

ANALYTICAL HIERARCHY PROCESS (AHP) APPROACH ON CONSUMER PREFERENCE IN SELECTING RESTAURANT (STUDY: CABAL DINING, JW RESTAURANT AND JUNGLE BEER)

ANALISIS HIRARKI PROSES PADA PREFERENSI KONSUMEN DALAM MEMILIH RESTORAN (STUDI: CABAL DINING, JW RESTAURANT DAN JUNGLE BEER)

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Abstract: Eating is a daily necessity. According to the hierarchy of needs, a person must fulfill the physiological needs which are food, water, air and shelter. People concentrate on satisfying these needs before turning to higher needs. Consumer purchase decision is the process involved when individuals or groups select, purchase, use or dispose products, services or experience and ideas to satisfy their needs. It is important because in understanding customer decision making, we will understand how consumer make the purchase decision, how the process of decision making by customer from searching until selecting the product or service. This research used quantitative method. Quantitative research seeks to quantify the data. The method used in this research is Analytical Hierarchy Process (AHP). AHP is a method for ranking decision alternatives and selecting the best one given multiple criteria. It allows users to assess the relative weight of multiple criteria or multiple options against given criteria in an intuitive manner.

Keywords: *customer decision making, analytical hierarchy process*

Abstrak: Makanan adalah kebutuhan sehari-hari. Menurut hierarki kebutuhan, seseorang harus memenuhi kebutuhan fisiologis yaitu makanan, air, udara dan tempat tinggal. Orang berkonsentrasi pada memuaskan kebutuhan ini sebelum beralih kepada kebutuhan yang lebih tinggi. Keputusan pembelian konsumen adalah proses yang terlibat ketika individu atau kelompok memilih, membeli, menggunakan atau membuang produk, layanan atau pengalaman dan ide-ide untuk memenuhi kebutuhan mereka. Hal ini penting karena dalam memahami pengambilan keputusan pelanggan, kita akan memahami bagaimana konsumen membuat keputusan pembelian, bagaimana proses pengambilan keputusan oleh pelanggan dari mencari sampai memilih produk atau jasa. Penelitian ini menggunakan metode kuantitatif. Penelitian kuantitatif bertujuan untuk mengukur data. Metode yang digunakan dalam penelitian ini adalah Analisis Hirarki Proses (AHP). AHP adalah metode untuk peringkat alternatif keputusan dan memilih yang terbaik beberapa kriteria yang diberikan. Hal ini memungkinkan pengguna untuk menilai bobot relatif dari beberapa kriteria atau beberapa pilihan terhadap kriteria yang diberikan secara intuitif.

Kata kunci: *keputusan pembelian konsumen, analisis hirarki proses*

INTRODUCTION

Research Background

Eating is a daily necessity. According to the hierarchy of needs, a person must fulfill the physiological needs which are food, water, air and shelter. People concentrate on satisfying these needs before turning to higher needs (Lewis, 1981). In a fast paced and affluent society, eating out in restaurants has also become an important social and business occasion. The consumers usually have a wide range of options to choose from. There are restaurants by the thousands offering a full range of food varieties and services. As the number of restaurants has mushroomed, so the business has become much more competitive.

Consumer plays an important role in the restaurant industry. Without consumer, the restaurant business can not survive in the industry. The attitude of consumers is also gradually changing mainly due to increased income levels, strong economy, changing life styles and habits of customers. Consumer now become more selective and has many considerations to in the decision making to select place for eating. Many criteria set by the consumer before they make their choice. As the number of meals eaten outside the home continues to increase, the restaurant industry is one of the fast growing service industries in North Sulawesi. With growing competitiveness in the restaurant industry and the similarity of products or services offered by restaurants, it has become increasingly important that restaurants identify the factors that determine the basis upon which customers choose between restaurants.

