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COMPARATIVE RELATIONSHIP IN PERCEPTUAL ELEMENT IN TRIGGERING EMOTIONAL VALUE OF MALAYSIAN CAR DESIGN

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ABSTRACT

Automotive industry in Malaysia transforming the landscape from an agricultural to industrial nation, risen the high-value economic activities and improved the standard of living for most of the sector. As this sector continues to advance, more high-value jobs will be available and these include production engineers, modeler as well stylist, product, process and tool designers. Innovative design development in car segment, exterior and interior design, trend and advances technology creates new car model to attract consumer purchasing and compete among manufacturer. New car model will evoke consumer emotion which underlying the human values and these values can be useful for predicting the emotional responses to this new design. Thus, this paper aims to compare the relationship arise in triggering emotional value between Malaysian car design namely Proton and Perodua in literature findings of methods. The history of these two manufacturers and its competitors were elaborate and methods available in searching for this element were discussed and propose as future recommendation as further study.

1. Introduction

History Of Malaysia's Automotive Industry

The Malaysia's automotive industry plays a significant role in transforming Malaysia from an agricultural to industrial nation, which includes to the high-value economic activities, improved standard of living as well as in education sector. As the sector continues to advance, more high-value jobs will be available and these include production engineers, modeler as well product, process and tool designers. The sector employs thousands of Malaysians in both manufacturing and aftersales sectors and creates an important impact on the development of upstream industries (Malaysian Automotive Robotics and IOT Institute, 2019).

The beginning of Malaysia's automotive industry predates its independence when Ford Malaya was incorporated in 1926 in Singapore as regional distributor of Ford products. Malaysia's modern day automotive industry began in 1967 when Volvo Cars established an assembly plant in

Shah Alam, Selangor. In 1984, PROTON was set up as a national car project to spur industrialization. Perodua was later established in 1992 to assemble mini and supermini cars.

Malaysia's car industry is dominated by two local manufacturers which are heavily supported by the government through National Car Policy which are Proton and Perodua. Proton was officially incorporated on May 7, 1983. The first model, the Proton Saga, was commercially launched on July 9, 1985. The name "Saga" was chosen by Ismail Jaafar, a retired military soldier, and derived from "saga" (Adenanthera pavonina), a type of seed commonly found in Malaysia. The first new market for the Proton Saga was Singapore, right across the Straits of Johor. Proton was founded with the help of Mitsubishi. In 2003, the Malaysian government owned 32 percent of Proton. Mitsubishi which was part Daimler Benz had a 17 percent stake, at that time Mitsubishi was trying to get rid of its shares and Proton was making plans to take on a different foreign partner. The Malaysian government believed that Mitsubishi wasn't transferring technology fast enough to Proton (Hays, 2019).

Perodua (Perusahaan Otomobil Kedua Sendirian Berhad. English: Second Automobile Manufacturer Private Limited) is Malaysia's second largest automobile manufacturer after Proton. It was established in 1992 and launched their first car, the Perodua Kancil in August 1994. 'M2' refers to the codename which was used when the project to establish Perodua was still Top Secret. The shareholders of Perodua are UMW Corporation Sdn Bhd with 38 percent stake, Daihatsu Motor Co. Ltd. (20 percent), MBM Resources (20 percent), PNB Equity Resources (10 percent), Mitsui & Co. Ltd (7 percent) and Daihatsu (Malaysia) (5 percent) (Rosli, 2006).

Perodua mainly produces minicars and superminis and does not have models in the same market segments as Proton. They do not design or engineer their main components such as engine and transmission in house. Perodua cars have historically used Daihatsu component designs. Daihatsu held a 20 percent stake in Perodua at the company's launch, increasing this to 25 percent in 2001 and then to 35 percent. In 2004 Perodua started assembling the Toyota Avanza at their plant in Rawang, for sale in Malaysia.

2. Comparative Relationship Towards Proton And Perodua

In the new global economy, Proton and Perodua has been quite successful in its business ventures. Its cars are very popular among Malaysians, such as the Perodua Myvi, which sold 80,327 units in 2006, outselling its rival's best-selling car, the Proton Wira then, which only sold 28,886 units in Malaysia. The Perodua Myvi has been the best-selling car in Malaysia for 8 consecutive years, between 2006 and 2013 respectively. Perodua is set to become the largest manufacturer of compact cars in South-East Asia.

In the contemporary world people spending a lot of time interacting with their vehicle especially while driving. Perodua became the best-selling car company in Malaysia compared to Proton. According to Desmet, many aspects such as emotional value relation to exterior styling as well as social aspects of vehicles (Desmet, 2002).

