

ANALYZING CUSTOMER PERCEPTION ON PRODUCT ATTRIBUTES OF SMARTPHONE (OPPO, XIAOMI, ZENFONE) IN MANADO

by:

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ABSTRACT

Smartphone provides a one stop solution for mobile calls, email sending, and internet access, Smartphone is compact in size and often only slightly bigger than standard mobile phone. Recently the Smartphone sales increased for the brand at an affordable price as Oppo, Xiaomi, and Zenfone. That is why those Smartphone are bought by many people in Manado. This research is designed to provide information about marketing implementation and get a better knowledge regarding the role of product attributes of Oppo, Xiaomi and Zenfone. The method used in this research is quantitative research method using correspondent analysis which will provide an emphasis on numerical data (number) processed with statistical methods. The data from this research were gathered by using questionnaire, which the sample is the representative customer with simple random sampling approach. There are several points that can be found to be the main point is that each Smartphone has their own benefit and luxury offers by the companies. The result of this study confirms that according to customer perception, Zenfone has the very good function, ease of use, design, eco-friendliness and satisfaction compare with the two product Smartphone, in this case Xiaomi and Oppo. In the terms of reliability and durability, Oppo is more superior. Xiaomi's product attributes are less attractive compare to both of its competitors according to customer perception.

Keywords: *customer perception, product attributes, smartphone.*

INTRODUCTION

Research Background

The term Smartphone, refers to a multimedia phone handset, which is a multifunctional electronic device that has features ranging from Camera, Audio-Video Playback, Web browsing to a high-density screen display along with several other multimedia options. Smartphone provides a one-stop solution for mobile calls, email sending, and Internet access. Smartphone is compact in size and often only slightly bigger than standard mobile telephones. A Smartphone is actually a mobile phone, based on an Operating System, which possess all the major functions of a Computer, like web browsing, emailing, video and voice chatting, audio-video playback, and others. A few years back, a Smartphone was a PDA (personal digital assistant) having the calling features like a mobile phone, but nowadays mobile phones possess the functionality of added media players, compact digital camera, GPS etc.

The success of a business depends upon its ability to attract and retain customers that are willing to purchase goods and services at prices that are profitable to the company. Consumer perception describes how customers and potential customers view a company and its products and services. Consumer perception is important to businesses since it can influence consumer behavior, which ultimately affects the profitability of a business.

Today, many people are interested in smartphones, both children and adults. Since smartphone offers many interesting stuff than a normal mobile phone, such as having high-density screen resolution, Camera, Audio-Video playback, web browsing and other features beneficial for the users of smartphones. Recently the smartphone sales are increased for the brand at an affordable price as OPPO, Xiaomi and Zenfone (Asus), that is why those smartphones are bought by many communities in Manado.

Therefore, studying about customer perception on these brands is important. The research focuses at how customers position these brands in their mind. The chosen brands are the products which have similar price range in order to focus respondents' perception on a similar product line.

Research Objective

The research objective is to analyze the customers perception about product attributes of Oppo, Zenfone, and Xiaomi.

THEORITICAL REVIEW

Consumer Perception

Kotler and Amstrong (2005:124) defined, perception as the process, by which information is received, selected, organized, and interpreted by an individual. Perception is defined as "the process by which an individual selects, organizes, and interprets stimuli into a meaningful and coherent picture of the world." (Schiffman and Kanuk, 2007 : 148-163).

Consumer Behavior

Schiffman and Kanuk (2007:3) defined, consumer behavior is "the behavior that consumer display in searching for, purchasing, using, evaluating, and disposing of products and services that they expect will satisfy their needs". Solomon et al. (2006:6) consumer behavior is the study of the processes involved when individuals or group select, purchase use or dispose of product, services, ideas or experience to satisfy needs and desires.

