

## The Analysis of Consumers' Preferences for Batik Products in Indonesia

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### ABSTRACT

Batik industry has overgrown since the UNESCO recognised batik as a world heritage site and made batik a masterpiece of the Oral and Intangible Heritage of Humanity in 2009. The study aims to know what are the factors that affect consumers' preferences in buying batik product. The authors use a questionnaire to conduct a market survey, and 338 respondents from various Indonesian cities were collected. There are 21 questions; the first five questions relate to the demographic background of the respondents and the rest relate to the respondents' tendency towards batik products, the expected price and preferences in the purchase of batik products.

This study initiates an analysis of the preference of customers for batik products, which is a legacy product not only as fashion commodities. The results show that customers prefer social media and colleagues to find batik products, and traditional batik combined with modern style is still the preferred style. Our study contributes to the development of batik study, particularly on customer behaviour. This study also gives insights to batik producers to apply the appropriate approach to their customer in order to meet customer demands and pricing strategies.

Keywords: Consumer Preferences, Batik, Small-Medium Enterprise (SME), Price, Indonesia

### 1. INTRODUCTION

UNESCO has described Indonesian Batik, as the hand-dyed cotton and silk garments, techniques, symbolism and culture known as Indonesian Batik that permeates the life from start to finish of Indonesians (Krisnawati et al., 2016). The United Nation Agency for Education, Science and Culture or UNESCO recognised batik as one of the world heritage and put batik as the Masterpieces of the Oral and the Intangible Heritage of Humanity in 2009. According to Pinasti and Adawiyah (2016) based on the Directorate General of SME, The Ministry of Industry of Republic Indonesia there was 47,775 batik SME spread in Indonesia. This condition gave a massive contribution to employment. Hence this industry achieved attention from the

Indonesian government, due to it belongs to "national economics activator industry" and "export-oriented industry". Moreover, this industry is included in the creative industry that became the central pillar in developing creative economic sector (Susanty et al., 2010). As the growth of the industry, the number of batik producers or batik business units from 2011 to 2015 increased by 14.7%. The Ministry of Industry proved that in 2017 batik export amounted USD 58.46 million with various main destinations, such as Japan, USA, and Europe.

Studies about Batik industry were mostly obtained from the perspective of organisations such as the financial calculation of the business (Rahmawati et al., 2018), SMEs or industrial cluster (Aryanto, 2017; Farida, 2017) or the entrepreneurs itself (Azis et al., 2016). Studies on Batik customers were limited to the marketing aspect such as branding (Krisnawati et al., 2016) or the online marketing channel (Prayitno, 2016). Another study was taking the perspective of the customer and their behaviours even though customer value is one of the critical future research agenda that needs to be explored in batik industry (Haryanto and Priyanto, 2013).

As a heritage product, batik genuinely inherent philosophical values on its pattern and useful purpose. There is slight fading in its value due to market demand, such as with the invention of batik printing technology that lower the production cost and faster production compare to written batik (Gatut and Aryanto, 2010). This result creates a double sword effect between higher market demand and batik original value.

In the customer side, individuals would have more options to choose, wide-ranging product variety, and more suppliers available in both online and offline marketplaces. The customer demands also raised by the enthusiasm of Indonesian people to wear batik as a part of their lifestyle including the effort from the government to ask the officers and staff to wear batik as a policy. With the rise of the batik industry as part of apparel and fashion, it also creates a shifting in the industry such as the consumers' preferences. The fashion industry is one of the growing industries in Indonesia, particularly at the younger age group that dominates the market nowadays. In the other hand, batik has dual characteristics as a heritage product as well as apparel products. Therefore, it is essential to explore customer preferences for buying batik products.

This study is expected to contribute to practice since it is vital for a business to precisely understand customer preferences so that these can be targeted with the appropriate approach. While theoretically, it will develop a more profound understanding of customer behaviour, particularly on customer preferences towards buying batik products.

