

## ANALYTICAL HIERARCHY PROCESS APPROACH ON CONSUMER PREFERENCES IN SUPERMARKET SELECTION FRESHMART, MULTIMART AND HYPERMART

by:

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### ABSTRACT

Consumer play an important role in modern retail business. Without consumer, the modern retail business can't survive. The individual consumer has their own set of preferences and determination of these is based upon culture, education, and individual tastes. Supermarket must identify what consumer want because in Manado consumer face a lot of choice in selecting supermarket. This research purpose is to analyzed factor that influence consumer preferences in supermarket selection, identify which supermarket people choose the most and each supermarket key strength. This research used the Analytical Hierarchy Process (AHP) in processing the data. Population in this research is people in Manado who has experience in shopping at Freshmart, Multimart, and Hypermart. The sample of this research is 50 respondents of simple random sampling. The result have shown the most criterion that influence consumer when selecting the supermarket is product quality and brand image is the least criterion that influence consumer when selecting supermarket. Freshmart become the most preferred supermarket chosen by consumer. Location, product quality, and product variety are the key strength of each supermarket. Finally, every supermarket in Manado must give more attention to product quality, location and price as the most influence criteria when people decide to shop at supermarket.

**Keywords :** *consumer preferences, supermarket selection*

### INTRODUCTION

#### Research Background

Indonesia as the fourth largest country in the world, have potential market for retail industry. Retail business can be classified into two type, there are traditional retail and modern retail. Modern retail apply modern concept, utilization of technology, and accomodate lifestyle growth in society. Traditional retail model is fairly simple to execute. Customers understand the retail business model, companies have clear value propositions, and the market presents very high revenue potential to traditional retailers.

Minimarket, supermarket, and hypermarket are the three types of modern retail. Minimarket, supermarket, and hypermarket has the same characteristic in sales model, which is done directly by consumer with self service, means the buyer take their own goods from the shelves of goods pay at the cashier. Minimarket, supermarket, and hypermarket also sell wide variety of household goods including daily necessities. The difference between the three, lies in the number of items and types of products traded, the business floor area and parking area, and working capital needs.

Consumer play an important role in modern retail business. Without consumer, the modern retail business can't survive. The attitude of consumers is also gradually changing mainly due to increased income levels, strong economy, changing life styles and shopping habits of customers. Consumer now become more selective and have many consideration to purchase or to choose place for shopping. Many criteria set by the consumer before they make their choice.

Consumer preferences are the subjective tastes, as measured by utility of various bundles of goods. The individual consumer has their own set of preferences and determination of these is based upon culture, education, and individual tastes, among a plethora of other factors. Abilities to purchase goods doesn't determine a consumer's likes or dislikes. In Manado city, retail industry growing rapidly. There are many retail stores we can find in Manado. From department stores, speciality stores, minimarkets, supermarkets, drugstores, and restaurants. It lead to competitive market where the one who can fulfill consumer demand can survive in the industry. Freshmart, multimart, and hypermart are the biggest supermarket in Manado city. That three supermarket have many chain in Manado. Many strategy used to attract consumer, to make them a loyal consumer, from offer discount, put advertisement in newspaper, improve their service and many other.

### **Research Objective**

This research has several objectives are to analyze the impact of:

1. Supermarket criteria that influence customers to choose a supermarket.
2. Which criteria has influence the most in selecting a supermarket.
3. Which supermarket people choose the most.
4. Key strength of each supermarket selected by customer.

## **THEORETICAL FRAMEWORK**

### **Marketing**

Marketing defined by Kotler and Keller (2012:27) is about identifying and meeting human and social needs, one of the shortest good definitions of marketing is "meeting needs profitably". Marketing also entails an understanding that organizations have many connected stakeholder "partners," including employees, suppliers, stockholders, distributors, and society at large (McDaniel, et al, 2011:3).

### **Consumer Preferences**

Preference and acceptance can in certain circumstances 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 (Fife, et al, 2007).

### **Supermarket**

Supermarkets are large, departmentalized, self service retailers that specialize in food and some nonfood items McDaniel, et al, (2011:488).

### **Product Quality**

Kotler and Armstrong (2004: 283), product quality is the ability to demonstrate a product in its function, it includes the overall durability, reliability, accuracy, ease of operation and repair products are also other product attributes.