Product Attributes

Gwin et al. (2003) define product attributes as the characteristic or features that an object may or may not have and includes both intrinsic and extrinsic features. Benefits are the positive outcomes that come from the attributes. People seek products that have attributes that will solve their problems and fulfills their needs. Understanding why a consumer chooses a product based upon its attributes helps marketers to understand why some consumers have preferences for certain brands.

Marketing

There are many definition of marketing from many experts that had been published in book of some author. These are some theory or definition of marketing that had been used to support this research: Kotler & Keller (2012:27) stated that: Marketing is about identifying and meeting human and social needs. One of the shortest good definitions of marketing is meeting needs profitably.

Lamb, Hair & McDaniel (2011:3) stated that: Marketing is the activity, set of institutions, and process for creating, communicating, delivering, and exchanging offerings that have value for customers, clients, partners, and society at large.

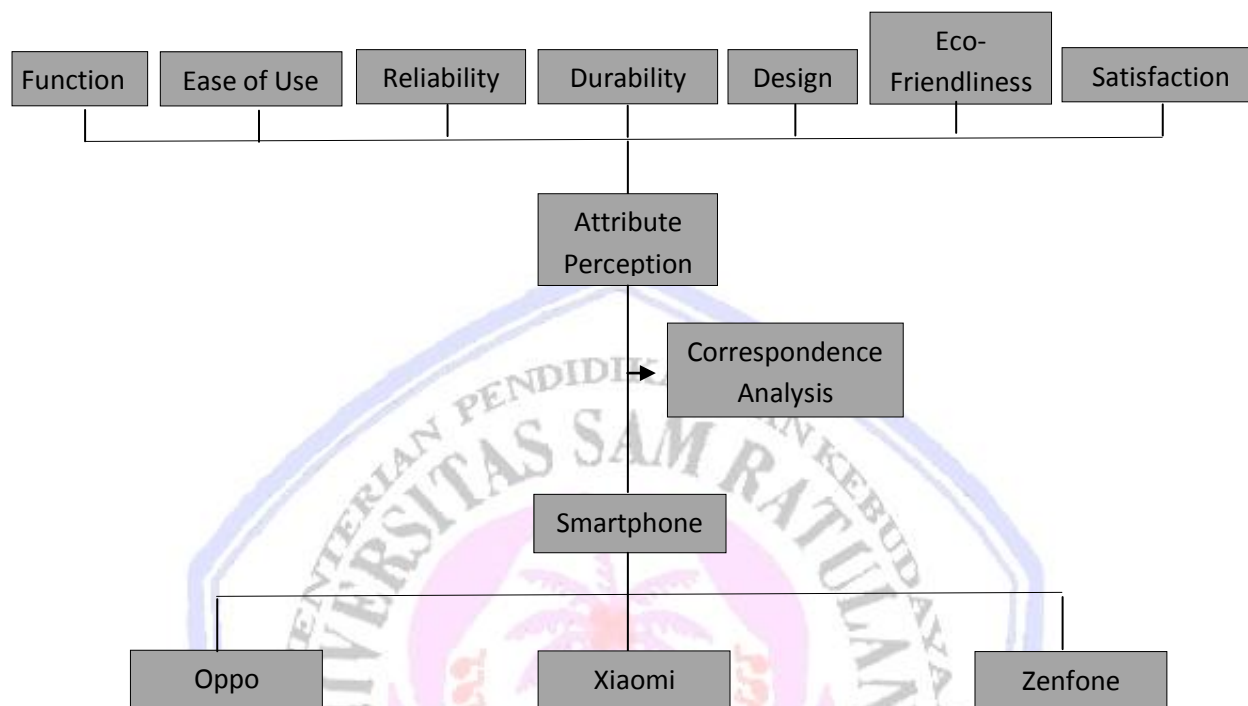


Figure 1. Conceptual Framework

Source: Data Processed

RESEARCH METHOD

Source of Data

All of the data sources on this research are gathered from primary data and secondary data. Sources of evidence to obtain data necessary to answer the research questions are questionnaires (as primary data) and documents (as secondary data). Primary data is data originated by the researcher for the specific purpose of addressing the research problem. The primary data are collected from questionnaire. Secondary data are gathered through such existing sources called secondary data.