## **2. LITERATURE REVIEW**

According to Wardhana (2017), consumer preference is the process of selecting an item according to consumer's level of need; it could be established toward consumer's mindset that is based on several reasons, such as:

- a. The degree of satisfaction of the product that consumer gained in consuming the product. This result will affect the consumer's future decision whether to continue consuming it or not.
- b. The behaviour of using the product that already became a habit throughout generations.

Rajpurohit and Vasita on Sabijono (2013) explained that preferences represent the choices among available options. According to Kotler and Keller (2016) there are buying process affected the consumer's preferences, among others:

- a. Problem recognition when consumers determine what is the problem that might be triggered by internal or external stimuli.
- b. General need description and product specification about the characteristic that might fulfil the consumer's needs.
- c. Supplier search is the process of identification which supplier that is appropriate and can fulfil the needs.

Hence when a consumer is deciding which product to choose from a set of alternatives, they often decide from the alternative that already discovered and finds the additional alternative before they choose the final product to satisfy their needs (Isik & Yasar, 2015). Previous research by Nurfikriyadi (2016) showed product design and product quality as the highest factors that affect the purchase decision of batik product. Participants were asked to rank the factors their perception about batik product quality; the results were material, pattern, and price on the following priority. Besides product-related factors, several studies mentioned other vital factors, such as price (Sabijono, 2013; Nurfikriyadi, 2016), promotion, and ease of payment that also important attributes on customer purchase decisions (Nurfikriyadi, 2016). Therefore, in this research, we explore product and price-related factors in understanding customers' preferences towards buying Batik product in Indonesia

### **3. RESEARCH METHODOLOGY**

#### **3.1 Data Collection**

In collecting data for our study, we used an online market survey. The market survey is an appropriate method to gather quantitative or/and qualitative data; some advantages are using the questionnaire as a method in research namely: structured format, easy and convenient for respondents, and cheap and quick (Walliman, 2011). To obtain the representativeness of the customer, data was gathered from a total of 338 respondents which randomly taken from various cities in Indonesia. It is comprised of 21 questions, the first five questions pertaining the respondents' demographic background, and the rest are pertaining the respondents' tendency towards batik products, the ideal batik products, the expected price for batik products and their preferences in buying batik products. From these data the authors could sum up some important results for the research, namely:

1. The average frequency of buying batik products within six months
2. The expected price for batik products
3. The customers' preferences in choosing or buying batik products
4. The customers' concern about the social mission for batik artisan and technology based on making batik

#### **3.2 Data Analysis**

To process the gathered data, the statistical analysis used in this research is descriptive analysis. Descriptive analysis is a method of quantifying the parametric numerical data such as where the centre, the broad of the spread, the point of central tendency, the mode, median and means (Walliman, 2017).

### **4. STUDY RESULTS**

#### **4.1 Validity and Reliability Test**

A questionnaire said to be valid if the question can reveal something that measured by

the questionnaire (Ghozali, 2013). Also, the survey already tested with the reliability test and the survey passed the Cronbach Alpha value which more than 0.7. The questionnaire said to be reliable if the response is consistent or stable over time, and the measurement used in this study is One Shot or just one measurement (Ghozali, 2013).

#### **4.2 Demographic Profile**

From the demographic factor, young-adult respondents are dominating the results, with 15 to 25 years old are the majority (59.4%) and followed by 26 – 35 years old (25.1%) participant. This result means that millennial could probably dominate the current market, and as much as 65.1% of them are female.

The occupation of the respondents are mostly students (41.4%) and followed by office employee (35.8%), who mostly are living in major cities in Indonesia, such as Jakarta, Bogor, Depok, Tangerang, Bekasi, and Bandung. The majority income of the respondents is at IDR 2,500,000 and below (37.8%) and IDR 2,500,000 – IDR 5,000,000 (34.3 %), which depict the income of the respondents.

