

**ANALYSIS OF MANADO CONSUMER PREFERENCE IN BUYING BATIK APPAREL PRODUCT**

by:

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**ABSTRACT**

Apparel industry has become a great opportunity in making profit. Batik apparel product is one of the type products from this industry. Batik apparel products have captured a lot of market share among Manado consumers. It drives many companies to compete in maintaining and attracting new customers. The understanding of consumer preferences in buying batik apparel product could give information for companies to satisfy customers and gain profit. The objectives of this research are: to identify which attribute of batik apparel is the most preferred by consumer and which combination of attributes that gives the highest utilities of ideal consumer preferences of batik apparel products. The population is people who ever buy batik apparel products or who are going to buy batik apparel products with sample 150 respondents using convenience sampling method. The conclusions of this research are as follow: (1) based on importance values analyzing of conjoint analysis, among three attributes of batik apparel products given, price is the most important factor. The second factor is design attribute and followed by store attribute; and (2) the ideal combination of attributes for batik apparel products which has the highest utility in consumer preferences is batik apparel products with hand-writing batik designed, which is offered with lower prices in Specialty store. That ideal combination is mostly preferred by Manado consumers.

**Keywords:** *consumer preferences*

**INTRODUCTION****Research Background**

Apparel industry has already become a great opportunity in making profit. The needs of clothes make this industry keep growing well. Many stores and manufactures are competing each other to design product, create value, and offer to customer. They are gaining profit when they can satisfy customers by designing desirable apparel product. Apparel is defined as everything what people wear to protect their body and make them look beautiful. Apparel is usually made from many kinds of raw materials such as, cotton, fur, leather, nylon, polyester, silk, wool, and so on. Raw material of apparel is depending on the model/design, its utility and geographical location. Apparel products are categorized as suits, shirts, sweatshirts, robes, pants, skirts, underwear, and many more. Apparel also is distinguished based on type of its utility, for example formal, casual, religious, cultural, and sport apparel.

Apparel or clothing is a basic need of human being. Abraham Maslow's in his hierarchy of needs theory (Kotler and Keller, 2009:202) explained that clothing is a part of physiological needs. These needs should be met first by human. Physiological needs are the most important needs that must be fulfill over the others level of needs. These needs are extremely important in sustaining human life. When people are doing daily activities, they will definitely meet these basic needs. Therefore, people have to fulfill the need of air, water, food, clothing, and shelter before fulfill another needs. Basically, physiological needs are not created, but it has been around since people were born. It has become human essential needs. People wear clothes to protect and cover their body. The purposes of clothing are to keep the wearer feel comfort and secure during activities. Apparel also provides protection from some elements such as sun, wind, rain, and snow.

When buying apparel product consumer will prefers to the particular product because that type gives more value to them. When consumer buys a product, actually they not only buy the product but also value of that stuff. Every consumer has different value of product. The value is based on what benefit they will receive when buying a particular product. Of course, consumer will prefer product, which give them more benefit than other alternative. In order to satisfy consumer needs and wants, marketers should know what kind of product people need. In fulfill their needs, consumer make some evaluating and comparative judgment among various alternative available. They implement preferences to make a decision of product. Marketers have to learn, what important attributes influence customer decision and what kind of product they prefers to buy.

Apparel industry in Manado has been developing rapidly. Some shopping mall like Mantos, MTC, and Mega Mall give a great opportunity for stores in this industry to growing with a great profitability. They compete each other to attract customer, maintain customer, and gain profit. They are offering various kind of apparel product. This study is needed by marketers for stores and manufacturers to design apparel products and implement marketing program. There are so many kinds of apparel products available in Manado. Indonesian batik apparel is the example of apparel product that has become familiar for Manado buyers.

Batik is one of Indonesia's cultural heritages. In 2009, Indonesia Batik officially became in list of Intangible Cultural Heritage of Humanity by the United Nations Educational, Scientific, and Cultural Organization (UNESCO). In the past, Batik is used to know as cloth for certain society. But currently, batik is getting familiar to all societies. Batik has captured a lot of market in Manado. It has become famous among Manado consumers. Batik has been available in various forms of clothing such as shirts, blouses, skirts, dresses, jackets, and so on. Various kinds of batik apparel are available in form of hand-writing batik designed and printing batik designed. Batik is getting more famous also and demanded because most of government office, private office, and banking have batik's days. On that day all employees are wearing batik apparel. It is usually held on Friday. Of course, every employee who is wearing batik apparel has their own preference in buying apparel products.