In Manado city, the industry of restaurant industry growing rapidly. There are many restaurant that can be found in Manado. From a different service, targeted consumer and location, from low price to high price (or the kind of restaurant). It lead to competitive market where the one who can fulfill consumer demand can survive in the industry.

One of the most fast growing types of restaurant is the Club lounge type of restaurant which is happening lately. This kind of restaurant is mushroomed and become popular in the community especially the youngsters. JW Restaurant, Jungle Beer and Cabal Dining are some of the most attractive Restaurant in Manado City. Those three restaurants have different strategy serving their costumer to make them a loyal consumer, from offer discount, put advertisement in newspaper and improve their service and many others. Regarding the circumstance above, through this research will analyze that three Restaurant in Manado (JW Restaurant, Jungle Beer and Cabal Dining) with the criteria that can influence consumer preferences to select a restaurant and try to find which restaurant to meet the customers' expectations the most and which criteria has influence the most people in selecting a restaurant.

Research Objectives

1. To identify which restaurant people choose the most.
2. To identify which criteria has influence the most in selecting restaurant.

THEORITICAL FRAMEWORK

Marketing

Marketing defined by Kotler and Armstrong (2008) is about identifying and meeting human and social needs. Marketing has two facts. First, it is a philosophy, an attitude, a perspective, or a management orientation that stresses customer satisfaction. Second, marketing is activities and processes used to implement this philosophy. Marketing is the activity, set of institution, and processes for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large. Burns and Bush (2006:4) defined marketing as "an organization function, not a group of persons or separate entity within the firm. It is also a set of processes and not a single tactic such as creating and end-aisle display. The processes create, communication, deliver value to customers. Marketing is not trying to sell customers something; rather, it is providing customers with something they value. The objective of marketing is to create and manage customer relationships for the benefit of the organization and its stakeholders".

Marketing is a process that occurs in organizations and business that must be well-organized so that it will lead the business and organization reach their objectives in terms of delivering value and create long term relationship with their targeted customers or groups.

Consumer Behavior

Consumer behavior is defined as the behavior that consumers display in searching for purchasing, using, evaluating and disposing of products and services that they expect will satisfy their needs. Consumer behavior focuses on how individual make decisions to spend their available resources (time, money, effort) on consumption related items (Schiffman and Kanuk, 2004). Consumer behavior is the study of individuals, groups, or organizations and the process they use to select, secure, use, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society. (Hawkins, Best and Coney 2004:7). It is very important how businesses understand the consumer behavior so that it will easily drive them to the expected activity which is purchase decision that in the end will be useful for the increase of selling and profit for the businesses.

Consumer Preference

Preference and acceptance in certain circumstances can mean the same thing but it is useful to keep the distinction in mind with preference tending to indicate choices among neutral or more valued options with acceptance indicating a willingness to tolerate the status quo or some less desirable option (Schaw et al, 2007).

Service Quality

A service is any act or performance one party can offer to another that is essentially intangible and does not result in the ownership of anything. Its production may or may not be tied to a physical product. Service providers need to understand how consumers choose and evaluate their Offerings (Zeithaml, 1988).

Restaurant Environment

Ambient condition reflect the distinctive atmosphere of the service setting and include elements such as lighting, air quality, noise, music, and so on (Bateson and Hoffman, 2008). It indicated that, in some situations, the atmosphere of the place could be as much important as the product itself (e.g., foods and services) in purchasing decision making.

Price

Price is that which is given up in an exchange to acquire a goods or service. Price plays two roles in the evolution of product alternatives: as a measure of sacrifice and as an information cue (McDaniel et al, 2011). Price is a value that will purchase a finite quantity, weight, or other measure of a good or service.

Product

A good, idea, method, information, object or service created as a result of a process and serves a need or satisfies a want. It has a combination of tangible and intangible attributes (benefits, features, functions, uses) that a seller offers a buyer for purchase (Business Dictionary, 2014).