#### **4.3 Consumer Tendency towards Batik Products**

This section illustrates the consumer tendency in buying batik products, as much as 44.4% of all respondents tend to buy batik once within six months, and 85.8% of them usually buy maximum three items. In buying batik products mostly, the respondents prefer to come to boutique/distro, batik shop/batik house followed by department store as the second alternative or on the other word is an offline store, rather than the online store.

The price expectation for casual batik apparel would be IDR 100,001 – IDR 200,000 as 46.2% of respondents chose it; the second one is for the formal batik apparel as much as 36.4% of respondents decided to choose IDR 201,000 – IDR 300,000, and the last is price expectation for the other batik products such as accessories, bags, wallets and batik souvenirs the 49.4% respondents decided to choose IDR 50,000 – IDR 100,000. For the total expense in buying batik products, 35.5% consumer usually spend IDR 100,001 – IDR 300,000. More than of the half of the respondents did not become aware of the batik products fashion trend, and the other half of them, according to the survey mostly they are gain the information about the trend of batik products from social media. Finally, the most superior product design of batik apparel is the traditional pattern with modern design which chosen by 55% respondents.

#### **4.4 Consumer Preferences toward Batik Products Purchase Decision**

This section defines what the essential factors are influencing the consumer in buying batik products. Likert scale is used to present the findings, the scale 1 indicates the preferable factor that influences customers' preference, and vice versa, the scale 10 indicates the least preferable factor that influences customer preference that afterwards analysed using one sample statistics to validate the data. The first ten factors asked are about the preferences toward batik products purchase decision as seen in table 1 below.

Table 1. Consumer Preferences toward Batik Products Purchase Decision

Factor	Rank
Price	2
Batik Pattern	1
Product Design	3
Promo/discount	5
Brand	10
Product Quality	4
Service and after sale service	9
Ease of Ordering	7
Ease of Payment	6
Shopping Experience	8

Source: Author's Analysis, 2018

Based on the table above with ascending ranking, the preferable factor is the batik pattern, as we know that every pattern in batik has its story behind as example from Batik Fractal seen on Figure 1 below. The second factor influencing consumer preference in buying batik is the batik price; we can conclude that the consumer in batik products is price sensitive. The third factor is product design, as mentioned before that the traditional with modern design is the most preferable by the consumer. Moreover, the consumer indeed considers whether the product is highly differentiated, although only a small amount of them who are following the batik current batik trend.



Figure 1. Pattern Description  
 Source: Batik Fractal's Instagram

The fourth factor is product quality; this factor points to product performance and its durability throughout time. This result is a usual thing if the consumer considering this factor while buying a product. The next factor is promotion or discount, with this factor the batik producer or seller could attract more consumers to buy their product, for example, Batik Fractal gave the same price for all products for an occasion such as National Batik Day as shown on the figure below.



Figure 2. Promotion  
 Source: Batik Fractal's Instagram

The sixth factor is the ease of payment; this means the more payment alternatives are quite affecting the consumer preference. The next factor which is like the previous factor is ease of ordering, the more alternatives and immediate response in order will easily satisfy the consumer, moreover, nowadays there is a various way for the consumer to reach out the seller, for example by online messenger, website, or market place or e-commerce. The eight-factor is the shopping experience, this includes all the buying process experienced by the consumer, and we can conclude this factor is not a considerable factor for the consumer. Afterwards, the ninth factor is the service and after-sale service, and the last factor is the brand of the batik product.

#### 4.5 Consumer Preference for Batik Quality

The fourth sections of the market survey illustrate the factors that specify a good quality of batik products. There are five factors, and Likert scale is used in assessing this section. Scale 1 indicates the most preferable and vice versa the scale 5 indicates the least preferable. As seen on the table below, the excellent batik product is determined by the batik pattern, as mentioned in the previous section that each pattern



has its meaning. The second factor is product design. There are various product designs in the textile or fashion industry to satisfy the consumer needs or demand.

