

PRODUCT PERFORMANCE ANALYSIS OF BATIK PACITAN SMES USING IMPORTANCE PERFORMANCE ANALYSIS (IPA) AND POTENTIAL GAIN OF CUSTOMER VALUE'S (PGCV) INDEX

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ABSTRACT

This study was aimed to determine the product performance of SME products Pacitan batik and identify SME cBatik's approach in order to improve their product's quality based on consumers' sight. The analysis tools used in this research are Importance Performance Analysis which is used to measure product attribute's expectations and performance from the consumer point of view and also PGCV Index (Potential Gain of Customer Value's Index) which is used to determine the priority scale of Pacitan's batik performance improvements. The results showed that 1) Batik Pacitan's performance is good from consumer's perception, shown by the average level value of compatibility between consumer expectations and product performance of 99.32%, that means 99.32% product performance already fulfill consumers' expectation. 2) There are six indicators of product quality that already meets consumer's expectations which are product's quality price level, the diversity of colors, color quality, the diversity of designs / patterns, unique designs / motifs and quality raw material. 3) There are 5 indicators of product quality that need to be improved in Pacitan batik's quality based on priority scale which are fineness of batik, the completeness of product packaging information (brand, manufacturer address, batik name, way of maintenance, etc.), packaging design, color and brand of product packaging.

Keyword : PGCV, importance performance analysis, quality, potential, value

INTRODUCTION

Developments in the business world led to the level of competition for businesses is increasing, especially for manufacturers who produce food products. Nowadays, a lot of similar products emerging on the market. Therefore, it takes the right strategy by the manufacturer that the

product is able to compete and be able to capture market share. Under these conditions the consumer satisfaction have an important role for the company.

Consumer perceptions of the quality of a product is often assessed based on a set of criteria that is different because of the level of interest and involvement of consumers also vary. Consumers tend to judge the quality of a product based on factors - factors that they associated with these products. These factors can be intrinsic product characteristics such as size ie, the color, taste or aroma and extrinsic factors such as price, store image, the image of the brand and promotional messages conveyed through advertising, both print and electronic media (Tjiptono, 2002) When attributes contained in a product in accordance with the customer wants it will cause interest in the purchase (Schiffman and Kanuk, 1997).

The method can be used to determine customer satisfaction is the method Potential Gain Customer Value (PGCV). According to Irwin (2010), PGCV method can be used to determine the attributes of the facility or what should be improved to meet customer satisfaction. This method alone has a surplus than Importance Performance Analysis, which provides a comparison of product quality attributes right not described in terperici on Importance Performance Analysis (Polker, 2011). In determining the performance improvement used the assumption that the quality attributes that need to be repaired and improved performance are attributes that have PGCV index above the median, while the quality attributes that must be retained is an attribute that has a value below the median (Jameson, 1997).

The company's understanding of the attributes - product attributes that are important to consumers, the main attraction and are considered by consumers in product purchasing decisions is a necessity for companies. Similarly, the batik SMEs Pacitan. Batik Pacitan became known of its existence in 1986, but the development is still lacking batik Pacitan known compared to other batik, such as batik Solo, Yogyakarta batik and batik Pekalongan. Pacitan batik artisans in several centers of batik, including in Ngadirojo include Pagerejo, Wijoro, Tanjungpuro, Sidomulyo. Tulakan sub-district which includes Ketro, clubs, as well as the District Arjosari Tulakan covering Pringkuku, Arjosari and Kebonagung. Batik quality of consumer perceptions can be seen from several attributes, such as price, color, diversity and uniqueness of the design / motif, fineness batik craftsmanship, quality fabrics, brands and packaging. This research was conducted to find out how is the performance of the products batik Pacitan, according to consumer perceptions with Importance Performance Analysis (IPA) and Potential Gain of Customer Value's (PGCV) Index to assess the level of interest and the level of performance attributes - attributes batik products above.