The understanding of consumer preferences when they make a decision to buy apparel product especially batik apparel could give marketers, stores and manufacturers information in improving their business. For example when they design a new batik apparel product or plan a strategy in marketing. By using conjoint analysis, there will be an analyzing of some important attributes to have such a good understanding about consumer preferences in buying batik apparel products.

## Research Objective

The objectives of this research are:

1. To identify which attribute of batik apparel is the most preferred by consumer.
2. To identify which combination of attributes that gives the highest utilities of ideal consumer preferences of batik apparel products.

## THEORETICAL FRAMEWORK

### Theories

#### Consumer Preferences

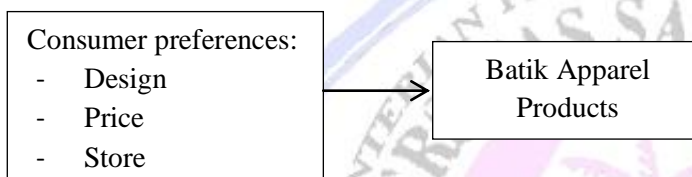
The concept of preferences comes from economic theory, with preferences defined as individuals 'utility' for consuming goods and services (Philips et al., 2002). According to Rajpurohit and Vasita (2011), preferences indicate choices among neutral or more valued option available. Further, Rajpurohit and Vasita, (2011) argued that the preference of the consumer is the result of their behavior they show during searching, purchasing and disposing the product. Kotler and Keller (2009:209) explained the process when consumer forms their preference in evaluating processes: (1) consumer is trying to satisfy a need; (2) consumer is looking for certain benefits from the product solution, and (3) consumer sees each product as a bundle of attributes with varying abilities for delivering the benefits sough to satisfy this need.

### Customer Decision Making

Schiffman and Kanuk (2007:3) stated that consumer behavior focuses on how individuals make decisions to spend their available resources (time, money, effort) on consumption-related items. According to McDaniel et al. (2011:191), consumer decision making process is a five-step process used by consumers when buying goods or services, they are need recognition, information search, evaluation of alternatives, purchase decision, and post-purchase behavior.

### Previous Research

Kotri (2006) found the value creation models of 34 respondents (customer) both on a group and individual basis as the basis to understand what factors created value for individual customer and to predict how customer would react to changes in Estiko-Plastar's existing value proposal. North, et al. (2003) found attributes that are important to female consumer when apparel purchasing decisions have to be made. Rajpurohit and Vasita (2011) found that majority of consumer are aware about the service offered by their mobile phone operators and those consumers are satisfied with the service offered by their mobile phone operators. Carpenter and Moore (2010) fpimd 17 unique product attributes, are examined within seven distinct retail format choice scenario resulting in seven separate predictive models based upon retail format. Raj et al. (2013) found the factors that influence consumer' choice of brands in the segment of Automobile market and function of brand equity on product choice.



**Figure 1 Conceptual Framework**

## RESEARCH METHOD

### Type of Research

Type of this research is relation research. It will investigate consumer preferences when buying batik apparel products.

### Place and Time of Research

Research was conducted in Manado because the respondents of this research are Manado consumer. Time of this research is from June to August 2013.

### Population and Sample

Population refers to entire group of people, events, or things that the research desires to investigate (Sekaran and Bougie, 2009:262). The population considered in this research is Manadonese who ever buy batik apparel products or who are going to buy batik apparel products. Sekaran and Bougie (2009:263) stated that sample is a subset of the population. Convenience sampling was applied in this research regarding the obtaining of information quickly and efficiently. This sampling method also is the best way to collect data due to time and resources constraints. The sample size for conjoint studies normally ranges between 150 and 1200 respondents (Orme, 2010:65). So, the number of sample considered in this research is 150 respondents.