Table 2. Customers' Preferences toward Batik Products Quality

Factor	Rank
Product Design	2
Batik Pattern	1
Price	4
Colour	5
Material	3

Source: Author's Analysis, 2018



Figure 3. Batik Fractal Product Designs

Source: Batik Fractal Website

The third factor determining the good batik product is the material used. There are many kinds of material could be used in producing batik, and consumer considers it due to its correlation with the usage and convenience of the products. The next factor is the product price; this reflects that many consumers do not consider price while determining the batik quality. The last factor to be considered by the consumer is the

colour of the product; this condition reflects that the consumer considers this factor after all the previous factors considered.

#### **4.6 Consumer Response toward Social Mission and Technology**

This section is pertaining to the consumer interest to the social mission and technology advancement that might provide by the batik producer. The social mission itself means that the middlemen of batik producer or the seller giving the positive impact for the batik artisan region through some sustainable programs their conducted. As much as 86.1% consumer interests to the social mission that the middlemen gave for the batik artisan and 52.4% of them are willing to pay more around IDR 50,000 – IDR 100,000 for the social mission.

The second one is the advancement of technology; this could be training or/and proprietary technology made by the middlemen for the batik artisan. As much as 63.4% of the respondents are interest and willingness to pay more for the technology advancement and same as the social mission 52.4% of them are willing to pay more around IDR 50,000 – IDR 100,000.

### **5. CONCLUSION AND RECOMMENDATION**

Some interesting findings are adding new insight on customer preferences towards the batik industry in Indonesia. The conclusions of this research are as follow. *First*, the source of information those customers obtained about the batik products most preferred by the customers are social media and followed by a recommendation from colleagues, as seen in the study by Chan and Astari (2017). *Second*, for the style choice, 54.6% of respondents choose traditional batik combine with modern style. *Third*, unlike the study of Sabijono (2013) price is not the most factors considered by the customer when choosing batik product, but the batik pattern. Commensurate with the previous section there are some disparities and similarity with the previous survey conducted by Nurfikriyadi (2016), pattern and design are two most preferable factors in determining batik product quality, not the colours as found in the previous research. From disparities between two surveys, we can conclude that shifting on customers' preferences is exist over the three years gap. *Finally*, from the market survey on mostly young adult in major cities in Indonesia, the most preferable batik products design they might buy is traditional pattern with modern design. Even though more than half of the customers did not really consider about the batik product fashion trend, yet the batik product company still can use social media to markets their product. The millennial age group was chosen because their high population and potential purchasing power, moreover they became the decision makers at many corporations that make them possible to control purse strings affecting the success of the market moreover in the big city in a country (Solomon, 2017).

This study initiates the research about customer preferences on batik product, that not only as fashion commodities but also a product which has heritage value. We uncover several factors and customer behaviour that capture the potential market for batik products. For the price determination, batik sellers could adjust with their target market and segmentation, since it was divided into several categories based on the income, age, or occupation.

Future research could accommodate the use of conjoint analysis to precisely measure customer preferences since the factors might be unable to accommodate fully and the customer should choose specific attributes over the others, such as price and design over material quality, and so on. To develop batik customer studies, several theories



can be borrowed such as consumer culture theory (CCT) that suitable to address batik phenomena to consumption choices and behaviours from a social and cultural point of view, as opposed to an economic one (Arnould and Thompson, 2005).