Location

The retailing axiom “location, location,location” has long emphasized the importance of place to the retail mix. The location decision is important first because the retailer is making a large, semipermanent commitment of resources that can reduce its future flexibility. Second, the location will affect the store’s future growth and profitability (McDaniel et al, 2011).

Multi-Criteria Decision Making

Most decision making involves complicated procedures in which decision makers rank the alternatives of a choice according to multiple criteria (Saaty, 2008).

Previous Research

Azrina and Alaudeen (2012), the respondents were asked to indicate the importance factors that are important to their opinion along a five-point scale. In this study, 180 respondents were selected. The questionnaires were distributed to every customer who walked into the restaurant. It could be summarized that consumers put heavy priorities on food quality, followed by trustworthiness, service quality, price, environment, and location. Harrington, Ottenbacher and Kendall (2011), examined the relationship among six restaurant attribute factors and three consumer characteristics/behavior in fine-dining restaurant choice selections. The six factors are described as promotion, price/value, quality expectation, setting, dietary, and variety/innovative characteristics. Gender, age, and dining frequency were shown to impact the strength of the relationship with these six factors.

The fourth article focuses on the restaurants in Pakistan, as this industry showing higher market and consumption in Pakistan. According to the economic survey of Pakistan 2011-12 urban population of the Pakistan is 67.55 million showing a large market for the restaurants as the restaurants are mostly be successful in the urban areas, not in rural because of the expenditure patterns of households. (Azim et al, 2014). The fourth article by Neha (2012), aims to contribute to the limited research in this area and provide insight into the consumer decisionmaking process specifically for the India foodservice industry. The fifth article from Abdullah, Zainoren, Abdurahman, and Hamali (2011), presents the dimensions of customer preference in the food service industry, tested empirically for undimensionality, reliability and validity using both exploratory and confirmatory factor analysis.

RESEARCH METHOD

Type of Research

This research will use quantitative method. Quantitative research seeks to quantify the data with comparative type. It seeks conclusive evidence based on large, representative samples and typically involving some form of statistical analysis (Maholtra, 2009 : 180).

Place and Time of Research

This research is conducted in Manado city. These research use customers that have experience eating at those three restaurants as the respondent. This research was held from February – May 2016.

