MALAYSIAN PERCEPTIONS TOWARDS BEMBAN PRODUCT DESIGN

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ABSTRACT

This research represents an initial study of *bemban* product designs during the *Hari Kraf Kebangsaan* (National Craft Day) in Kuala Lumpur. The practitioners of *bemban* products have tried to create innovative designs with the help of the Kraftangan Sarawak and the Sarawak Craft Council to derive good relevant designs that meet the market. Therefore, the objective of this study is to investigate Malaysian perceptions towards *bemban* product designs to identify how Malaysians perceive current *bemban* products in the market. In order to achieve research objectives, the Kansei engineering attitude and behaviour, user's experience research and a 5 level semantic differential scale were used to construct questionnaires. According to the survey analysis, it is highly important to understand user's desire in the *bemban* product development.

Keywords: Perceptions, Bemban, User Research, SD scale, Kansei Engineering

1. BACKGROUND RESEARCH

Bemban is a plant that can be found mostly in Southeast Asia. In Malaysia, the Ibans from Sarawak are highly known for using *bemban* plants to produce *bemban* products for lifestyle activities and ritual ceremonies.



Figure 1: Bemban Air (Donax Arundastrum)

There are various traditional motifs found in the *bemban* products produced by the Ibans of Sarawak. The product design, shape, form and patterns normally follow the functions of the products, which carries significant semantic reference towards the lifestyle, demography and behaviour its users.



Figure 2: Bemban Product (Traditional)

Recently, *bemban* products have started to take on a new turn in terms of design due to its failure to meet the current change of design preference in the Malaysian market that were brought about by lifestyle, material and religious revolutions. Therefore, its complexity and unprofitability has also resulted to the refusal of many *bemban* practitioners and Iban youngsters to participate in the creation of *bemban* products. With the help of the Kraftangan Sarawak and the Sarawak Craft Council, *bemban* product practitioners started to create innovative and relevant designs that would meet the demands of the Malaysian market. Product functionality, decorations, and other materials are presently being added in the development of *bemban* products.



Figure 3: Bemban Product (Current)

In order to assist *bemban* product development in moving forward and meeting the demands of the Malaysian market, this research recognises different Malaysian perceptions towards current *bemban* products.

2. RESEARCH METHOD

2.1. Kansei Engineering (Attitude and Behaviour) Approach

Based on the working *bemban* product development, the criteria of selection for an instrument would require its ability to measure Malaysian perceptions towards Malaysian craft products. The researcher used Malaysian products as the benchmark due to their similarities in product situations and characteristics with *bemban* products.

The Kansei Engineering psychological measurement focusing on attitude and behaviour is the method used in this research. This distinction can be summed up by contrasting "what people say" versus "what people do" (very often the two subjects are quite different). The purpose of attitudinal research is usually to understand or measure people's stated beliefs. (Christian Rohrer, 2014)

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Attitudes Components

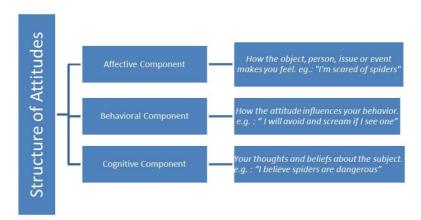


Figure 4: ABC Model Attitudes

Structure of Survey

- a. Attitude (Thinking):
 - i. What are the preference of Malaysians in terms of style pertaining to craft products?
- b. Behaviour (Actions from the past):
 - i. What are the preference in terms of style based on their previous purchases?
 - ii. What are the characteristics of products that were purchased?

2.2. Semantic Differential Approach

The following analyses the use of the Semantic Differential (SD) type 5-point of rating scale designed to measure the feelings of Malaysians towards the craft.

Question structure: The respondent is asked to choose his or her feelings towards crafts, based on a 5-point scale between two polar adjectives (for example: "Future-Ancient", "Alive-Gone" or "Remembered-Forgotten").

Score meaning: 1-2 points mean that the product is still acceptable by Malaysian consumers, 3 points mean natural, 4-5 points mean the product is obsolete and 6 points mean that the consumer doesn't recognise the product.

2.3. Study Sampling

A pilot test of questionnaires is distributed to a total of 160 various age groups and are divided into 5 age groups: below 20, 21-30, 31-40, 41-50, and above 51 years old. These questionnaires were distributed at the *Hari Kraf Kebangsaan* / National Craft Day, Kuala Lumpur, Malaysia.

