

# ANALYSIS OF CULTURAL ATTRIBUTE IN PRODUCT DESIGN OF CRAFT TO INCREASE PURCHASE INTENTION

Lusia Permata Sari Hartanti<sup>1)</sup>, Dian Trihastiuti<sup>2)</sup>

Industrial Engineering, Faculty of Industrial Technology  
University of Pelita Harapan Surabaya, Jl. Jend. A. Yani no.288 Surabaya (60234), Indonesia  
lusia.permata@uphsurabaya.ac.id<sup>1)</sup>, dian.trihastuti@uphsurabaya.ac.id<sup>2)</sup>

## ABSTRACT

*Craft products cannot be separated from culture. This is reflected from the strong influence of cultural attribute in product design which will be the uniqueness of Indonesian craft products. The purpose of this study is to determine the cultural attribute of the craft product, to analyse the influence of cultural attribute on purchase intention. Data analysis is using correlation and regression method. Based on the correlation test, the attribute of craft products is external, internal, and price behavior. Regression model showed that only three attribute that significantly affect the model: the external, price and behavior*

**Keywords:** *craft, cultural, purchase intention*

## 1. INTRODUCTION

Indonesian has realized that this time agriculture and industrial sector is no longer as a driver of the nation's economy. In the 1990s, a new economic era was emerged that optimizes the utilization of human resources creatively called the creative economy (Ministry of Trade, 2008).

One of the sub-sectors that dominate the contribution of the creative industries sector in the GDP is a craft industry. Craft subsector contributed 25.51% in 2006. However, in the period 2002 - 2006, craft industry subsector is also listed as one of the sub-sector that has average growth is below the average national GDP growth (Ministry of Trade, 2008). This situation indicates that the growth of the craft industry is still low.

Batik is an Indonesian cultural heritage and identity that has been recognized by UNESCO since 2009. Various regions in Indonesia has the potential to produce batik, such as Pekalongan, Solo, Sidoarjo, Yogyakarta, and others. Each of these areas can result in different patterns according to the character / identity of the area.

There are many factors that encourage consumers to buy batik. These factors include color, style, price, quality and much more. This study will review more deeply the cultural attribute in batik and its influence on

purchase intention. The purpose of this study is to determine the cultural attribute of the craft product, to analyse the influence of cultural attribute on purchase intention.

## 2. THEORETICAL BACKGROUND

### 2.1 Creative Industry

The definition of the creative industries is Industry that derived from the utilization of creativity, skill and talent of individuals to create wealth and job opportunities through the creation and utilization of creativity and inventiveness of the individual (Ministry of trade of the Republic of Indonesia, 2008). Subsectors of creative industry are advertisement, architecture, art market, craft, design, fashion, video-film-photography, interactive game, music, publishing and printing, art performance, computer service and software, television and radio, research and development.

### 2.2 Creativity and Culture

Creativity is a mental process involving the generation of new ideas or concepts, or new associations between existing ideas or concepts (Trisaksono, 2008). Culture is the whole of complex, which contains the knowledge, belief, art, morals, law, custom, and other capabilities that obtained by a

person as a member of society (Edward B. Taylor).

According to Yeh and Lin (2011) there are three attributes that must be considered in the design of the cultural product:

1. Tangible level: color, quality, shape, decoration, line, shape into details of products, assemblies of each section, and so on.
2. Behavioral level: the functions, operations, convenience in use, safety and enjoyment of use.
3. Intangible level: covering the specific meaning of such products, stories, inspiring emotions, cultural elements.

### 2.3 Purchase intention

Purchase intention is big concern in industry because it is process to analyze and predict the behavior of consumers (Lin & Lin, 2007). Purchase intention is the implied promise to one's self to buy the product again whenever one makes next trip to the market (Fandos & Flavian, 2006; Halim & Hameed, 2005 in Tariq, 2013).

## 3. RESEARCH METHOD

Research method is shown in figure 1.

