

Product Transference Perceptions: An Experimental Approach to Innovative Methods of Design

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ABSTRACT

Object of consumers' emotional response possess to communicate in the aspects of our personality, group membership and aspirations. Likewise, symbolism obviously in related to consumer product plays a major role perceives as a symbol of social status, power, and rebellion. While there is extensive empirical evidence that consumer products display differences in personality and social rank, the present study seeks to examine the neglected question of how user judge the objects and how the objects bestow values upon users. It mainly focused on the judgement of the product itself rather than how products bestow values upon users. The complexity of the problem arise from the marketing research method such as varied demographic, the choice of name and colour, and the styling segmentation can only be solved and improved by using an efficient method of design. This paper explores an analysis of existing methods in related disciplines and provides guidelines in formulating and extending the technique. It was done in order to formulate an experimental approach to design marketing method as one of the technique which can be apply to design research. The discussion draws upon psychology effect and possible explanation of the result based on the experimental approach of this method. Finally, suggestions are made as a way forward in developing an efficient design marketing method in research perceptions of consumer products.

KEYWORDS: Perceptions, Innovative Method, Product Transference, Experimental Approach.

INTRODUCTION

The appearance of product design strongly influences the consumer's perceptions in the market. Consumers' perceptions response derived from their emotional derived plays a significant role in the visual appearance of product design. These responses are gathered through market research data collection techniques by company to formulate and develop an effective marketing research method. These techniques improve their marketing strategies and increase sales for the company. With current globalisation and trade liberalisation, traditional research techniques are no longer efficient in generating the sales.

Consumers' reaction to products strongly influences their sales in the market. The consumer responses of the product's styling appearance is fundamental to a design and more so to the company. Formulating an effective market research method is important for companies to explore their strategies. User satisfaction became a major determinant in design strategies of a company. In relation to this, user satisfaction relies on the values that are driven by the emotions response from: 1) the used of product; 2) symbolic values referring to the product's reflection on its user; and 3) character values relating to the personality of the product. According to [1], products carry two different kind of symbolisms; self-expressive, which relies on the user's identity and expression of group membership, social position or status. Thus, symbolism plays as a major role in the consumer product as refer to automotive industry. In regards, cars tend to be said as an extension of ego and personal lifestyle.

"Religious, economies or erotic desire can be displaced to an object. One way that an object's social value is over determined is through the demonstration of excess capability that suggests a latent property to deliver human qualities. A car can have an excess of power that cannot actually be used on the road but a powerful car makes the driver powerful" [2].

According to [3], in order to consumer product satisfy the user need, it is necessary to develop an experimental approach to formulated an efficient method. This study suggests the needs for the development of visual experience studies and analysis into design research. To achieve this, it is important to combine research design into two former traditions of visual research: 1) supporting the designer in creation and analysis to produce meanings, and 2) providing the means to anticipate and test how user will interpret and experience the visual messages in products. As a result, designers concentrate more on visual impact and visual research methods.

Within the consumer product industry, a wide range of market research methods have been adapted by companies. In addition to this, design market research, increasingly integrated knowledge from other disciplines

such as human factors/ergonomics, social sciences and market research [4]. Research, therefore, is absolutely necessary to uncover the emotional responses to the design of products. The fields of interest include aesthetics, psychology, consumer research, sociology, marketing, and semiotics [5]. The complexity of the problem arise from the market such varied demographic, the choice of name and colour, and the styling segmentation can be only solved and improved by using an efficient method [6].

An exploration of new techniques is crucial and important for the consumer product. Despite the various methods and techniques that have been applied to the investigation of the emotional relationship of consumers with product design, there is a lack of publications devoted specifically to the consideration of the value a product bestows upon the user. Limited information about product personality and user image within the design field demonstrates a lack of understanding of how people judge the objects and how the objects bestow values upon users. At the moment, market research methods are mainly focused on the judgement of the product itself rather than how products bestow values upon users [7].

Marketing Research Method in Consumer Product

As suggest by [8], design methods are not recipe for success and offer a guide to the thinking and action structure. It helps the designer to communicate efficiently with their client and team. The process will slowly learn through this method by experience and reflecting critically and able to tackling design problems effectively and efficiently. Among traditional methods that been used includes user observations, interviews, questionnaires, focus groups, mind map, trend analysis, strengths, weaknesses, opportunities and threats (SWOT) analysis, perceptual map, and value curve [9-17]. These methods define the value and its objectives and each one provide the possibility and limitations in different cases.