3. **RESULT & ANALYSIS**

3.1. Initial Results

3.1.1. Product Style

The visual styling for craft products was divided into 6 categories: Traditional, Contemporary, Futuristic, Minimalist, Industrial, and others. The Malaysian consumers' score for the type of craft visual style were compared between attitude and behaviour questions and are reported as follows:

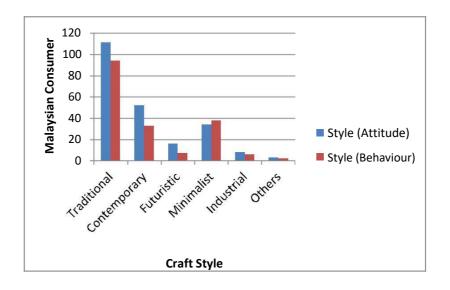


Figure 5: Malaysian scores on craft style preferences according to attitude and behaviour

Figure 5 shows craft styles from attitude and behaviour point of views. Attitude in this questionnaire means the visual style of craft product that they will purchase in *Hari Kraf Kebangsaan* (HKK), while behaviour is the visual style of craft product that they have already purchased. The data in figure 5 clearly revealed that the Traditional style is the highest preferred craft style product that is realised from attitude and behaviour questions. However, several styles that followed suit in terms of attitude were Contemporary, Minimalist, Futuristic, Industrial and others. In addition to that, a slight difference in terms of behavioural data showed that following the traditional style were Minimalist, Contemporary, Futuristic, Industrial and others.

3.1.2. Product Functions

Product functions for craft products are divided into 5 categories: Decorations, Gifts and Corporate Souvenirs, Fashion and Accessories, Tools and Home Appliances, and

others. The Malaysian consumer scores for the type of product functions based on behaviour questions and are reported as follows:

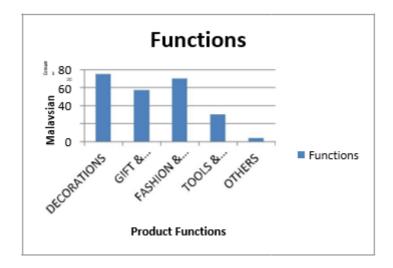


Figure 6: Malaysian scores on Preferences Product Functions according to behaviour

The Malaysian consumer scores for the type of product functions based on stated product that has been purchased are tabled in Table 1 which states the functions of Top 10 Craft Product that Malaysians have purchased.

No	ltem	າຣ	Total Purchasing		
		Fashion	Decoration s	Tools	
1	Batik <i>(Batik)</i>	•			77
2	Plaited Product (Anyaman)		•	•	26
3	Songket (Songket)	•			19
4	Woodcraft (Ukiran Kayu)		•		12
5	Cloth (Baju)	•			11
6	Labu Sayong (Labu Sayong)		•	•	10
7	Congkak <i>(Congkak)</i>		•	•	9
8	Dagger <u>(Keris, Parang, Pisau,</u> Kerambit)		•	•	8
9	Ring, Bracelet (Gelang, Cincin)	•			6
10	Shoes (Kasut)	•			5
	Total	123	65	53	188

Table 1	Functions	of Top	10 Craft	Product that	Malaysian	has purchased
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From table 1, the highest functions from craft products that Malaysians have purchased are Fashion, followed by Decorations and Tools. However, Gift functions cannot be measured using this table since every product can be as a gift and it depends on consumer.

3.1.3. Obsolete Parameters

Initial findings are reported as follows.

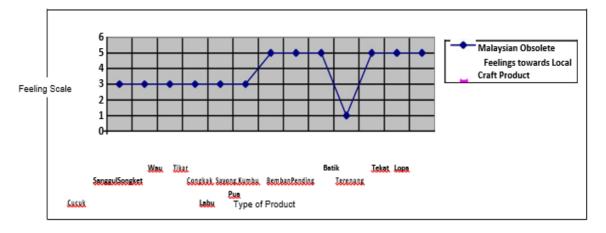


Figure 7: Malaysian Obsolete Feelings towards Craft Product

3.1.4. Consumer Recognition towards Bemban Product

The Malaysian consumer scores for the *bemban* recognition are reported as follows:

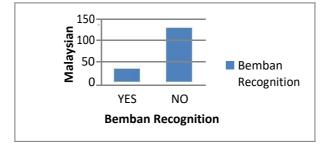


Figure 8: Malaysian Recognition towards Bemban Product

3.2. Preliminary Findings

Preliminary trends can be identified based on the questionnaire analysis conducted. The following are some main conclusions that can be made:

1. Product style and functions criteria preferred by Malaysians -

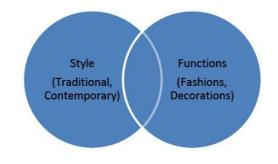


Figure 9: Craft Criteria according to Malaysian Preferences

Based on Figure 9, the darkest side that merges between style and function is the product criteria that are accepted by Malaysians. This explains that a product that retains a style and function that are favourable to Malaysian consumers will attract Malaysians to buy as well as accept the product design. There's a need to majorly develop craft product functions based on tools and home appliances that can meet the Malaysian lifestyle.

- 2. What do Malaysians mean by traditional style?
 - a) Based on Questionnaire



Figure 10: Traditional Style words meaning

3. Which tools & home appliances should be developed? For tools & home appliances craft products, they should be developed into something that Malaysians can use in this era. This is supported by tools & home appliances that Malaysians still purchase are anyaman, labu sayong, parang & pisau, and congkak.

4. CONCLUSION

Based on the survey, current *bemban* products are unable to meet Malaysian preferences. A majority of Malaysians fail to recognise *bemban* products whereas a minority of Malaysians who recognise the product, felt that the designs are obsolete. Based on the differences between traditional *bemban* products with current bemban products, its development has been in stagnant motions due to the lack of empathy towards user preferences, behaviour and lifestyle. Therefore, *Bemban* product development has been designed by functions following the form. This means that there is a decline in the current *bemban* products that have always put functions and semantic reference with user's lifestyle as an aesthetic value. *Bemban* products have been developed by increasing their aesthetic view of various material decorations and fancy functions that doesn't meet Malaysian preferences. This perspective of aesthetic point of view prevents the design development from moving forward and meeting the market's expectations.

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REFERENCES

Axelsson, J, Eklund, J, Nagamachi, M, Ishihara, S, Rydman, K, & Sandin, J. (no date). *Suspension and damping a lowlifter platform (An application of Kansei Engineering).* Division of Quality and Human-Systems and CMTO. Linkoping Universitet, SE-581 83, Linkoping, Sweden. Hiroshima International University.

Durin, A. (2014). Tikar Bemban. Universiti Malaysia Sarawak.

Demirbilek, O & Sener, B (2003) *Product design, semantics and emotional respons. Ergonomics*, 46:13-14, 1346-1360, DOI: 10.1080/00140130310001610874

Lokman, A. (2010). *Design & Emotion: The Kansei Engineering methodology*. Faculty of Computer and Mathematical Sciences, Universiti Teknologi MARA (UiTM) Malaysia. Vol 1, Issue 1, 2010.

Lévy, P. (2013). *Beyond kansei engineering: The emancipation of kansei design*. International Journal of Design, 7(2), 83-94.

Lockton, D (2012), `Attitudes, meaning, emotion and motivation in design for behaviour change', working paper, available at http://danlockton.co.uk

McLeod, S. (2014). *Attitude and Behavior*. Retrieved from https://www.simplypsychology.org/attitudes.html

Nagamachi, M. (2008). *Perspectives and new trend of Kansei/Affective Engineering*. User Science Institute, Kyushu University. Conceptual Paper.

Nagamachi, M, Tachikawa, M, Imanishi, N, Ishizawa, T, Yano, S. (2008). *A Successful Statiscal Procedure on Kansei Engineering Products*. 11th QMOD Conference.

Simon T. W. Schütte, Jörgen Eklund, Jan R. C. Axelsson & Mitsuo Nagamachi (2004) *Concepts, methods and tools in Kansei engineering*. Theoretical Issues in Ergonomics Science, 5:3, 214-231, DOI: 10.1080/1463922021000049980

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Sharon, T (2014). *Tools for Entrepreneurs: Flying Cars, UX Research, Attitude and Behavior*. Retrieved from https://www.youtube.com/watch?v=KISgWT2Nbak