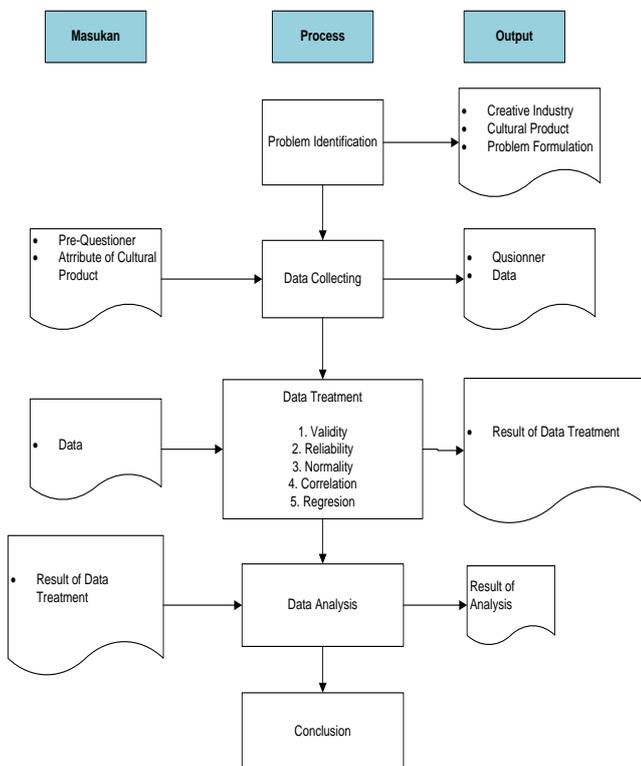


Figure 1 Research Method

## 4. RESULT AND DISCUSSION

### 4.1 Framework

Framework research is shown in figure 2.

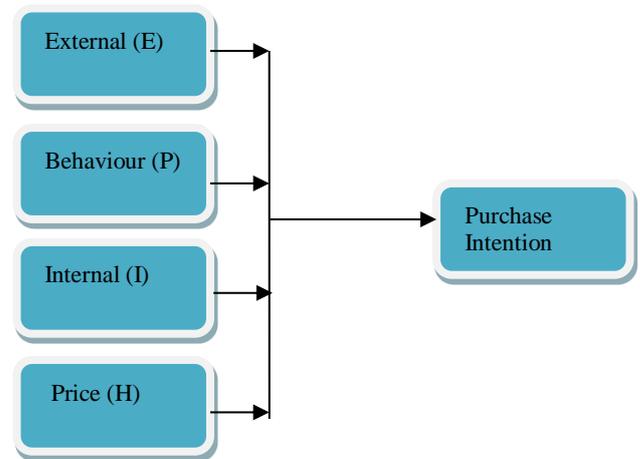


Figure 2. Framework of research

### 4.2 Questioner Design

The question in the questionnaire is compiled based on the results of a review of studies and interviews. The four variables used included aspects of external, internal behavioural, price, and purchase intention by the total number of questions as many as 18. The grouping is as follows: external aspect has 6 questions (E1, E2, E3, E4, E5, E6), behavioral aspects has 3 questions (P1, P2, P3), the internal aspects has 4 questions (I1, I2, I3, I4 ) and the price aspect has 1 question (H1). While the purchase intention has 3 questions (m1, m2, m3).

### 4.3 Data Treatment and Analysis

#### 4.3.1 Descriptive Analysis

The data of respondent is shown in figure 3, 4, 5.

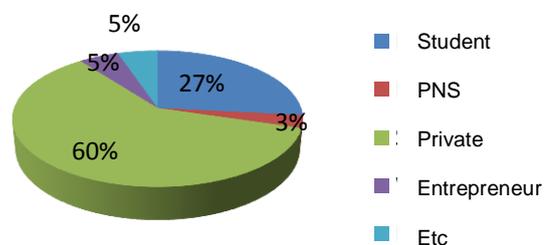


Figure 3. Occupation of respondent

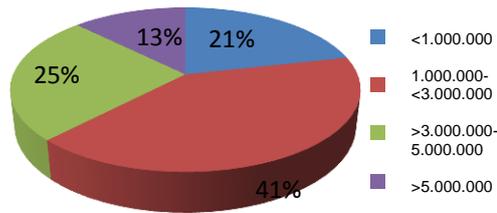


Figure 4. Salary/month of respondent

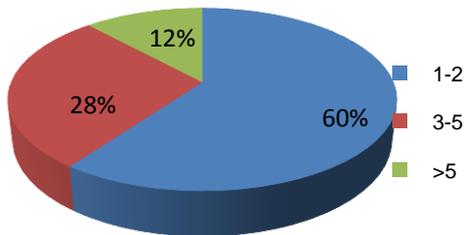


Figure 5. Frequency of Buying (per month)

**4.3.2 Validity and Reliability**

Based on validity test, the attribute which not valid is I3, so this attribute will be deleted for next analysis. The result of validity test is shown in table 1.

Table 1. Validity test

Indicator	r result	Conclusion
E1	0.227	Valid
E2	0.485	Valid
E3	0.580	Valid
E4	0.293	Valid
E5	0.574	Valid
E6	0.503	Valid
P1	0.489	Valid
P2	0.275	Valid
P3	0.427	Valid
I1	0.574	Valid
I2	0.554	Valid
I3	-0.010	Not Valid
I4	0.216	Valid
H1	0.236	Valid
m1	0.241	Valid
m2	0.288	Valid
m3	0.489	Valid
m4	0.211	Valid

Reliability test result indicates that the alpha coefficient of 0.795 so it can be concluded that the questionnaire was reliable.