PROBLEM FORMULATION

By knowing the perception of the performance of the Pacitan batik products, batik SMEs expected Pacitan can make the effort - the effort as an improvement on the attributes - attributes of a product that is still perceived as important but are considered less qualified by consumers. Thus the quality of Pacitan batik can be increased and will ultimately improve the competitiveness of Pacitan batik batik among others that exist in Indonesia. The problems of this study are :

1. How does the performance of products batik SMEs in Pacitan according to consumer perceptions ?
2. What measures should be taken by the batik SMEs in Pacitan in order to improve the quality of their batik products in the eyes of consumers ?

LITERATURE REVIEW

Indeks Potential Gain In Customer Value (PGCV)

Analysis of Potential customers through index Gain In Customer Value (PGCV) was first written in a March issue of the journal quality progress in 1997 by William C. Hom stating that the index Potential Gain In Customer Value is a concept and equipment that is easy to analyze customer. The ease of giving way for the importance-performance diagrams to be compared in a quantitative form a more thorough and detailed.

Analysis of Potential Index Gain in Customer Value (PGCV) consisting of ACV value and value UDCV. To find the value of the ACV or Achieved Customer Value, by multiplying the variable importance with performance variables, namely :

$$\mathbf{ACV = I \times P}$$

Description :

I = Score average level of expectations

P = Score average level of performance / reality

After obtaining the value ACV, then the next is to find the value UDCV or Ultimately Desired Customer Value, which is obtained by the formula:

$$\mathbf{UDCV = I \times Pmax}$$

Description :

I = Score average level of expectations

P = Score average level of performance / reality

After obtaining the value ACV, then the next is to find the value UDCV or Ultimately Desired Customer Value, which is obtained by the formula:

$$\mathbf{PGCV = UDCV - ACV}$$

The conclusion is that if an item to get the largest index value, it means that the item is given priority access to new improved performance following the second and subsequent items.

Identification Analysis PGCV Index

Identification PGCV index analysis has several steps, such as :

- a. The first step, of the data results obtained by filling the questionnaire, determined indkes PGCV generated each respondent for each attribute of the quality of products that have been determined. Product quality attributes are part of the product dimensions consisting of 12 attributes that price, diversity of colors, durability of color (the color does not fade batik), diversity of designs / motifs, uniqueness of designs / motifs, smoothness batik craftsmanship, quality of raw materials, trademarks, Color packaging, packaging design, complete information on the packaging of the product (brand, manufacturer address, name batik, batik way maintenance and others), Ease in pemsanan. This data was obtained from the value of ACV and value UDCV.
- b. The second step, after the index PGCV of each respondent was obtained, then calculated the mean (median) of the index PGCV per attribute. The median is the middle value measurement obtained with the sort of numbers from the smallest to the largest advance.

Once sorted, it can be searched middle value (median) of the entire index PGCV per these attributes. Median formula stated :

$$\text{Median} = (n + 1) / 2 \text{ (if } n \text{ is odd)}$$

$$\text{Median} = \{(n / 2 + n / 2) / 2\} \text{ (if } n \text{ is even)}$$

Description :

n = Number of Observations

The formula above median when the number of observations (n) odd then use the formula on five equations and if the number of observations (n) even then used the equations of six (Jogiyanto, 2012)

- c. The third step, the index value per attribute PGCV index is plotted in the graph PGCV each attribute. The graph shows visually, which attributes must be considered to be repaired and maintained quality.
- d. The fourth and fifth steps are used to determine the level of satisfaction of each dimension of overall product quality. The fourth step PGCV each dimension index is calculated as an accumulation of double grain quality measurement products. This index is the median value of the index PGCV per attribute. Calculation of median values is the result of dividing the number of index values for each attribute in the same dimension as the number of attributes in these dimensions.

RESEARCH METHODS

1. Research Methods, Based on the method, this research is a survey research.
2. Data Collection Methods Interviews, questionnaires Deployment, and observations.
3. Data Sources
 - e. Primary data, ie data obtained in the field through direct observation of batik products Batik Pacitan and Pacitan's SMEs which are in Ngadirojo, Tulakan, Pacitan.
 - f. Secondary data, ie data obtained through a search of the literature in the form of literature, journals, magazines, newsletters, and articles related to the topic of research
4. Population and Sample.