The focus group method had been used by Lexus of Toyota Motor Corporation to gather their consumer perceptions in Beverly Hills, California and by Harley-Davidson motorcycle company to gather their consumer experience [18, 19, 20]. In regards, the motivation research method has been used by Piaggio, who conducted thorough interviews in attempt to uncover previously hidden or repressed desires of consumers [21]. In addition, Harley-Davidson has used ethnographic methods to understand consumers' behaviour and to create special relationships with them [22].

The above methods are focus upon the vehicle per se. Despite the various methods and techniques that have been applied to the investigation of the emotional relationship of consumers with automotive design, there is a lack of publications devoted specifically to consideration of the value a product bestows upon the user. Currently, market research methods are more focused on judgement of the product itself, overlooking a key feature of products, namely the capacity of the product to confer its characteristics onto the owner.

Value a Product Bestows Upon the User

The characteristics of the product onto the owner can be overt or more subtle. In the overt category, owner of a new Rolls Royce will indicate wealthy status, and this crosses national boundaries. Ownership of such vehicles confers wealth and status imposes an image success on its owner. In addition, status of success is also apparent in the ownership of a Bentley, Lamborghini, Ferrari, and down to the second level of Mercedes and BMW. Similarly in the developing nations, these characteristics are indicated by ownership of certain vehicles.

The objects we possess communicate aspects of our personality, group membership, and aspirations. Likewise, symbolism obviously in related to the automotive industry plays as a major role in it. It typically perceives as a symbol of social status, power, and rebellion [23]. In [24] articulated these aspects invented the term 'conspicuous consumption', where he described the role of possessions in the definition of our social identity.

METHODOLOGY

An experimental aesthetics technique namely product transference perceptions has been conducted in this study. In order to assess user requirements and to establish how they perceive competing models, methods were required that could be cost effective and adaptable in various markets to evaluated the products. This resulted in two methods for this study via pilot survey: 1) visual positioning task; and 2) room affect method.

Visual Positioning Task

For the visual positioning task, a qualitative approach has been applied derived by combining two methods of the Semantic Differential [25] and Multidimensional Scaling (MDS) [26]. This method uses a visual field format whereby participants maneuver and position products relative to one another in a visual space. Essentially, it adopts the format of Multidimensional Scaling [27], whereby products are positioned in a proximities space: the closer together in the space, the more similar the products. However, unlike Multidimensional Scaling, the dimensionality of the proximities space is predetermined. And it is here that the dimensions commonly identified in Semantic Differential studies can be used. Alternatively, different dimensions can be imposed according to the interests of the designer-researcher. While the above may sound complex, in practice it is extremely easy to set up

and analyse, participants also find it easy to use. From the standpoint of both the designer and the participant, it requires neither verbal articulation nor an understanding of numbers-statistics. In addition, it will generate visual output [28].

The method conducted which participants from different nationality were given one task involving motorcycle. The participants were asked to position the product pictures on the visual axis of a plot that was provided. The first plot used an Evaluation axis consisting of like-dislike and a Social axis consisting of cheap-expensive, positioned orthogonal to one another. The second plot used a Potency axis, strong-weak and an Activity axis, slow-fast. The results from each participant were combined into the mean position for each of the stimuli.



Figure 1: Visual positioning task procedure

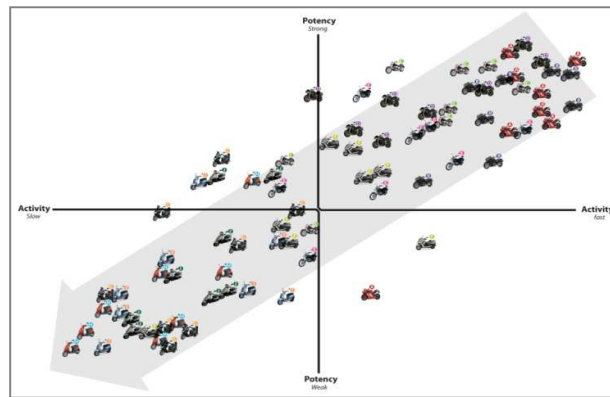


Figure 2: Visual positioning task result

Room Affect Method

For the second method, a quantitative approach has been applied derived by combining two methods of Room Affect and Personality Traits [30]. The Room Effect derives from environmental psychology. In [29] found that the characteristics of a room were transferred to its prospective occupant. A warm room would equate with a warm occupant and a powerful room with a powerful occupant. In [31] observed a similar Room Effect, whereby the characteristics of the room impacted upon judgements of people's faces associated with the room. For example, faces in a 'beautiful' room were rated higher in 'energy' and 'well-being' levels than those in an 'average' room, which in turn were rated higher than those in the 'ugly' room. In [32] also found an association between the design of a professor's room and the presumed characteristics of the professor who would be found there.