Conceptual Framework

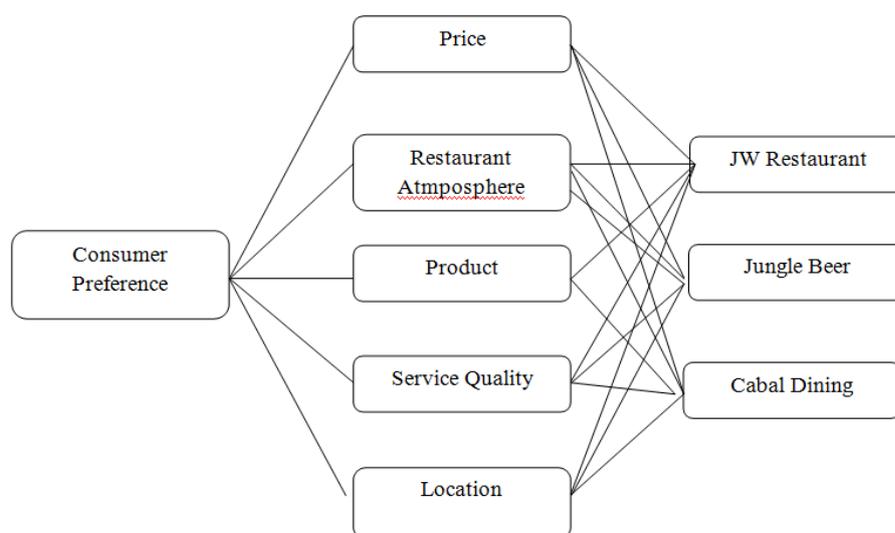


Figure 3.1 Conceptual Framework

Source: Data Process, 2016

Population and Sample

Population refers to the entire group of people, events, or things of interest that the researcher wishes to investigate. It is the group of people, events, or things of interest for which the researcher wants to make inferences based on sample statistics (Sekaran and Bougie, 2009). Population in this research is people in Manado who have experience eating at JW Restaurant, Jungle Beer and Cabal Dining. According to Sekaran and Bougie (2009) sample is a subset of the population. Research is all customers JW Restaurant, Jungle Beer and Cabal Dining as many as 50 respondents that already eating at that three restaurants. The sampling design is purposive sampling. Purposive sampling is sample selected in a deliberative and non-random fashion to achieve a certain goal.

Data Collection Method

Primary data refer to information obtained first-hand by the researcher on the variables of interest for the specific purpose of the study (Sekaran and Bougie, 2009). Individuals provide information when interviewed, administered questionnaires, or observed. Group depth interviews, or focus groups, are another rich source of primary data. The primary data used in this research is questionnaire that will be distributed to respondents. Secondary data refer to information gathered by someone other than the researcher conducting the current study (Sekaran and Bougie, 2009). The secondary data used in this research is taken from books, relevant literature and journals from library and internet. Secondary data in this research were used in the research background, literature review and research methodology.

Operational Definition of Research Variable

1. Restaurant criteria mean factors of restaurant that influencing people or reason why people want to eat at restaurant.
2. Price
Price in this research indicated that which is given up in an exchange to acquire a goods or service. Price is very important due to consumer decision making especially in selecting restaurant.
3. Restaurant Environment
Restaurant environment in this research indicated the that condition reflect the distinctive atmosphere of the service setting and include elements such as lighting, air quality, noise, music, and so on is considered by the consumer.
4. Product
Product in this research indicated that the restaurant serving a good product in specific, the foods and beverages because it is the main thing consumer looking for from the restaurant.
5. Service Quality
Service quality in this research indicated that the restaurant have a good and polite staffs, friendly and also helpful for the consumer in order to meet their needs and wants at the restaurant. It can be used to measure the customer satisfaction.
6. Location
Location in this research indicated that the restaurants are near with city center, beach, shopping center and easy to reach should be highly considered by respondent.
7. Alternatives:
 - a. Cabal Dining
 - b. JW Restaurant
 - c. Jungle Beer

Data Analysis Method

The Analytic Hierarchy Process (AHP) is due to Saaty (1980) and is often referred to, eponymously, as the Saaty method. It allows users to assess the relative weight of multiple criteria or multiple options against given criteria in an intuitive manner. In case quantitative ratings are not available, policy makers or assessors can still recognize whether one criterion is more important than another. Therefore, pairwise comparisons are

appealing to users. Saaty established a consistent way of converting such pairwise comparisons (X is more important than Y) into a set of numbers representing the relative priority of each of the criteria. The AHP generates a weight for each evaluation criterion according to the decision maker's pairwise comparisons of the criteria. The higher the weight, the more important the corresponding criterion.

Table 1. Rating Scale

Intensity of Important	Definition	Explanation
1	Equal importance	Two factors contribute equally to the objective
3	Somewhat more important	Experience and judgement slightly favour one over the other.
5	Much more important	Experience and judgement strongly favour one over the other.
7	Very much more important	Experience and judgement very strongly favour one over the other.
9	Absolutely more important	The evidence favouring one over the other is of the highest possible validity.
2,4,6,8	Intermediate values	When compromise is needed.