Target population in this study is that consumers batik batik SMEs production Pacitan. The sampling method used in this research is purposive sampling method. Considerations used in this research that respondents aged 18 and over, an influencer / decider in the process of purchasing products batik Pacitan. In determining the sample size that will be used as a data source, in this research using interval estimation method. Based on the results of the calculation of the number of samples to be taken in this study is the number of 72 samples. Sample selection methods using convenience sampling method, with consideration of ease in the distribution of questionnaires. The variable in this study is the performance of the product, with the following indicators : prices, diversity of colors, durability of color (the color does not fade batik), diversity of designs / motifs, uniqueness of design / motif, batik Subtlety workmanship, quality raw materials, trademarks, packaging colour, packaging design, complete information on the packaging of the product (brand, manufacturer address, name batik, batik way maintenance and others) as well as the ease of booking.

Respondents will be asked to judge the importance of indicators - indicators of the performance of the products above, as well as assess the performance of batik products Pacitan based indicators - indicators.

5. Measurement Scale

Measurement of perceived quality by consumers and assessment of product performance comparisons with competitors batik SMEs Pacitan done using a scale of 1-5 with criteria not very important to very important for the level of interest and very dissatisfied to very satisfied for the assessment of the level of satisfaction.

ANALYSIS METHOD

For the method of analysis performed descriptive statistical analysis. Data were obtained from interviews and questionnaires will be processed and analyzed with descriptive statistical approach to identify the characteristics of respondents and respondents' assessment of the performance of the products batik production Pacitan batik SMEs in Ngadirojo, District and Sub District Tulakan Arjosari based on subjective perceptions of respondents.

RESULTS AND DISCUSSION

Company Overview Batik Pacitan

Batik Pacitan can souvenirs from Pacitan is a favorite of many tourists who stop in the city of Pacitan as souvenirs. In fact, a native of Pacitan themselves too much to like batik products to be used as clothing or other accessories. Pacitan batik products have distinctive patterns and colors are shades of plants, animals with arches or lines each - each have a symbol or a specific meaning.

Batik has a production Pacitan well as points of sale located in several different places - different in each district dn in producing products in each - each SME average - average produce 15 to 20 units per day.

Characteristics of Respondents

Characteristics of respondents in this study is shown of gender, age, education, past employment, monthly income, frequency of purchase, the number of products purchased and style batik products are often purchased. Data batik Pacitan respondent characteristics can be seen in Table 1.

Table 1. Characteristics of Respondents

Characteristis	Group	Number	%
Gender	Female	52	85,60
	Male	20	14,40
Old (Years)	18 – 30	20	27,77
	31 – 45	35	48,61
	46 – 64	17	23,61
Education Background	Elemtry	0	0
	Middle School	0	0
	High School	17	23,61
	Bachelor	55	76,39

Job Related	Student	5	6,94
	Civil State Employee	28	38,89
	Private Employee	13	18,05
	Entrepreneur	16	22,22
	Others	10	13,89
Salary	Rp 500.000 – Rp 1.000.000	5	6,94
	Rp 1.000.000 – Rp 2.000.000	4	5,56
	Rp 2.000.000 – Rp 4.000.000	10	13,89
	≥ Rp 4.000.000	53	73,61
	Buying Frequency	1 – 2 multiple	55
	3 – 4 multiple	10	13,89
	≥ 5 multiple	7	9,72
Number of Product	1 – 2 unit	40	55,55
	3 – 4 unit	18	25,00
	≥ 5 unit	14	19,45
Product Pattern	Plantation	32	44,45
	Animals (zoo)	30	23,61
	Others	10	11,11
Product Forming	Uniform	10	13,89
	Pure Textile	57	79,16
	Accessories	15	20,83

Sources : Field Research 2015

Validity and Reliability Test

Validity is a measure that describes the level of validity of an instrument. An instrument is considered valid if it is able to obtain precise data on the variables studied. Based on the calculation of the validity of the test, showed that all the attributes declared invalid because r count larger than r table of 0229 ($n = 72$ and $\alpha = 0.05$). An instrument as valid and reliable if it can perform the function of measuring or measuring results are precise and accurate (Simamora, 2008).