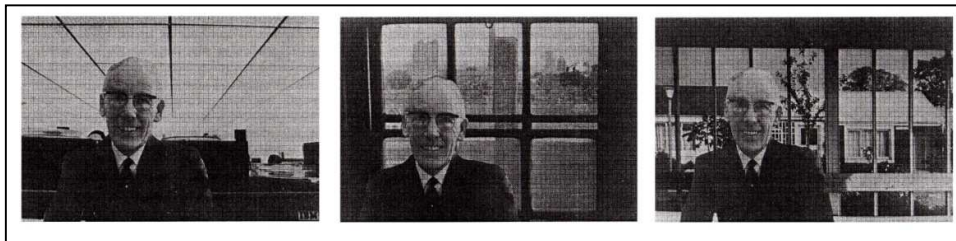


Figure 3: Room effect method

Participants in this study were given a paper based questionnaires. In order to test for possible effects, clearly different products were paired and shown in every page of the questionnaires. These pictures consist of Vespa against Modenas motorcycles. Considerable effort went into finding two pairs of human faces of comparable age and comparable looks. The rationale for this was that males and females of extremely good or bad looks were unlikely to be effected by a product, and therefore more a neutral look was desired. Furthermore, only the head and shoulders were shown, thereby limiting the amount of information available to the test subjects. Finally, each of these pictures was positioned similarly to the vehicle, and the motorcycles were digitally modified to be as similar in size, orientation and colour as possible. Participants then evaluate the pictures by answering the 9 likert scale questions derived from a standard five-factor model of personality traits covering Extraversion, Agreeableness, Conscientiousness, Neuroticism, and Openness to Experience [30]. The result then been analysed by using statistical analysis software Statistical Package for the Social Sciences (SPSS), now known as Predictive Analytics Software (PASW).

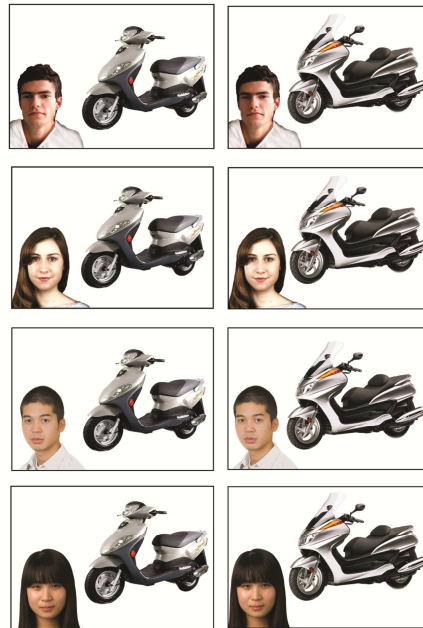


Figure 4: Stimuli pictures of room effect method

DISCUSSION

The purpose of these studies was to assess the feasibility of using these techniques to gain insights into products. Preliminary results of the pilot survey prove the possible Product Effect via these techniques. Visual positioning task was conducted to investigate the effective of task for participants in position products within a two-dimensional space characterised by two orthogonal scales. Furthermore, are these methods effective cross-culturally and cross gender? If the design appearance of the tested products failed to influence the participants' judgement of the products', then these would be. From the inspection of the results, this is apparent for participants that are the spread within the space is less for the Potency-Activity factor than for the Evaluation-Social factor. The above effect gives further confirmation in the meaningfulness of the task. The presence of such effects for the two distinct nationalities lends further weight.

Room Effect task was conducted to investigate the possible carry-over of the Room Effect into products. Would the product influence perceptions of the person associated with it? The results reveal some distinct product effects and also both gender and nationality differences in such effects. Initially, the application of statistical analysis software SPSS with Analysis of Variance (ANOVA) test was performed to determine where differences lay and then t-tests to isolate such differences. The results prove confirmatory. However, highly significant differences were observed for some of the measures used, with indications of strong cross-cultural agreement of difference nationalities for some and less for other participants. While generalization from a pilot study is somewhat premature; never-the-less, the results suggest that the Product Effect was more pronounced for the females associated with the motorcycles.

This study suggested a new method as a way forward in developing an efficient design marketing method in research perceptions of consumer products. These method will be further explore and develop through the design invention and innovation as one of the possible method in design perception.

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