Population and Sample

Sekaran (2000:262), population is “the entire group of people, events, of things of interest that the researcher wishes to investigate”. The populations in this research are all Smartphone (Oppo, Xiaomi, Zenfone) Consumers in Manado. Sekaran (2000:279), a sample is “a subset of the population. It comprises some members selected from it”. In order to ensure adequate representation of customers, random sampling process was used to select the sample of the study. The samples that were the respondents of the survey consist of 50 of each Smartphone (Oppo, Xiaomi and Zenfone) which sums the total of 100 respondents of the questionnaires.

Operational Definition of Research Variables

1. Function

The action for which a person or thing is specially fitted or used or for which a thing exists.

2. Ease of use

The action for which a thing can be used conveniently and easy.

3. Reliability

The extent to which an experiment, test, or measuring procedure yields the same results on repeated trials.

4. Durability

The action for which a thing can stay strong and in good condition over a long period time.

5. Design

The action for which to plan and make (something) for a specific use or purpose.

6. Eco-friendliness

The action for which a thing is not environmentally harmful to use.

7. Satisfaction

The action for which a person pleased with the result of something useful.

Data Analysis Method**Correspondence Analysis**

Correspondence analysis is a statistical technique that provides a graphical representation of cross tabulations (which are also known as cross tabs, or contingency tables). Cross tabulations arise whenever it is possible to place events into two or more different sets of categories, such as product and location for purchases in market research or symptom and treatment in medical testing (Yelland, 2010:1). As presented in this research, correspondence analysis employs a contingency table, which is the cross tabulation of Fast-Food and Customer Perception. The Fast-Food also is cross-tabulated on personal characteristic variables: age, income, occupation. When the cross tabulation is established, the data matrix is analyzed by using SPSS 20 for table and graph output. Once the dimensionality has been established, the association of a category with other category then is identified and interprets according to the proximity in a perceptual map. Overall, the map is displayed how the row and the column variables may be grouped. The percentages of explained variance need to be corrected and the correspondence analysis interpretation of inter point distances needs to be adapted. As such, it is highly suited for showing association between elements of cross-tabulated variables as points on a map. Small distances between points indicate high association, while large distances indicate low association" (Abdi and Valentin, 2007:5).

Perceptual Mapping

Perceptual mapping is "the application of multidimensional scaling (MDS) and various factorial techniques, such as principal component analysis (PCA), correspondence analysis (CA) indiscriminant analysis (DA)" (Greenacre, 2008:2). "In a perceptual map, products (or brands) are represented graphically in a space spanned by attributes. For this purpose, consumers are often asked to indicate their preference on a, usually predefined, rating scale. A multivariate analysis method, for example, principal component analysis, discriminant analysis, multidimensional scaling or canonical correlation analysis, is applied either directly to the ratings or after some data preparation steps" (Torres & Velden, 2005:2).

RESULT AND DISCUSSION

Result

Customer Perception to Function of Smartphone

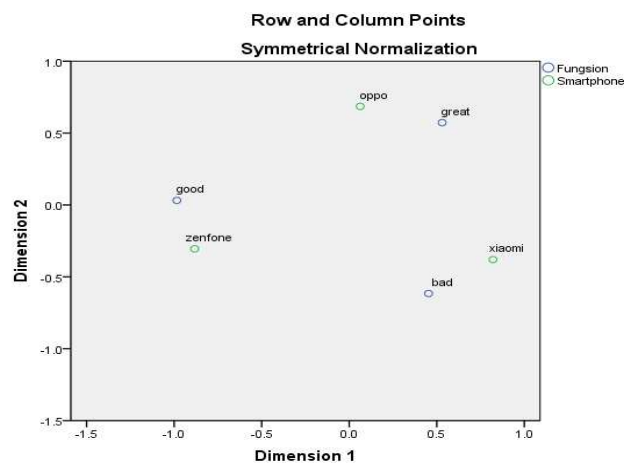


Figure 2. Customer Perception to Function of Smartphone (Oppo, Xiaomi, Zenfone)