Table 1: Total sales of car in Malaysia in 2017 and 2018

Brand	Total sales (Passenger Vehicles)			
	2018		2017	
	Total	Share	Total	Share
Perodua	**227,243**	**42.6%**	**204,887**	**39.8%**
Honda	102,282	19.2%	109,511	21.3%
Proton	**64,744**	**12.1%**	**70,991**	**13.8%**
Toyota	43,446	8.1%	47,615	9.3%
Nissan	21,956	4.1%	19,949	3.9%
Mazda	15,765	3.0%	9,454	1.8%
Mercedes	13,118	2.5%	12,067	2.3%
BMW	12,008	2.3%	10,618	2.1%
Volkswagen	7,001	1.3%	6,536	1.3%
Kia	5,658	1.1%	4,131	0.8%
Others	19,981	3.7%	18,287	3.6%
Total	533,202	100%	514,697	100%

Table 2: Total sales of car based on brand in 2019 according to passenger and commercial car

Brand	Total Sales			Passenger Vehicles			Commercial Vehicles		
	Apr-19	Mar-19	YTD	Apr-19	Mar-19	YTD	Apr-19	Mar-19	YTD
Perodua	22,141	23,286	82,800	22,141	23,286	82,800	0 -	0	0
Proton	7,011	6,136	25,292	7,011	6,136	25,292	0 -	0	0
Honda	6,175	8,677	28,365	6,175	8,677	28,365	0 -	0	0
Toyota	5,465	5,899	19,187	3,948	4,712	14,607	1,517	1,187	4,580
Nissan	1,608	2,050	6,774	1,268	1,574	5,277	340	476	1,497
Mazda	1,302	1,010	4,613	1,299	1,000	4,539	3	10	74
Mercedes	974	1,365	3,992	945	1,334	3,899	29	31	93
BMW	760	920	3,325	760	920	3,325	0 -	0	0
Isuzu	742	783	2,646	0 -	0	0	742	783	2,646
Mitsubishi	671	897	2,944	157	306	913	514	591	2,031
Ford	451	547	2,046	1	2	8	450	545	2,038

3. Emotion Value In Car Design

Philosophers and psychologists have often claimed that emotions involve appraisals or evaluations. One version of this claim has it that values are the "formal objects" (Kenny) or "correlates" (Husserl) of emotions. People are emotional beings and products can address our emotions in multiple ways. According to Norman, there is no longer sufficient for a product to function properly, to be usable and efficient, or to have an aesthetic appeal especially in car design (Norman, 2002).

We can be inspired by the shape or design of a new car, frustrated by the multifunctioning of the device, or proud of owning a fancy pair of glasses that provides us with status. In all our encounters with the artificial world, emotion pops up and they strongly contribute to our perception, preferences, and our general well-being. Positive emotions when experienced both psychologically and physiologically, thus forming a powerful emotional attachment between the human user and the product. In the contemporary world, people spending large amounts of time with their vehicle focusing on the exterior and while driving. For emotion-driven design to become a ma-

ture design strategy, we need to understand why, when, and how products evoke particular emotions. Emotion evoked by car design underlying human values and values can be useful for predicting emotional responses to new design. The emotional chart to identify emotions Russell suggest that at a single moment the conscious experience of an emotion can be seen as blend of two dimensions (Barrett & Russell, 2015).

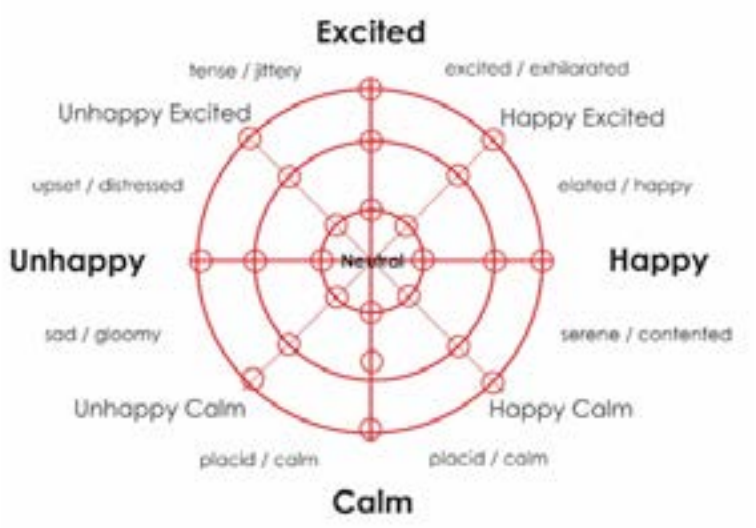

Figure 1: Emotional chart by Russel

4. Method

4.1 Feasibility Of Visual Protocol Analysis

Protocol analysis is a rigorous methodology for eliciting verbal reports of thought sequences as a valid source of data on thinking, the central assumption of protocol analysis is that possible to instruct subjects to verbalize their thoughts in a manner that doesn't disturbing the process of the completion of a task and accepted the valid data on thinking.