Reliability test was used to test whether the data obtained from the study are reliable or trustworthy (Simamora, 2008). Based on the results of reliability testing for all item questionnaire answers can be seen that the Cronbach's alpha value is 0757 and the level of expectation for the level of reality is 0.697. The results obtained showed that the questions on the questionnaire is reliable or reliable, so it can be used repeatedly in a relatively similar conditions will produce the same data or there is little variation.

Analysis of Potential Index Gain In Customer Value (PGCV) per Attributes

This analysis was conducted to determine how PGCV index value for each attribute and each dimension of quality products. The assumption used is when a dimension attribute and product

quality obtain PGCV index value above the median, then the attributes and dimensions of the quality of getting a top priority for the new improved performance following the second item, and so on. PGCV index values that are below the median, it will receive priority for sustained performance. To define a product quality attributes are in a position to be maintained or improved performance is highly dependent on the value of the median (Hom, 2002). The larger the index value. PGCV which is above the median value, the greater the priority is obtained for improved performance (Siregar, 2006). PGCV index value per attribute can be seen in Table 2.

Table 2. Index PGCV in Each Attributes

No.	Product Quality Attribute	Symbol	ACV	UDCV	PGCV
1	Prices	X1	16,99	19,85	2,86
2	Diversity of colors	X2	15,60	19,80	4,20
3	Durability of color (the color does not fade)	X3	14,40	19,15	4,75
4	Diversity of designs / motifs	X4	15,33	19,70	4,37
5	Uniqueness of design / motif	X5	15,08	20,05	4,97
6	Batik Subtlety processing	X6	16,21	22,50	6,29
7	Quality of raw materials	X7	12,59	17,30	4,71
8	Trademarks	X8	17,11	21,55	4,44
9	Packaging color	X9	16,33	19,40	3,07
10	Packaging design	X10	18,60	22,80	4,20
11	Complete information on the packaging of the product (brand, manufacturer address, name batik, batik way maintenance and others)	X11	14,03	21,20	7,17
12	Usability in order	X12	14,64	21,65	7,01

Sources : Field Research 2015

The mean or median value obtained after performing calculations PGCV index of all the attributes that is equal to 4.57. Based on the equal division of the median value of all the attributes, derived attributes that must be maintained and its performance attributes that must be repaired. Product quality attributes are given priority to be maintained and improved performance can be seen in Table 3 and Table 4

Tabel 3. Attribute of Product Quality on Depended

No.	Attribute of Product Quality	PGCV Index	Priority
1.	Price	2,86	1
2.	Packaging color	3,07	2
3.	Diversity of colors	4,20	3
4.	Packaging design	4,20	4
5.	Diversity of designs / motifs	4,37	5
6.	Trademarks	4,44	6

Tabel 4. Attribute of Product Quality Improvement

No.	Attribute of Product Quality	PGCV Index	Priority
1.	Complete information on the packaging of the product (brand, manufacturer address, name batik, batik way maintenance and others)	7,17	1
2.	Usability in order	7,01	2
3.	Batik Subtlety processing	6,29	3
4.	Uniqueness of design / motif	4,97	4
5.	Durability of color (the color does not fade)	4,75	5
6.	Quality of raw materials	4,71	6

RESULT ANALYSIS

Importance Performance Analysis (IPA)

Used to measure the performance of products batik SMEs in Pacitan according to consumer perceptions. IPA analysis consists of two components, namely quadrant analysis and gap analysis (gap)

Quadrant Analysis

Quadrant analysis is used to determine consumer response to the product attributes that are mapped based on the level of interest and the performance of the product attributes. Quadrant analysis results in this study can be seen in Table 5. The results showed that the overall performance of batik Pacitan according to consumer perceptions are good. This is indicated by value - average level of compatibility between consumer expectations and the performance of the product amounted to 98.207%, which means that 98.20% of product performance has to meet consumer expectations.

