to its full potential. The layout of the equipment has been arranged as well as possible, but the limitations of space and existing equipment sometimes reduce work efficiency in the pastry.

Menu Item	Equipment		
Crème Brulee	Scale, bowl, whisk, oven		
Fondue	Knife, pan, stove, whisk		
Churros	Scale, mixer, pan, stove, spatula		
Fruit Yoghurt	Mixer, whisk, bowl, pan, stove, cake cutter, palette knife		
Strawberry Cheesecake	Scale, mixer, cake pan, oven, palette knife		

Table 1. Tool Menu Pastry on Karumba! Rooftop

Source: Author's Data, 2018

## 3. Availability of Menu Ingredients

Every basic need for pastry is in the storage and preparation division. Daily pastry ingredients are recorded in a form called a market list. This market list serves as a guide in purchasing staples, therefore the chefs in the pastry division must understand the ingredients needed in making each product.



Picture 2. The Process of Providing Menu Ingredients Source: Author's Data, 2018

## 4. Pricing Strategy, Cost, and Contribution Margin

The selling price of pastry menu items is determined by the executive chef with a calculation called food

considerations costing. Other of determining the selling price are through comparison with competitors, as well as adjustments to the portion and type of products offered. Another thing that becomes the hotel strategy in determining the selling price of food is to balance the percentage of food cost from menu items, so that each menu generates profit with a percentage that is not much different. While contribution margin is the amount of profit from the sale of menu items by reducing the selling price (menu price) with the food cost of the menu items. The following table contains the cost, pricing and contribution margins of the five menu items offered by Karumba restaurants! Bar.

Table 2. Pricing Strategy, Cost, and MarginContribution

Menu Item	Menu Price	Food Cost	Margin
Menu Rem	(Rp)	(Rp)	Contribution (Rp)
Crème Brulee	72.000	27.338	44.662
Fondue	75.000	25.436	49.564
Churros	35.000	12.612	22.388
Fruit Yoghurt	75.000	17.332	57.668
Strawberry	79.000	25.727	53.273
Cheesecake	/9.000	25.727	55.275

Source: Consolidated RVC Menu Item Sales Detail, 2018

## 5. Nutritional Value

The pastry division at the Mercure Jakarta Simatupang Hotel still does not pay attention to the nutrition contained in every product offered. Each pastry product has different nutritional content, such as sugar, fat, and other ingredients. The amount of ingredients depends on the type of cake and filling used. Although the products in the pastry are division predominantly sweet desserts, by following a balanced and low-fat diet, we can adjust products with more nutritious ingredients and are low in fat and sugar or at least identify the calorie, carbohydrate, protein and fat content available. on each menu item offered.

#### 6. Accuracy in Menu

Dessert menu at the Karumba restaurant! Rooftop explained accurately. First is the description of the menu offered has been explained accurately and easily understood, this description is also written in 2 languages namely English and Indonesian. Second is the price listed on the menu item choices offered, the price of the menu written is the actual selling price. In addition there is an explanation on each menu page that the prices listed are non-tax prices of 21% of the total food price. Finally, a photo of the food offered is the original form of food served, each aspect of the explanation above can provide an accurate picture of the food that will be offered.

### 7. Type of Menu

A'la Carte and Table D'hote. A'la Carte menu types are regular menu types offered to guests, while Table Dote menu types are occasional menu types that are offered to guests at certain times with different menu items. The Menu Table D'Hote at the Hotel is also called the Blackboard Menu. The food items offered on this menu are replaced once a month.

### 8. Menu Analysis

Menu analysis is carried out by restaurant managers with an understanding of menu engineering theory. But instead of grouping each menu item into one of the available categories, the concept of searching for menus according to popularity is done by offering a Table Dote menu or commonly called the Blackboard Menu.

## 9. Menu Design and Layout

Menu design and layout are important factors that can represent the atmosphere of the restaurant itself. A'la Carte menu on Karumba! Rooftop is designed with a horizontal rectangular shape, consisting of 13 menu pages, with a predominant color theme in gray and brown colored writing that looks modern. The menu layout is divided into two main parts namely the menu bar and food choices, then the menu is categorized based on the type of food and drink.