### **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, (2011:629).

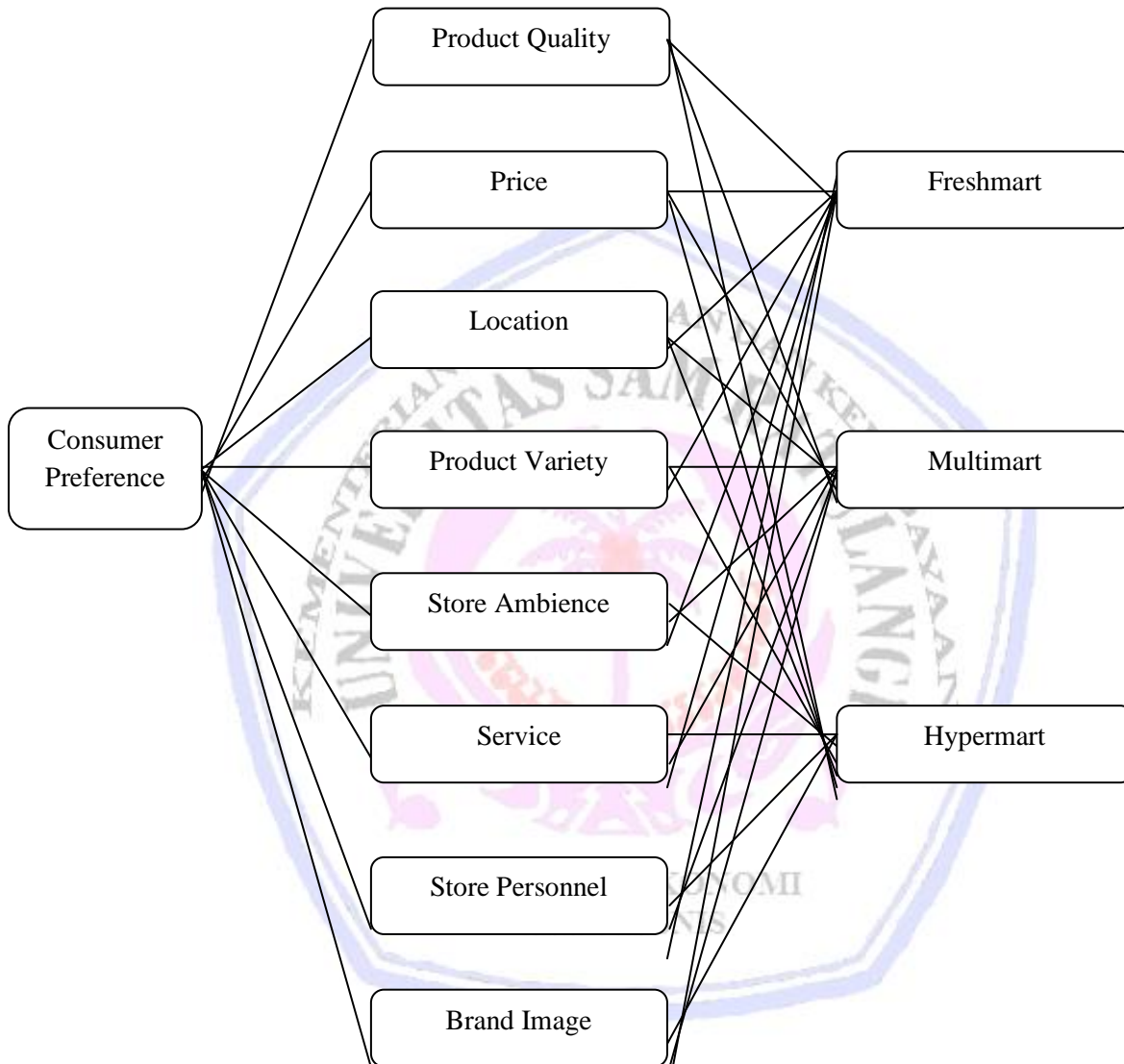
### **Location**

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, (2011:504).

### Product Variety

Product is anything that can be offered to a market to satisfy a want or need, including physical goods, services, experiences, events, persons, places, properties, organizations, information, and ideas Kotler and Keller (2012:347). Randall and Ulrich (2001) defines product variety as the number of different versions of a product offered by a firm at a single point in time.

### Conceptual Framework



**Figure 1. Conceptual Framework**

Source: Data processed, 2014

### Type of Research

This research will use quantitative method. Quantitative research seeks to quantify the data, using Analytical Hierarchy Process (AHP). Quantitative method uses in this research by run the questioner for the main source.