Figure 2, explain that the customers' perception of "bad" on function of smartphone is plotted close to Xiaomi, the perception of "great" is plotted close to Oppo, and the perception of "good" is plotted close to Zenfone. It means Zenfone has excellent functions, while Xiaomi has a function that is not good.

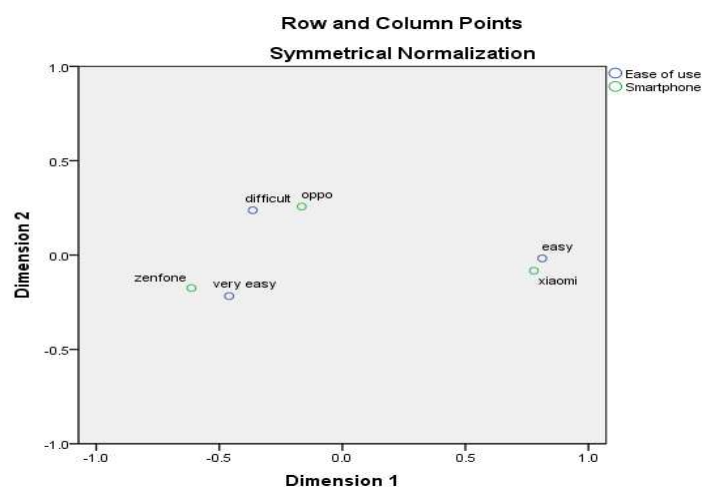


Figure 3. Customer Perception to Ease of Use of Smartphone (Oppo, Xiaomi Zenfone)

Figure 3, explain that the customers' perception of "difficult" on Ease of Use of Smartphone is plotted close to Zenfone, the perception of "easy" is plotted close to Xiaomi, and the perception of "very easy" is plotted close to Zenfon. It means the customer perception towards Ease of Use wear Zenfone still mixed.

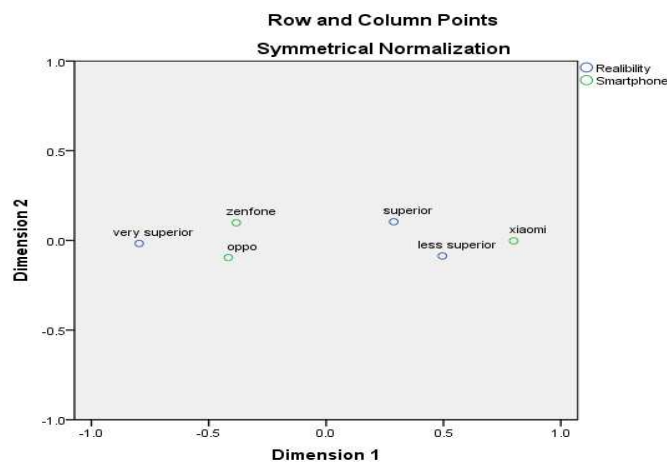


Figure 4. Customer Perception to Reliability of Smartphone (Oppo, Xiaomi Zenfone)

Figure 4, explain that the customers' perception of "less superior" on Reliability of Smartphone is plotted close to Xiaomi, the perception of "superior" is plotted close to Xiaomi, and the perception of "very superior" is plotted close to Oppo.