**4.3.3 Normality test**

Normality test is used to determine if the data has normal distribution so data can be used later in the process. Data has normally distributed if p-value of each variable on > 0,05 (Hair et al, 2006). From the normality test, it can be concluded that each attribute are normally distributed, so it can be used for further analysis.

**4.3.4 Correlation test**

Correlation test is done to know the relationship between the variables. Initial hypothesis as follows:

H0: there is no significant relationship between the product attributes and purchase intention

H1: There is a significant relationship between the product attributes and purchase intention

The result of Correlation test is shown in table 2.

Table 2. Correlation Test

		Correlations				
		E	P	I	H1	M
E	Pearson Correlation	1.000	.298**	.372**	.083	.486**
	Sig. (2-tailed)		.000	.000	.340	.000
	N	135.000	135	135	135	135
P	Pearson Correlation	.298**	1.000	.357**	.246**	.501**
	Sig. (2-tailed)	.000		.000	.004	.000
	N	135	135.000	135	135	135
I	Pearson Correlation	.372**	.357**	1.000	.154	.332**
	Sig. (2-tailed)	.000	.000		.075	.000
	N	135	135	135.000	135	135
H1	Pearson Correlation	.083	.246**	.154	1.000	.326**
	Sig. (2-tailed)	.340	.004	.075		.000
	N	135	135	135	135.000	135
M	Pearson Correlation	.486**	.501**	.332**	.326**	1.000
	Sig. (2-tailed)	.000	.000	.000	.000	
	N	135	135	135	135	135.000

\*\* .Correlation is significant at the 0.01 level (2-tailed).

The results of correlation analysis showed that the significant value of external, behavior, internal, price has a significance value of less than 0.05 so it can be concluded that there is a significant relationship between purchase intention and product attributes.

**4.3.5 Regression test**

The result of regression test is shown in table 3.

Table 3. Regression Test  
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.648 <sup>a</sup>	.420	.402	.33280

a. Predictors: (Constant), H1, E, P, I

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	1.148	.303		3.784	.000
E	.295	.062	.352	4.794	.000
P	.246	.056	.326	4.384	.000
I	.035	.050	.052	.699	.486
H1	.133	.044	.208	3.013	.003

a. Dependent Variable: M

ANOVA<sup>b</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.414	4	2.603	23.506	.000 <sup>a</sup>
	Residual	14.398	130	.111		
	Total	24.812	134			

a. Predictors: (Constant), H1, E, P, I

b. Dependent Variable: M

R value (0.648) indicates that external variable, behaviour variable, internal variable and prices variable is correlated with purchase intention. According to Guilford (1973) if the value of R ranges from 0.4-0.7 then the correlation between variables have significant correlation. Adj R-sq results showed 40.2 % of the variables were detected in the study, which affect the purchase intention. Thus there are 59.8 % of other variables that affect the interests of purchases that need to be further investigated.

Although the correlation results showed that all four dimensions have a significant correlation to purchase intention, but the regression results indicate that the coefficient of internal aspect is not significant to model. It can be seen from the results of the internal dimension of the p-value is

greater than 0.05. From the analysis, the regression equation can be written as follows :

Interests purchase = 1.148 + 0.295 external + 0.246 behavior + 0.133 price + e

F value (23.506) is greater than the table value of F (2.28) with a significance level of 0.05 , so it can be concluded that the regression equation can be used to predict interest in the purchase .

## 5. CONCLUSION

Based on the correlation test, the attribute of craft products is external, internal, and price behavior. Regression model showed that only three attribute that significantly affect the model: the external, price and behavior. The regression equation can be written: Interests purchase = 1.148 + 0.295 external + 0.246 behavior + 0.133 price + e. These attributes have a positive influence in batik purchase intention.

## 6. REFERENCE

- Departemen Perdagangan Republik Indonesia. (2008). Pengembangan Ekonomi Kreatif Indonesia 2025. Jakarta.
- Tariq, M.I., M.R.Nawaz., M.M.Nawaz., H.A.,Butt. (2013). Customer Perceptions about Branding and Purchase Intention: A Study of FMCG in an Emerging Market.. Journal of Basic and Applied Scientific Research.
- Yeh, M.L., and Lin, P.H. (2011) P.L.P. Rau (Ed): Internationalization, Design, pp. 144-122, Berlin: Springer-Verlag.

## AUTHOR BIOGRAPHIES

**Lusia Permata Sari Hartanti** and **Dian Trihastuti** are lecturer in Department of Industrial Engineering, Faculty of Industrial Technology, University of Pelita Harapan, Surabaya.