4.2 Halo Effect / Beautiful Is Usable

Halo Effect initially proposed as Halo Error by Wells (1907) has been defined as a cognitive process in which the global evaluation of a brand can influence one's response to others attribute or impression of one attribute shapes the impression of another independent attribute (Simeng Gu, Fushun Wang, Patel, Bourgeois, & Huang, 2019). The halo effect is a phenomenon where people judge the general personality of a person based on the perception of one salient characteristic. The effect was first observed by Fredrick Lyman Wells in an article in 1907 (Wells, 1907), and referred to as the "error of the halo" in an article written by Edward Thorndike in 1920 (Thorndike, 1920). It has been widely applied in various areas such as marketing, consumer behavior and design (Guerin & Innes, 1981).

4.3 Perceived Quality

In the automotive industry, research regarding perceived quality is established mainly by investigation of brand image and heritage, aesthetic quality and different technical aspects related to material quality, sound quality, etc. The next suggestion of triggering the perception of car design emotion in Malaysia is perceived quality. Quality is recognized by many authors that product quality has a multidimensional structure. In 1984, Garvin introduced five approaches of quality definition: transcendent, product based, user based, manufacturing based and value based. The transcendent approach has a philosophic nature and proposes: "quality cannot be defined precisely". The product-based approach sees the quality as a measurable variable. The consumer based approach represents an idiosyncratic and highly subjective view of quality in the product. The manufacturing-based approach represents quality is identified as "fulfillment of the requirements". The value based approach defines quality regarding cost and price. As a framework of product quality elements Garvin proposed eight basic dimensions.

Table 3: Eight basic dimensions of product quality elements

	Dimension	Elaboration
1.	Performance	primary product characteristics
2.	Features	("bells and whistles" / secondary attributes that improve product performance and quality
3.	Reliability	frequency of failure
4.	Conformance	match with specifications
5.	Durability	product life
6.	Serviceability	speed of repair
7.	Aesthetics	"fits and finishes"
8.	Perceived quality	reputation and intangibles

Garvin identifies aesthetics and perceived quality as the most subjective dimensions of quality. According to Garvin, advertising has a similar impact on the customer impression as the aesthetics and perceived quality Mitra and Golder use the term "objective quality" defining it as ' performance combined with all product attributes'. Objective quality could be measured by mixed methods and expert ratings and exclude subjective attributes like aesthetics and external factors like brand image. Regarding perceived quality, Mitra and Golder interpret this term as the "perception of the customer", deriving from Zeithaml's definition of perceived quality. Zeithaml (1988) describes perceived quality as the subjective consumer judgment regarding overall product superiority, different from objective quality.

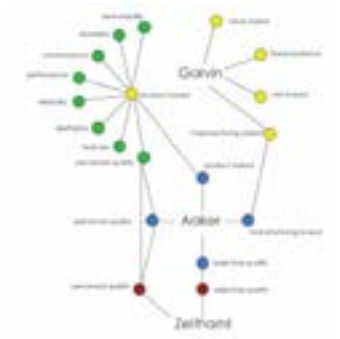

Figure 2: Schematic illustration of the quality dimensions

5. Discussion And Further Recommendation

Malaysian car brand should find the best method in designing a car by emphasizing the limitation of emotional needed in car design, in passenger and commercial car or vehicle such as halo effect and perceived quality as a method than designers can use as mention to triggering emotional value of Malaysian car brand. With the study of the previous method researcher look into several possibility of defining an establish method to look into product value hence the car design itself. Thus, the relationship value between Malaysian car design manufacturers namely Proton and Perodua were propose as future recommendation for further study.

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References

Barrett, L., & Russell, J. (2015). They Psychological Construction of Emotion. New York: Guildofrd Press.

Desmet, P. (2002). Designing emotions. The Design Journal, 6(2), 60-62.

Guerin, B., & Innes, J. (1981). Awareness of cognitive processes: Replications and revisions. . Journal of General Psychology, 104, 173-189.

Hays, J. (2019). Proton and the Autombile Industry in Malaysia. Retrieved from http://factsanddetails.com/southeast-asia/Malaysia/sub5_4e/entry-3698.html

Malaysian Automotive Robotics and IOT Institute. (2019). The Automotive Industry. Retrieved from http://www.marii.my/automotive

Norman, D. A. (2002). Emotion & design: attractive things work better. Interactions, 9(4), 36-42.

Rosli, M. (2006). The Automobile Industry and Performance of Malaysian Auto Production. Journal of Economic Cooperation, 27(1), 89-114.

Simeng Gu, Fushun Wang, Patel, N. P., Bourgeois, J. A., & Huang, J. H. (2019). A Model for Basic Emotions Using Observations of Behavior in Drosophila. Frontiers in Psychology.

Thorndike, E. L. (1920). A Constant Error in Psychological Ratings. Journal of Applied Psychology, 25-29.

Wells, F. L. (1907). A Statistical Study of Literary Merit. Archives of Psychology, 1-30.

Zeithaml, V. A. (1988). Consumer Perceptions of Price, Quality, and Value: A Means-End Model and Synthesis of Evidence. Journal of Marketing, 52(3), 2-22.

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