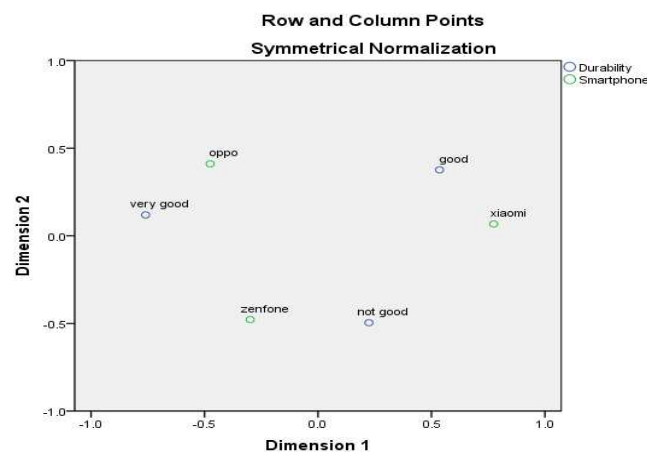


Figure 5. Customer Perception to Durability of Smartphone (Oppo, Xiaomi Zenfone)

Figure 5, explain that the customers' perception of "not good" on Durability of Smartphone is plotted close to Zenfone, the perception of "good" is plotted close to Xiaomi, and the perception of "very good" is plotted close to Oppo. It means Oppo has very good product durability, while product durability for Zenfone is not good in the eyes of customers.

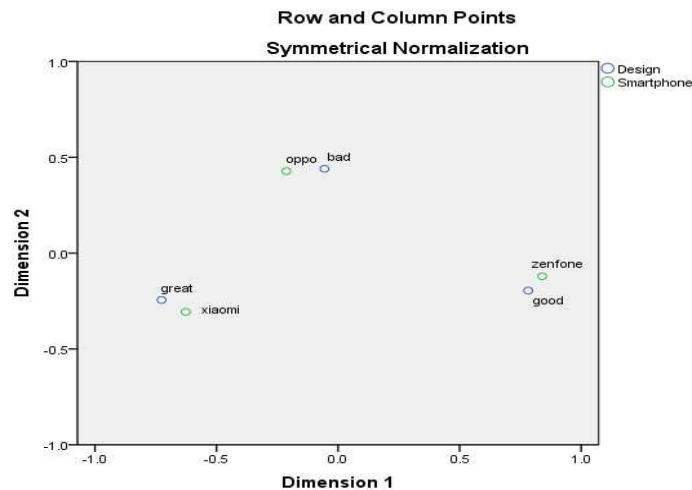


Figure 6. Customer Perception to Design of Smartphone (Oppo, Xiaomi Zenfone)

Figure 6, explain that the customers' perception of "bad" on Design for Smartphone is plotted close to Oppo, the perception of "great" is plotted close to Xiaomi, and the perception of "good" is plotted close to Zenfone. It means Zenfone has the good design, while Oppo's design product is bad in the eyes of customers.

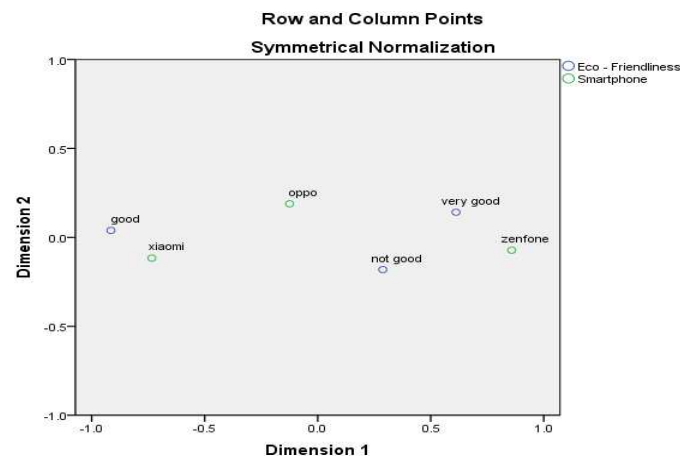


Figure 7. Customer Perception to Eco-Friendliness of Smartphone (Oppo, Xiaomi Zenfone)

Figure 7, explain that the customers' perception of "very good" on Eco-Friendliness for Smartphone is plotted close to Zenfone, the perception of "good" is plotted close to Xiaomi, and the perception of "not good" is plotted close to Zenfone. It means the customer perception toward Eco-Friendliness wear Zenfone still mixed.