### REFERENCES

- [1] Arnould, E. J. and Thompson, C. J. (2005). Consumer culture theory (CCT): Twenty Years of Research. *Journal of Consumer Research*. 31 (4): 868–882. doi:10.1086/426626.
- [2] Aziz, N. A. A., Aziz, N. A. A., Aziz, N. N. A., Muhamad, S. F., & Pazil, A. H. M. (2016). Determining the Factors to Engage In Batik Business: A Study among Batik Entrepreneurs in East Cost Malaysia. *International Journal of Management Sciences*, 7(5), 273-286.
- [3] Chan, A., & Astari, D. (2017). The analysis of content marketing in online fashion shops in Indonesia. *Review of Integrative Business and Economics Research*, 6(2), 225.
- [4] Farida, N. (2017). Antecedent of Innovation and Marketing Performance in Batik Industry. *Advanced Science Letters*, 23(1), 471-474.
- [5] Gatut, B., and Aryanto, V. (2010). Batik Industry of Indonesia: The Rise, Fall and Prospects. *Studies in Business & Economics*, 5(3).
- [6] Ghozali, I. (2013). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS 21*. Badan Penerbit Universitas Diponegoro. Semarang.
- [7] Haryanto, J. O., and Priyanto, S. H. (2013). Recent future research in consumer behavior: A better understanding of Batik as Indonesian heritage. *Researchers World*, 4(4), 32.
- [8] Himawan, A. and Hapsari, D. K. (2018, March 12). Kemenperin: Investasi Industri Tekstil Rp10,19 Triliun di 2017. Available at: <https://www.suara.com/bisnis/2018/03/12/191038/kemenperin-investasi-industri-tekstilrp1019-triliun-di-2017>
- [9] Isik, A. and Yasar, M. F. (2015). Effects of Brand on Consumer Preferences: A study in Turkmenistan. *Eurasian Journal of Business and Economics*, 8(16), 139-150.
- [10] Kotler, P. & Keller, K. L. (2016). *Marketing Management* 15th Edition. Pearson.
- [11] Krisnawati, N., Perangin-angin, L. K., Zainal, M., & Suardi, I. (2016). Brand equity analysis and its impact on the loyal customer of local batik to develop its competitiveness (An empirical study of Batik Banten in South Tangerang). *J. Admin. Bus. Stud*, 2, 1-89.
- [12] Nurfikriyadi, (2016). *Proposed Marketing Strategy for Batik Nation (A Batik Fashion Startup Company)*. Master Thesis. School of Business Management. Institut Teknologi Bandung.
- [13] Pinasti, M., & Adawiyah, W. R. (2016). Co-Opetition to Promote Growth of Batik Small and Medium Enterprises. *International Journal of Business and Society*, 17(3), 401-412,543.
- [14] Prayitno, T. H. (2016). The Effect of Price Perception and Convenience Online Shopping Towards Customer Satisfaction of Batik Products in Indonesia. *International Journal of Recent Advances in Multidisciplinary Research*, 3(12), 2086-2091.

- [15] Rahmawati, D., Rahadi, R. A., Damayanti, S. D. (2018). Business Valuation for Small Medium Enterprise (Case Study: Pikel Indonesia). *International Journal of Business, Economics and Law*, 17(2), 8-15.
- [16] Sabijono, G. (2013). Analysis of Manado Consumer Preference in Buying Batik Apparel Product. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis dan Akuntansi*, 1(4), 414-421.
- [17] Solomon, M. (2017, December 27). Millennial Customers Will Dominate In 2017. Is Your Customer Service Experience Ready for Them? Available at: <https://www.forbes.com/sites/micahsolomon/2016/12/27/millennial-customers-will-dominate-2017-is-your-customer-service-experience-ready/#5dbd844744d0> [Accessed 19 June 2019].
- [18] Susanty, A., Bakhtiar, A., Sriyanto. (2010). *Customer Preferences Analysis for Developing Creativity in Batik Industry*. International Seminar on Industrial Engineering and Management.
- [19] Walliman, Nicholas. (2011). *Research Methods: The Basic*. Oxon: Routledge.
- [20] Wardhana, A., Syahputra, Kartawinata, B. R. (2017). Determinant Factors of Consumer Preferences in Indonesia Airlines Industry. *Jurnal Bisnis & Manajemen*, 18(1), 11-20.