#### **10. Standard Recipes**

The pastry division has implemented standard recipes in every manufacturing of its products. Standard recipes are intended to maintain the consistency and quality of the products produced. These standard recipes are written in a file stored in the pastry room as a guide for every staff in the pastry division in making a product, including existing trainees.

#### Table 3. Standard Recipes Pastry Menu

CRÈME BRULEE		FRUIT YOGHURT	
INGREDIENTS	AMOUNT	INGREDIENTS	AMOUNT
Yolks	12 pcs	Sugar	500 gr
Sugar	120 gr	Yolks	15 pcs
Fresh Cream	1L	Plain Yoghurt	750 gr
Vanilla Essence	5 gr	Gelatine Powder	100 gr
		 Whipped Cream	2L
		Chopped Peach	

CHURROS		STRAWBER	STRAWBERRY CHEESECAKE		
INGREDIENTS	AMOUNT	INGREDIENTS	AMOUNT		
Water	1L	Cream Cheese	2 kg		
Butter	400 gr	Sugar	660 gr		
Sugar	20 gr	Eggs	16 pcs		
Salt	20 gr	Melted Butter	135 gr		
Flour	600 gr	Fresh Cream	198 gr		
Eggs	14 pcs	Strawberry Filling	40 gr		

Source: Mercure Jakarta Simatupang Hotel Pastry Department

#### 11. Food Cost Precentage

Food cost percentage is related to menu pricing calculation. The policy of determining the percentage of menus at the Mercure Jakarta Simatupang Hotel was made by executive chef. The size of each menu item offered is balanced so that each menu item has a large advantage that is not much different.

#### 12. Menu Trends

The pastry division at the Mercure Jakarta Simatupang Hotel has followed 2 kinds of trends, namely infinity glaze and cake with a blend of local ingredients in the provision of menu variations in buffets and also special occasions, which are Eid last year. But judging from the type and appearance of the menu, the trend has not been applied to the menus offered at Karumba! Restaurants Rooftop.

Percentage of sale is based on a report on the number of sales per item during March 2018, average popularity is obtained by dividing one by 5 menus offered. Then the results of the popularity level are obtained by comparing the large percentage of sale menu per item with the average average popularity. If the percentage of sale is higher than the average popularity, the result of the sale of one menu item is high and vice versa.

Table 4. Popularity level of Pastry Menu atKarumba Restaurant! Rooftop

Determining Popularity				
Menu Item	Percentage of Sales	Popularity		
Crème Brulee	14.29%	Low		
Fondue	3.57%	Low		
Churros	21.43%	High		
Fruit Yoghurt	28.57%	High		
Strawberry				
Cheesecake	17.86%	Low		
Average Popularity		20%		

Source: Author's Data, 2018

Based on the analysis of the table above, it can be seen that the dessert menu that has a high level of popularity is churros and fruit yogurt. whereas, Crème Brulee, fondue and strawberry cheesecake have a low level of popularity.

Determining Profitability				
Menu Item	Menu Price (Rp)	Food Cost (Rp)	Margin Contribution (Rp)	Profitability
Crème Brulee	72.000	27.338	44.662	Low
Fondue	75.000	25.436	49.564	High
Churos	35.000	12.612	22.388	Low
Fruit Yoghurt	75.000	17.332	57.668	High
Strawberry Cheesecake	79.000	25.727	53.273	High
Total			227.555	
Average Margin Contribution				45.551

## Table 5. Profitability Level of Pastry Menu at Karumba! Restaurant Rooftop

Source: Author's Data, 2018

Based on the analysis of the table above, it can be seen that there are three dessert menu items that have a high level of profitability, namely fondue, fruit yogurt and strawberry cheesecake. Then there are two dessert menu items that have a low level of profitability, namely Crème Brulee and Churros.