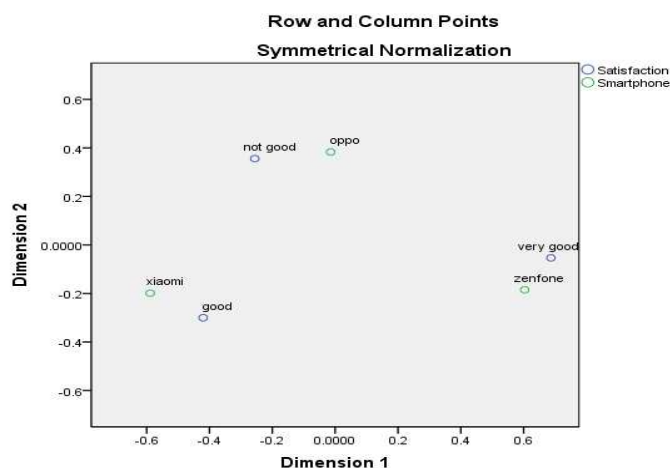


Figure 8. Customer Perception to Satisfaction of Smartphone (Oppo, Xiaomi Zenfone)

Figure 8, explain that the customers' perception of "very good" on Satisfaction of Smartphone is plotted close to Zenfone, the perception of "good" is plotted close to Xiaomi, and the perception of "not good" is plotted close to Oppo.

Discussion

Function

Product Function is the usability of a product for customers who use smartphones and give the benefits to customer of smartphone products according to their needs and wants.

Ease of Use

Ease of Use for the product is a product whose use Smartphone is not difficult for customers so feel easy to use. Amenity provided Smartphones make customers more interested in using.

Reliability

Reliability for product is virtue or excellence of a product so that customers feel has many benefits in using the Smartphone products.

Durability

The action for the produk Smartphone can stay strong and in good condition over a long period time.

Design

Product design is a process of creating new products that will be sold by the company to the customers or a plan or drawing produced to show the look and function or workings of a building, garment, or other object before it is built or made. From design product Smartphone, customers can choose which ones to their like, which is the most excellent design.

Eco-Friendliness

Which a product has an environmental influenced to the customer itself and the society. By choosing a 'green product', it can help to see how the energy is efficient (battery) and how it was made.

Satisfaction

Which a product can fulfill the desire among customer needs and wants and how a product affects customer expectation in order to reach their feeling of satisfied.

CONCLUSION AND RECOMMENDATION

Conclusion

This study can be concluded as follows:

1. People in Manado have their own perception towards Smartphone's (Oppo, Xiaomi, and Zenfone). People in Manado see that each Smartphone's have their own benefit and luxury offers by the companies.
2. In terms of function, ease of use, design, eco-friendliness and satisfaction in product attributes, Zenfone is more superior compare to Oppo and Xiaomi.
3. In the terms of reliability and durability, Oppo is more superior.
4. Xiaomi's product attributes are less attractive compare to both of its competitors according to customer perception.

Recommendation

This study has confined and suggestion for future research, namely:

1. It will be more beneficial if the manufacturers could improve each of their products so it can meet the customer needs and wants.
2. Marketers need to improve each of their products in order to gain customer expectations.
3. Improve the performance of Smartphone's in terms of product attributes such as function, ease of use, reliability, durability, design, eco-friendliness and satisfaction. Because it is important to make a good product attributes in order to get customer perception towards Smartphone's.
4. For next analyst, it is important to use perceptual mapping. The result of this research may be used for more advanced research on Smartphone's in order to make development in the business.

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