### Place and Time of Research

The study was conducted in Manado between July – August 2014.

### 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, 2009:262). Population in this research is people in Manado who has experience in shopping at Freshmart, Multimart, and Hypermart. Sekaran and Bougie (2009:263) sample is a subset of the population. It comprises some members selected from it. In other words, some, but not all, elements of the population from the sample. By studying sample, the researcher should be able to draw conclusions that generalizable to the population of interest. The sample of this research is all customers of Freshmart, Multimart, and Hypermart as many as 50 respondents that already shopping at that three supermarkets. The sampling design is simple random sampling. Sekaran and Bougie (2009:278) this sampling design is best when the generalizability of the findings to the whole population is the main objective of the study.

### Data Collection

This research the source of data consists of primary and secondary data. Primary data has been obtained by spreading questioners to the respondents and the secondary data has been collected from books and all relevant articles from the library and Internet.

### Operational Definition and Measurements of Research Variables

This research defines the variables into:

1. Consumer Preference (Y) are defined how a consumer ranks a collection of goods or services or prefer one collection over another.
2. Supermarket criteria (X) means factors of supermarket that influencing people or reason why people want to shop at supermarket.
3. Alternative : Freshmart, Multimart, and Hypermart

### Data Analysis Method

Analytic Hierarchy Process (AHP) is how to derive relative scales using judgment or data from a standard scale, and how to perform the subsequent arithmetic operation on such scales avoiding useless number crunching. One of the uses of a hierarchy is that it allows us to focus judgment separately on each of several properties essential for making a sound decision. The most effective way to concentrate judgement is to take a pair of elements and compare them on a single property without concern for other properties or other elements (Saaty, 1990). The preference scales for pairwise comparisons are as follow:

**Tabel 1. Pairwise Comparison Value Preference**

Preference Level	Numerical Value
Equally preferred	1
Equally to moderately preferred	2
Moderately preferred	3
Moderately to strongly preferred	4
Strongly preferred	5
Strongly to very strongly preferred	6
Very strongly preferred	7
Very strongly to extremely preferred	8
Extremely preferred	9

Source: Data processed, 2014.

The basic procedure to carry out the AHP consists of the following steps:

1. Structuring a decision problem and selection of criteria
2. Priority setting of the criteria by pairwise comparison (weighing)

3. Pairwise comparison of options on each criterion (scoring)
4. Obtaining an overall relative score for each option.

In a final step the option scores are combined with the criterion weights to produce an overall score for each option. The extent to which the options satisfy the criteria is weighed according to the relative importance of the criteria. This is done by simple weighted summation. Finally, after judgements have been made on the impact of all the elements and priorities have been computed for the hierarchy as a whole, sometimes and with care, the less important elements can be dropped from further consideration because of their relatively small impact on the overall objective. The priorities can then be recomputed throughout, either with or without changing the judgements Saaty (1990).

## RESULT AND DISCUSSION

### Result

**Tabel 2. Result of the overall criterion**

Product Quality	Price	Location	Product Variety	Store Ambience	Service	Store Personnel	Brand Image
0.262	0.165	0.165	0.129	0.091	0.099	0.054	0.038

Source : Data processed, 2014

In this result show the highest score is product quality (0.262), it means product quality is the factor that have influence the most people to shop at the supermarket among the others criteria. The second is price (0.165), location is in third position with score (0.162), followed by product variety (0.1123). and the rest filled by service (0.099), store ambience (0.091), store personnel (0,054) and brand images as the lowest score (0.038). As the overall inconsistency = (0.085), it mean the data comparison in this result is valid and consistent.

**Tabel 3. Result of Consumer Preferred Supermarket**

Preferred Supermarket		
Freshmart	Multimart	Hypermart
0.499	0.299	0.202

In this result shows that people choose Freshmart as the most preferred supermarket for them to shop among the other alternatives. Freshmart have the highest score with (0.499), in the second position is Multimart with score (0.299), and followed by Hypermart in the last position with score (0.202). In this result the overall inconsistency indicated = (0.070), it shows that the comparison of data in this research is valid and consistent.