### Data Collection Method

The data collected in this research divided by two kinds of data comprises primary data and secondary data. Data collected in this research was taken from Manado People. It had been taken through two main data collection methods. They are: primary data through self-administered survey and secondary data taken from internet browsing, journals and textbooks that support primary data. Collecting data from literature books and articles also relevant information is used to guide theory in this research and also to create more understanding about the theory.



## Operational Definitions and Measurement of Research Variables

**Table 1. Operational Definition of Research Variables**

Variable	Description	Measurement
Consumer preferences	Activities when people like a particular product among several choices available.	9-point rating (score) scale
Design Attribute	A composition of a product	Hand-writing batik designed or Printing batik designed
Price Attribute	Amount of money consumer have to spend to get a product	High price or (> IDR.200.000) Low Price (IDR.75.000 – IDR.199.000)
Store Attribute	A Place where consumer find a product.	Specialty Store or Department Store

*Source: Data Processed 2013*

A structured questionnaire was designed to generate respondents' response. The questionnaire was designed with 8 combinations of attributes and levels. Cards describing each option were presented to the respondent and combination of store atmosphere attributes was asked on a 9-point rating (score) scale with the anchors as not "not so preferred" to "greatly preferred".

### Data Analysis Method

#### Validity and Reliability Test

Validity refers to the extent to which differences in observed scale score reflects true differences among objects on the characteristics being measured, rather than systematic or random errors, the validity coefficient for each variable is good, where the value are above the minimum level of 0.30. While Reliability refers to the extent to which a scale produce consistent result of repeated measurements are made on the characteristic.

Reliability is assessed by determining the proportion of systematic variation in a scale. This is done by determining the association between scores obtained from different administration of the scale. To ensure that all question in the questionnaire is truly reliable, so the measurement of the internal consistency is made, which can be defined as the correlation between question items that is evaluated the same factor. This internal consistency can be seen at the Cronbach Alpha Parameter or the coefficient alpha varies from 0 to 1, and a value of 0.6 or less indicates unsatisfactory internal consistency reliability.

#### Conjoint Analysis

Conjoint analysis is one of market research techniques used today. It is included in multivariate technique for research. Conjoint analysis helps marketer to understand the preferences of consumer for a product. It uses a combination of level each product attribute to estimate the preference. According to Hair et al. (2006:464), conjoint analysis is a multivariate technique developed specifically to understand how respondents develop preferences for any type of object (products, services, ideas). This method enables companies to estimate the value created to customers with remarkable accuracy. It provide a cost effective and timely solution that can be used for market segmentation decision, design, pricing, service level of product/service, and other improvements that create value for company. According to Kotri (2006), conjoint analysis is a method that can help in making optimal pricing and product development decision. While, Curry (1996) stated that conjoint analysis is a popular marketing research technique that marketers use to determine what features a new product should have and how it should be priced.

## RESULT AND DISCUSSION

### Result

#### Validity and Reliability Test

The correlation between indicators is more than minimum level which is 0.30 therefore the instrument is valid. The Cronbach Alpha is 0.718 which is more than 0.6, therefore, the measurement instruments used for this research are reliable and the instrument can get the consistent result if used in different times.

#### Conjoint Measurement

The average importance values of the respondents when buying batik apparel products is as follows: price attribute (40.405%), design attribute (30.754%), and store attribute (28.841%). This result means that most of respondents tends to consider price firstly when they are buying batik apparel product. Price includes high price (>IDR 200.000) and low price (IDR 75.000 – IDR 199.000). For them, price is the most important factor when buying batik apparel product among all factors or attributes.

Every attribute has designed with two levels. Positive value indicates the highest utility score. In design attribute, hand-writing batik designed has the highest utility score with .259 points while printing batik designed only has -.259 points of utility score. Low price (IDR.75.000 - IDR.199.000) demonstrates the highest utility score for price attribute with .026 points while high price (>IDR.200.000) only shows -.026 points of utility score. For store attribute, specialty store shows the highest utility score with .192 points while department store only shows -.192 points of utility score.