Source: Data Processed, 2016

Taylor (2013:445) mentioned a summary of the mathematical steps used to arrive at the AHP-recommended decision:

1. Develop a pairwise comparison matrix for each decision alternatives (site) for each criterion.
2. Synthesization:
 - a. Sum the value in each column of the pairwise comparison matrices.
 - b. Divided each value in each column of the pairwise comparison matrices by the correspondent column sum-these are the normalized matrices.
 - c. Average the values in each row of the normalized matrices-these are the preference vectors.
 - d. Combine he vectors of preferences for each criterion (from step 2c) into one preference matrix that shows the preference for each site for each criterion.
3. Develop a pairwise comparison matrix for the criteria.
4. Compute the normalized matrix by dividing each value in each column of the matrix by the corresponding column sum.
5. Develop the preference vector by computing the row averages for the normalized matrix.
6. Compute an overall score for each decision alternative by multiplying the criteria preference vector (from step 5) by the criteria matrix (from step 2d).
7. Rank the decision alternatives, based on the magnitude on their scores computed in step 6.

RESULT AND DISCUSION

Result

Table 2. Result of Overall Criteria

Location	Service Quality	Price	Product	Restaurant Atmosphere
0.07	0.12	0.20	0.22	0.39

Sources: Data processed, 2016

The highest score is restaurant atmosphere (0.39). It means that restaurant atmosphere is the factor that influence the most people to eat at the restaurant. The second highest influence shown by price (0.22), followed by service quality in third position (0.20), then product followed in the fourth position (0.12) and location as the lowest important criteria (0.07). The overall inconsistency 0.07. In general, the degree of consistency is

satisfactory (acceptable) if overall inconsistency ≤ 0.10 . It means the data comparison in this result is valid and consistent.

Table 3. Result of AHP (Best Restaurant)

Jungle Beer	JW Restaurant	Cabal Dining
0.24	0.37	0.39

Sources: Data processed, 2016

Based on the observation, this research shows that respondents choose Cabal Dining as the most preferred restaurant for them among the other alternatives. Cabal Dining have the highest score with 0.39, followed by JW Restaurant with score 0.37, and Jungle Beer in the last position with score 0.24. The overall inconsistency indicated = (0.06), In general, the degree of consistency is satisfactory (acceptable) if overall inconsistency ≤ 0.10 . It means that the data comparison in this result is valid and consistent.

Discussion

This research is designed to find out the consumer preference in restaurant selection among three restaurants that are Cabal Dining, JW Restaurant and Jungle Beer. The result obtained by using Analytical Hierarchy Process (AHP) as Multi-Criteria Decision Making (MCDM) method that helps decision maker to facing the complex options of alternative with various complex subjective criteria. This method is also useful to define the strength and weakness of each restaurant based on the criteria. Below is the discussion and explanation from the result of this research based on respondent's data. The respondents are people who have been eat at the three restaurants.

Pairwise Comparison for the Main Criteria Analysis

Firstly, for the overall of five main criteria (restaurant atmosphere, price, product, service quality and location), based on the most important criterion that influences customer is restaurant atmosphere. First position that influence criteria is restaurant atmosphere. The restaurant should have a proper service setting, including elements such as lighting, air quality, noise, music, and the proper environment which indicated that, in some situations, the atmosphere of the place could be as much important as the product itself in purchasing decision making because it affected the mood of the costumers because they want to feel comfort. The respondents are those who have experienced on each alternative provided which are the three restaurants based on the requirement of using AHP method. So in this research, according to the respondents, restaurant atmosphere becomes the most preferred factor for the customer in selecting restaurant in Manado.

Price becomes the second highest criteria that influence people when they want to choose restaurant. Price becomes one of the important things to consider which restaurant they want to choose. When customer wants to choose restaurant, they choose the most affordable price. Most customers of restaurant are students who still get money from their parents. So, the restaurant should not give the unaffordable price for the customers. Third position that influence criteria is product. The product that served by the restaurant must be delicious and high quality. Because the when costumers visit a restaurant they will order the food and beverages in order to fulfill their needs and wants. So the product must meet the costumer expectation. By experiencing the good taste costumer will have consideration to have a visit again to the restaurant.