To analyze the level of customer satisfaction with the performance of the products used Cartesian diagram analysis. Based on the mapping diagram Cartesian quadrant analysis, the result that on 11 indicators of quality of products, one indicator is located in quadrant A, six indicators located in quadrant B and 4 indicators located in quadrant C. Explanation of the

mapping of indicators - indicators of the quality of products in the Cartesian diagram in above are as follows:

1. Quadrant A

- a. Indicators that are in quadrant A is an indicators of the quality of products that are considered important by consumers but given performance is still below consumer expectations. Indicators - indicators in Quadrant A is - it is a top priority for the improvement of the quality of batik products Pacitan to be able to improve customer satisfaction.
- b. Based on the analysis of the 12 indicators IPA product quality batik Pacitan, there is one indicator that is included in quadrant A, the fineness of workmanship batik. These results indicate that the quality of workmanship batik Pacitan can not fully meet consumer expectations.
- c. Quality of batik Pacitan Batik motifs that tend to have a larger, yet have batik's quality as good and smooth as batik - batik from other regions, such as Solo, Pekalongan and Yogyakarta.

2. Quadrant B

- a. Indicators that is located in quadrant B is an indicators of the quality of products that are considered important by consumers and its performance has been unable to meet the expectations of consumers, so that consumers feel satisfied. Indicator - indicator of product quality should be maintained and continuously improved in order community satisfaction with the quality of batik products Pacitan may continue to rise.
- b. Based on the analysis of the 12 indicators IPA product quality batik Pacitan, there are six indicators included in quadrant B, namely : Batik Pacitan is available in a variety of price levels, diversity of color batik, batik batik Pacitan color quality, diversity of design / motif Pacitan, uniqueness of design / motif Pacitan Pacitan quality batik material.
- c. Indicators of the quality of the products above, is an indicator of the quality of products that have been unable to meet consumer expectations. Consumers have many choices batik Pacitan ranging from lowest price to highest price.
- d. Besides available in a variety of price levels, batik Pacitan also has an increasingly diverse colors. Though still dominated by basic colors brown and black that are characteristic Batik Pacitan, but now consumers can get batik with a wide selection of attractive colors.
- e. Batik famous Pacitan with good coloring. Pacitan batik batik process using techniques 2 times lorod. Moreover, in the process of making batik Pacitan, batik is not only done on one side of the fabric only, but back and forth on the two sides of the fabric. This makes the color of the famous batik Pacitan "wanteg" or not easily fade.
- f. Pacitan batik motif has a diverse and unique. Pacitan is characteristic of batik motif Jonasan, namely the non-geometric motifs dominated by basic colors brown and black. Today many new batik motifs developed by the batik craftsmen Pacitan.
- g. Based on an assessment of the respondents, the quality of raw materials used in the batik process, in particular the fabric also has a nice and smooth. Good quality fabric as the raw material of batik according to respondents is important because in

addition to making batik overall quality becomes better also comfortably worn by consumers.