**Table 2. Overall Utility of Concept Cards**

Card Number (Profile)	Total Utility	Ranking
1	6.016	8
2	6.534	4
3	6.586	3
4	6.400	6
5	6.452	5
6	6.970	1
7	6.068	7
8	6.918	2

Source: data processed 2013

Table 2 shows the overall utility of every single concept card or profile. Total utility of every card determine the rank of concept card. The higher utility means the higher ranking. Rank of concept card determine which concept card is the most prefer by consumers.

Total utility or total preferences of consumer were analyzed by using the following model:

$$T_{pref} = U_{Bi} + U_{Mj} + U_{Sk} + \text{Constant}$$

Where:

$U_{Bi}$  = Utility or part-worth of level i from attribute design variable

$U_{Mj}$  = Utility or part-worth of level i from attribute price variable

$U_{Sk}$  = Utility or part-worth of level i from attribute store variable

For example, to find out the total utility of concept card no.1 by using the total preferences model above. This card have a combination of printing batik designed for design attribute, high price for price attribute, and department store for store attribute. By using the model above, total utility for this card is 6.016.

**Table 3. Total Utility For This Card**

Attribute	Level	Utility for Level
Design	Printing batik designed	-.259
Price	High Price	-.026
Store	Department Store	-.192
	Constant	6.493
Total utility		<b>6.016</b>

After calculated the overall utility of all concept cards, it can be shown that profile (card) no.6 has the highest utility and the lowest utility is profile (card) no.1. Total utility for profile no.6 is 6.970 points while total utility for profile no.1 is only 6.016 points. It shows that profile no.6 is the highest rank and profile no.1 is the lowest rank among concept card presented. Most of respondents were considered profile no. 6 as the combination of attributes that offer the highest utility for them among eight profiles given. It can be stated that profile no.6 involves the ideal combination of attributes for consumer based on the averaged importance and utility discussed before. Total utility for each profile was calculated used averaged importance and utility or group summary, not individual or subject importance and utility. Averaged importance and utility is the summary of all subject importance and utility.

Pearson's R and Kendall's tau statistic displayed at the bottom of summary and subjects output is the indication of how well the model fits the data. Pearson's correlation is a measure of linear relationship between two variables, which ranges from +1 to -1. Pearson correlation coefficient of .816 indicates a positive linear relationship between variables. Kendall correlation coefficient expresses the degree of association among the multiple ratings made. Kendall's uses information about relative ratings and is sensitive to the seriousness of the misclassification. Kendall's tau of .643 indicates that a high association between ordinal variables.

## Discussion

Based on the data from questionnaires, data result were gathered and processed. After that some findings are analyzed. Data analyzed from this research has shown the relative importance value of the attributes of batik apparel products. The attributes are design, price, and store. Also it has found out the utility score of each level of attribute or concept card. The range of the utility values (highest to lowest) for each factor or attribute provide a measure of how important the factor was to overall preference. Factor with greater utility ranges play more significant role than those with smaller ranges. Importance value indicates how important the factor affecting consumer preferences in this case consumer preferences when buying batik apparel products. From 3 attributes given in this research, the highest importance value is price attribute. The second is design attribute and the lowest importance value is store.

The first factor of the most preferable by batik apparel consumers is price. Importance values show that price is the most important factor affecting consumer preferences. Price has a highest importance values among the other attributes given. Price of batik apparel product plays an important role in affecting consumer preferences. Consumer tends to consider price firstly when buying batik apparel products. Price becomes the most important because price represents the value that consumers have to give when they want the product. Price also represents consumer buying power of a product. So, it makes sense when consumer considers price is the most important factor when they buying batik apparel product. In this research, price attribute has two levels. High price (>IDR.200.000) and low price (IDR.75.000 – IDR.199.000). According to the result of the questionnaires, most of batik apparel' consumer in Manado prefer low price (IDR.75.000 – IDR.199.000) than high price (>IDR.200.000). It is shown by the utility score of low price (IDR.75.000 – IDR.199.000) is higher than high price (>IDR.200.000). When buying batik apparel products, consumers prefer batik apparel products with lower price. Everybody wants to pay less and get more. Lower price of batik apparel product are more affecting consumer preferences than higher price. Batik apparel with lower prices is available in some store in Manado. They offer product with lower price among their competitors to gain more customer.