Fourth position that influence criteria is service quality. It is important for a restaurant to serve costumer in a good manner, because the costumer is not only looking for the food but also how the restaurant crew treat them. The good appearance of restaurant crew, their communication skill including the product and restaurant knowledge, the other intangible performance are required in order to make the costumer happy and feels satisfied. And the last place is location. Location is less important to customer because they take price and restaurant atmosphere on priority, location does not really important because somehow people does not take it as problem whether the restaurant far or easy to access but it is because people are attracted ore on what they put as priority.

Pairwise Comparison Criteria within Three Restaurants Alternatives Analysis

From the result of restaurant atmosphere, JW Restaurant has strength in the criteria because the design of the restaurant is sophisticated, with the proper set of lighting, comfortable seating and good decoration. The restaurant also provides background music and every weekend there is a live music performance and for some special occasion invites national/international artist or musician to perform. In price criteria, Cabal Dining became has strength in the criteria because the price was competitive and affordable.

In product criteria, JW Restaurant became the most preferred by respondents. For the customers, JW Restaurant has more selection of products rather than the other two restaurant. Next criterion is Service Quality. In this result the most preferred is goes to Cabal Dining. In terms of service, the restaurant gives the best performance in order to welcome their costumer. At criteria of location, the result shows that Cabal Dining is the most preferred by customers. It is because Cabal Dining is located in the Kawasan Megamas which accessible to everyone because it is located in the center of the city. In every criterion, Jungle Beer not being the most prefer restaurant. It is because Jungle Beer is far away from downtown. Customers prefer choose the restaurants that are in downtown. The second reason is for customers who live near with Jungle Beer, it will be easy for them. But, for customers who live far from Jungle Beer, it will be difficult for them to reach this restaurant.

Result of Analytical Hierarchy Process of Consumer Preferred Restaurant

Based on the overall data, customer will choose Cabal Dining as the most preferred restaurant in Manado compared to the other alternatives. The result shows that when people want to eat and drink, they prefer to choose Cabal Dining as the most preferred restaurant among the other alternatives. Cabal Dining has the highest score, in the second position is JW Restaurant, and followed by Jungle Beer in the last position.

CONCLUSION AND RECOMMENDATION**Conclusions**

The main findings of this research are:

1. In the first place and got the highest total score 0.39 goes to restaurant atmosphere. According to the data comparison that developed in pairwise comparison of Analytical Hierarchy Process (AHP), restaurant atmosphere became the preferred criteria for customer when selecting restaurant. Second position of the highest score goes to price with total scores 0.22, and then product criteria come in third place with total score 0.20.
2. Based on the overall result that developed using Analytical Hierarchy Process (AHP), shows that Cabal Dining become the most preferred restaurant by the customers with score (0.39), in the second position is JW Restaurant with score (0.37), and Jungle Beer in the last position with score (0.24).

Recommendations

Restaurant atmosphere become the most important criteria for the customer. The factors that can drive customer to comfort at the restaurant can be seen by the seat, the air flow and other important thing such as background music, lighting and decoration. Sometimes the customers appetite affected by the condition of the surroundings. Business should emphasize the decoration of their shop, so as to provide a comfortable environment for the customers. Combining distinctive characteristics with the physical, visual and sensual elements of the shops can lead to image build-up and further to the success of the business defined Pangkey (2016).

1. Based on the data, JW Restaurant became the restaurant with the best restaurant atmosphere. So it is important for the restaurants to have more attention towards the atmosphere because first impression does matter. Before the customer see the menu, enjoy the service, taste the product and feel the experience, they see how the restaurant looks like.

2. Price also has important role in selecting a restaurant. By respondents, price became the second important thing to consider which restaurant they want to choose. In this case, Cabal Dining has the most affordable price compare to JW Restaurant and Jungle Beer. JW Restaurant and Jungle Beer should know who are the most customers. Based on the data, the most customers are students who still get money from their parents. So, JW Restaurant and Jungle Beer should give more affordable price.

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