3. Quadrant C

- a. Indicators of the quality of products which is located in quadrant C are indicators that are considered less important by consumers, and the performance of the product is still not meet consumer expectations. Indicator - an indicator that is located in quadrant C is an indicators of product quality should be improved after repairs on a priority indicator in quadrant A is done, so that customer satisfaction with Pacitan batik products can be increased. Based on the analysis of the 12 indicators IPA product quality batik Pacitan, there are four indicators that fall into quadrant C, namely: Brand products, color packaging, packaging design, product information on the packaging Completeness batik Pacitan (brand, manufacturer address, name batik, batik maintenance way , etc)
- b. The fourth indicator above qualities are things - things that have to be repaired or upgraded to improve customer satisfaction. Although according to consumer indicators - indicators are not too important, but if the indicator - the indicator is filled it will improve the quality of batik products Pacitan as a whole in the eyes of consumers.
- c. Consumer awareness of the brand batik Pacitan still low. This is due to the purchase of batik Pacitan, most customers come directly to the outlet batik based on a co-worker, friend or relative, so that consumers are more familiar with the place of purchase and producer compared with its own brand batik.
- d. The results also showed that packaging products should be more attention again. It is a priority to improve the quality of Pacitan batik packaging is to provide complete product information, such as brand, manufacturer address, name batik, batik way maintenance, and other information. Thus, consumers will have full information about batik products
- e. Another thing to consider is the design and color of the packaging. With attractive designs and colors that will enhance the attractiveness and value of the product in the eyes of consumers. By fixing the various aspects of product packaging, the packaging not only serves as a protective product but it can be used as a medium of promotion and education for consumers.

4. Quadrant D

Indicators that is located in quadrant D is an indicator - an indicator that is not taken seriously by consumers and has been implemented very well. The results showed that there are no indicators that fall into quadrant D.

Gap Analysis

Gap analysis in this study uses PGCV Index (Potential Gain of Customer Value's Index). Based PGCV index value obtained, then the order of priority in Pacitan batik performance improvement can be seen in Table 4 and 5. The results of the gap analysis using PGCV Index (Potential Gain of Customer Value's) provide the same results relative to the Cartesian quadrant analysis that have been discussed previously , Things to consider in the analysis of this PGCV is, although the index value for the indicator PGCV 6 has a value that is smaller than the index PGCV for indicators 8,9,10, and 11, but the indicator 6 remains a top priority in the

improvement of product quality batik Pacitan, as indicators of 6 are considered more important by consumers compared with indicators 8,9,10, and 11.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

1. In general, the quality of batik Pacitan according to consumer perceptions are good. This is indicated by value - average level of compatibility between consumer expectations and the performance of the product amounted to 98.20%, 98.20% which means that the performance of the product has to meet consumer expectations.
2. There are six indicators of quality product that meets the expectations of consumers, namely harga, color packaging, the diversity of colors, packaging design, diversity, design / motif, the trademark.
3. There are 5 indicator of product quality should be improved in the improvement of the quality of batik Pacitan in order of priority, namely: the subtlety of craftsmanship batik, completeness, product information on the packaging batik Pacitan (brand, manufacturer address, name batik, batik way maintenance, and so on), packaging design, color packaging and brand products.
4. Batik Pacitan must retain the attributes and perceived quality of the product is good enough, and make improvements to the attributes and dimensions of the quality of products that receive priority for improved performance. Attributes and dimensions that need to be improved product quality has a considerable influence for consumer satisfaction. By improving the performance of the attributes and dimensions of the product quality is expected to improve customer satisfaction with batik product Pacitan

Suggestions

1. Batik Pacitan must retain the attributes and perceived quality of the product is good enough, and make improvements to the attributes and dimensions of the quality of products that receive priority for improved performance. Attributes and dimensions that need to be improved product quality has a considerable influence for consumer satisfaction. By improving the performance of the attributes and dimensions of the product quality is expected to improve customer satisfaction with products batik Pacitan.
2. It takes efforts as an improvement on the attributes - attributes of a product that is still perceived as important but are considered less qualified by consumers. To improve the quality of workmanship batik, efforts should be made of which is to improve the skills and knowledge to be able to produce batik craftsmen smooth and neat.
3. Meanwhile, to increase the value of batik in the eyes of consumers, an effort that can be done is to improve the quality of packaging in terms of design, color and completeness of the information on the packaging. By continuously improving the quality of food products is expected to increase the performance of batik can Pacitan and will ultimately improve the competitiveness of Pacitan between batik batik - batik another in Indonesia.
4. For further research can be developed by adding Importance Performance Analysis (IPA) as a tool for research.

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