The next important factor for consumers when buying batik apparel products is design. Design has the second highest utility score after price. In this research, there are two kinds of batik apparel design, which is hand-writing batik designed and printing batik designed design. It is important because both of those designs have a different quality. Between hand-writing batik designed and printing batik designed, respondents in this research tend to choose hand-writing batik designed as their preferences. It is shown in utility score where hand-writing batik designed has the highest utility score for design attribute. Consumer tends to prefer hand-writing batik designed than printing batik designed. Because hand-writing batik designed has better quality, sounds more prestige for people who wearing batik apparel rather than printing batik designed design.

The last important factor affecting consumer preferences when buying batik apparel products is store. It is clear that Store has the lowest importance values after price and design. Store is the place where consumer used to buy products in this case batik apparel products. The places where they feel satisfy when buying batik apparel products. Based on utility score for store attribute, specialty store has the higher utility score than department store. Consumer tends to choose specialty store rather than department store. Specialty store has many choices of batik apparel products. They focus in satisfying customer needs of batik apparel. While department store, they have many kinds of product. They do not focus in satisfying customer needs of batik apparel. In department store, batik only has a small portion of their products line.

Overall utility clearly shows the total utility every concept card or profile. Concept card with the highest utility score is the most preferable profile by consumer. In this research, consumers are given eight profiles or combinations of attributes and its level to stimulate their preference. The result had shown that profile or card no.6 has become the mostly preferred by consumer when buying batik apparel product, because card no.6 has the highest utility score among others. Card no.6 is the combination of hand-writing batik designed for design attribute, low price (IDR.75.000-IDR.199.000) for price attribute, and specialty store for store attribute. It is an ideal combination consumer mostly prefers when they buying batik apparel product. That combination gives more value for customer when they can buy batik apparel with hand-writing designed with a lower price in specialty store. Consumers tend to pay less and get more. Lower price for hand-writing batik designed in specialty store will give a great value for customer rather than high price for printing batik designed in department store. Consumers prefer to pay low price product that has high quality in high service level store. In order to increase consumer preferences of batik apparel products, batik apparel industry, manufacturer and stores could use combination of attributes and level of batik apparel products as the consideration when they are trying to design new product. Because consumer mostly prefers to choose batik apparel products which is batik apparel products with the lower price, hand-writing batik designed, and consumer mostly preferred to buy batik apparel product in specialty store.

## CONCLUSION AND RECOMMENDATION

### Conclusion

The conclusions of this research are as follow: (1) based on importance values analyzing of conjoint analysis, among three attributes of batik apparel products given, price is the most important factor. The second factor is design attribute and followed by store attribute; and (2) the ideal combination of attributes for batik apparel products which has the highest utility in consumer preferences is batik apparel products with hand-writing batik designed, which is offered with lower prices in Specialty store. That ideal combination is mostly preferred by Manado consumers.

### Recommendation

The recommendations for the Batik apparel manufacturer are: (1) according to this research, conjoint analysis is very useful to determine what levels of attribute that is the most important for the customers. This method can be applied to get more understanding about customer especially to know what their needs and wants on a certain product. It is recommended to apply combinations regarding to customers' preferences, so batik apparel product manufacturer will know what levels of batik apparel product attributes are desirable in customer

mind; (2) from all factors given, price attribute of batik apparel products has highest importance value. It is important to pay attention in the price variable because it is the first consideration seen by a consumer when they are buying batik apparel products. Based on the research, lower price will be more interesting to customers. So, company should concern about pricing strategy. Company has to consider offering low price rather than high price. If these variables are not managed well, batik apparel products cannot be interested for customer to buy; and (3) for batik apparel products manufacturer, it is recommended to consider the ideal combination that was found out by this research which is hand-writing batik designed with lower prices and sell in specialty store. This is the most preferable combination of attribute' level for batik apparel products. Company should consider offering product with that combination because it will affect consumer final decision to buy the product. Conclusion above had shown the combination mostly preferred by consumer. Therefore, the combination should be offered more in order to satisfy the consumers. By considering that ideal consumer preferred combination, it will give more satisfaction for them and automatically company can generate more profit.

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