### Discussion

#### Pairwise Comparison for the Main Criteria Analysis

The overall result of main criteria (product quality, price, location, product variety, store ambience, service, store personnel and brand image), show the most important criteria that influence customer is product quality. People always look for the best quality when they want to buy something. Well known brand accepted well by the customer. Product Quality have highest score criteria compare to the other seven, being the most preferred criteria by respondents and the most crucial criteria that influence customer in selecting supermarket. The respondents are those who already have shopping experience on each alternative provided which are the three supermarket based on the requirement of using AHP method. So in this research, according to the respondent, product quality become the most preferred factor for the customer in selecting the preferred supermarket in Manado. Eroglu (2013) also stated that product quality as the most important criterion for consumer when select preferred supermarket. Second Place is price. When buy something, people will look on the price. People want to buy something if it's cheap, or they don't want to buy because it's expensive. Have low price don't mean that the goods don't have good quality, so people nowadays look goods with low price and have good quality. Give discount regularly can also help the supermarket to attract many customer and advertise within the customer.

Many people choose supermarket because of its location it means choosing a supermarket close to their home or work place in order to minimize the time. They will prefer considered about the location of its supermarket to avoid wasting time. Have spacious space for parking also make customer to consider shopping at supermarket. Next position is product variety. Have many variety of product, it also mean supermarket have a lot to offer to the customer. Customer like to go to the supermarket that have many variety of product because it can offer many kind of alternative product and they have many alternative to choose. In fifth place is service. Service in this research is about time of waiting que, exchange guarantee. Wait to long in queue when pay of course make customer tired. They must stand, and waste their time in wating for pay. Supermarket that pay attention to that kind of service, don't make customer wait to long because it's waste their time must be preferred by the customer. Next is store ambience. Cleanliness, spaciousness, of supermarket make customer feel comfortable when shopping. When shopping, customer prefer to get trolley. When they feel ease to driving trolley it can make they shop more than when they feel uneasy to driving trolley. Good layout design also can set the mood for customer to shop. Kursunluoglu (2008) said consumer are more attracted by non price factors much more than price factors. So criteria like location, store atmosphere, service are being important because that criteria could easily influence consumer decision.

Generally, store personnel can be image of a supermarket. Personnel attitudes, neat and tidy personnel really important to attract customer. Personnel providing good and appropriate service will increase customer intention to stay in the store. In the last place is brand image. Advertising can make supermarket known by the customer. Right know customer don't see the brand image of a supermarket as much as important like the other seven criteria when go shopping at supermarket. So brand image got lowest score among the criteria. But it does not mean this criteria not important. This criteria still important to the customer, but its in the least important criteria resulted from the corespondent.

### **Result of Analytical Hierarchy Process of Consumer in Selecting Supermarket**

The overall result of consumer in selecting supermarket shows that people choose Freshmart as the most preferred supermarket for them to shop among the other alternatives. In the second position is Multimart and followed by Hypermart in the last position. In this result the overall inconsistency is less than ten percent, it shows that the comparison of data in this research is valid and consistent.

## **CONCLUSION AND RECOMMENDATION**

### **Conclusion**

This research's findings are concluded as follows:

1. Supermarket criteria that contains of eight criteria (product quality, price, location, product variety, store ambience, service, store personnel and brand image), there are top three criteria that have the most influence for customer in selecting their preferred supermarket particularly in Manado. Product quality, price, and location are the top three criteria.
2. Product quality selected as the criteria that influence consumer the most when selecting a supermarket
3. Result that developed using Analytical Hierarchy Process, show Freshmart become the most preferred supermarket by the customers followed by Multimart and Hypermart in the last place.
4. Result of each supermarket key strength, for Freshmart, location become their key strength. Multimart key strength are product quality, price, store ambience, service, store personnel, and brand image, and Hypermart key strength is product variety.

### **Recomendation**

There are recommendations as follows:

1. Product quality becomes a most dominant criteria that influence consumer in selected supermarket. For consumers, they absolutely don't want to shop at supermarket that has bad product quality and for supermarkets, good product quality is crucial part for supermarket to keeping their customer's trust. Supermarket need to improve and keep their overall good product quality, in order to build and keep their competitive position in the market.

2. Multimart and Hypermart should improve their performance regarding of the eight criteria because Freshmart dominates the best performance in all priority criteria that make this supermarket able to attract more consumers.
3. Consumer will give more attention in three criteria that have the most influence when they want to choose their preferred supermarket, which are product quality, price and location. So each supermarket must improve in that area.
4. Each supermarket has their own key strength in order to compete with each other. Give more attention to their weakness and keep improve their strength will make supermarket become better day by day.

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