After getting the level of popularity and profitability of each item in the menu, then we can classify the items into one of the existing classifications namely star, plowhorse, puzzle and dogs. And analysis of the engineering menu is intended to increase the effectiveness and efficiency of sales

# Table 6. Classification of Pastry Menu in Karumba! Restaurant Rooftop

Classification					
Menu Item		Popularity	Popularity Profitability		
Crème Brulee	Crème Brulee		Low	Dogs	
Fondue	Fondue		High	Puzzle	
Churros	Churros		Low	Plowhorse	
Fruit Yoghurt		High	High	Stars	
Strawberry Cheesecake	Low	High	Puzz		

Source: Author's Data, 2018



Picture 3. Matrix of Analysis Results from the Engineering Menu Source: Author's Data, 2018

## CONCLUSION

Planning a pastry menu at a Karumba restaurant! Rooftop still needs to be improved, especially in the nutritional value and menu trends section. Analysis of the engineering menu on the pastry menu at the Karumba restaurant! The rooftop also shows that the dog classification menu item, crème brulee, is an item that must be discarded, because it is less desirable by guests and does not provide benefits for the restaurant. Also, analyze the engineering menu on the pastry menu at the Karumba restaurant! Rooftop shows that menu items with puzzle classification, namely fondue and strawberry cheesecake, should be increased by finding creative ways so that menu items can be sold, because these menu items can provide large profits if many are interested by guests.

Finally, analyze the engineering menu on the pastry menu at the Karumba restaurant! Rooftop shows that a menu item with plowhorse classification namely churros should be considered to raise prices, reduce portions of menu items or other things that can provide greater benefits for restaurants. Analysis of the engineering menu on the pastry menu at the Karumba restaurant! The rooftop also shows that the menu item with the star classification of fruit vogurt needs to be maintained, besides that the chef needs to innovate to develop a similar menu or that is expected to be of great interest to guests.

#### RECOMMENDATION

The advice that the writer can give to the executor of the Food and Beverage (F&B) business is to better consider the importance of good menu planning, because good menu planning and analysis can have a major impact on the effectiveness and efficiency of the Food and Beverage (F&B) business, especially restaurants. While the writer's advice to the company is to conduct research or market surveys, always monitor trends, especially the pastry world, and increase the creativity and innovation of the products created.

#### REFERENCE

- Bartono, & Ruffino. (2005). *Food Product Management di Hotel dan Restoran.* Yogyakarta: ANDI.
- Kasavana, M., & Smith, D. (1982). *Menu* engineering: A practical guide. Lancing: Hospitality Publisher.
- Marsyangm. (1999). Manajemen Jasa Pendekatan Terpadu. Bogor: Ghalia Indonesia.
- Martoyo, S. (2000). *Kepemimpinan dan Motivasi*. Jakarta: Ghalia Indonesia.
- Patriasih, R., & Sudewi. (2005). *Modul Mata Kuliah Patiseri*. Bandung.
- Setyosari, P. (2010). *Metode Penelitian Pendidikan dan Pengembangan.* Malang: Elang Mas.
- Subagjo, A. (2007). *Manajemen Pengolahan Kue dan Roti*. Yogyakarta: Graha Ilmu.
- Sugiyono. (2013). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D.* Bandung: CV Alfabeta.
- Walker, J. R. (2011). *The Restaurant From Concept to Operation*. Canada: Wiley.

Bayou, M. E., & Bennet, L. B. (1992). Profitability Analysis for Table Service Restaurant. *Cornell Hotel and Restaurant Administration Quarterly*, 49 - 55.

- Marsaulina, I. (2004). Studi Tentang Pengetahuan Perilaku dan Kebersihan Penjamah Makanan Pada Tempat Umum Pariwisata DKI Jakarta.
- Sinaga, S. (2010). Potensi dan Pengembangan objek wisata di kabupaten Tapanuli Tengah. Program DIII Pariwisata. Universitas Sumatera Utara.
- Turner, R. (2017). *Economic Impact 2017 World*. Retrieved April 11, 2018, from World Travel & Tourism:

www.wttc.org/-/media/files/reports/economicimpact-research/region-2017/world2017.pdf