

Cognition and Product Design Features of Emotional Branding

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Abstract: Companies try to employ shapes that are both emotionally appealing and compatible with the brand's image of aesthetics in generating favorable consumer responses. Existing research on branding and product design have demonstrated the importance of emotions. Consumers may base their evaluations of a brand extension on their subjective affective reactions toward the products. In this research, the authors choose products from the emotional branding survey to be the stimulus samples for investigating the product design features. The purpose of this study is to discover the relationship between the brand and the product, and to generate specific guidelines for a product's emotional design characteristics (Attractiveness, Beauty and Creativity) in the future. There were three steps in this study. They are listed as follows: The first step involves the selection of sixteen brands from fifty public brands by the experts to survey brand awareness. The second step was finding the five tops emotionally appealing brands from the above sixteen brands through a consumer survey to understand brand preferences. The third step was finding products from the four tops emotionally appealing brands to analyze the product design features. The findings are listed as follows: (a) Most of the emotionally appealing brands have over 50 years of brand history. (b) Emotionally appealing brands benefit more strongly from user recommendations and repurchase. (c) Product design features of emotional brand are the following: attractiveness, beauty and creativity. The results from this study can provide a guide for future product design development endeavors and growth of an aesthetic economy.

Keywords: Emotional Branding, Product Design, Emotional design characteristics.

1. INTRODUCTION

Most people choose one global brand over another because of brand awareness and global brand competition. Nowadays, the current trend and future challenges in the market include consumers paying more attention to the impression given by the products. Therefore, a product's emotional design characteristics (attractiveness, beauty and creativity) and brand effect are as important. Due to the growth of e-commerce, many obscure brands rose to fame from the packaging design and high quality of their products. As Holt, Quelch, and Taylor (2004) summarized in their review of experimental studies, global branding has lost more luster recently because transnational companies have been under virtual siege. Market research companies offer studies on the love consumers feel for brands (Pawle & Cooper, 2006). Based on previous researches, this study aims to investigate what the consumers considered about the interaction between a product's emotional design and brand emotion. The authors have attempted to explore the role of emotion in a brand and product design through emotion and subjective evaluation experiments. To explore this issue objectively, real cases offered a deeper understanding. The purpose of this study is to investigate the following research questions:

- (a) What are the emotionally appealing brand features?
- (b) What are the emotionally appealing brand's product emotional design features?
- (c) What is the relationship between a brand and an emotionally appealing product?

2. LITERATURE REVIEW

2.1. Emotional design

Are attractive or beautiful products more effective in terms of use than others? As Tractinsky (1997) summarized in his review of experimental studies that there was a very high correlation between perceived aesthetics of the interface and a priori perceived ease of use of the system. It additionally confirmed that there is something really attractive about being easy to use, and this sentiment is a positive emotion. The Ministry of Economic Affairs in Taiwan promotes the Qualia plan of Small and Medium Enterprises which integrates both cultural and creative product characteristics. "Qualia" includes five elements; attractiveness, beauty, creativity, delicacy and engineering. The plan proposes that enterprises make the value-addition to the product from Qualia in order to make the consumer experience the products' value (Lin, D.-G., 2012). McLoone et al. (2012) proposed that a successful product design meets or exceeds the emotional needs of users, beyond utility and quality. Integrating "feeling" into products to present the emotional communication of user experiences has become a design trend in the 21st century. As a result, "design for feeling" has become the key factor for innovative products (Ko, Lin, & Lin, 2009). As American design expert, Norman (2004), stated, affective/emotional factors are the ultimate determiner of the success or failure of product design. Therefore, a good product is a craft which exercises a discourse with people through its sensation evoking image and brings inspiration to them. The appearance attributes together provide the consumer with an overall impression of the product. Further, they are more actionable and informative than physical properties for designers to use in briefings or product evaluation studies which can be used to assess if consumers do actually perceive the meanings that the designer intended to convey using appearance attributes (Blijlevens, Creusen, & Schoormans, 2009). Sense of difference lies in the qualia and quality is qualia including attractiveness, beauty and creativity rendered in the product's external features.

2.2. Emotional brand

Rahinel and Redden (2013) found instead that people enjoy products with matching brand labels more than those with mismatching brand labels. Marketing research has been concerned about the attitude of consumers toward a brand such as liking or disliking. Gobé (2007) proposed that in this post-modern consumer democracy, people can't operate in a vacuum. Brands need to show their emotional side. Roberts first proposed the concept of brand love in 2005, and this topic has been getting increased attention (Roberts, 2005). Bergkvist and Bech-Larsen (2010) also proposed brand loyalty and active engagements as outcomes of brand love. Brand love includes passion for the brand, attachment to the brand, positive evaluation of the brand, positive emotion in response to the brand, and declarations of love for the brand. Brand love is a positive brand emotion, covering brand loyalty. Therefore, brand love is also a need to create a functional, symbolic and experiential value, which belongs to consumer awareness. (Park, Jaworski, & MacInnis, 1986)°The authors drew conclusions based on the literature review and provided motivation for the current study.

3. METHODS

The experiment of this study is composed of three stages. The first step was the selection of sixteen brands from fifty public brands by experts to survey brand awareness. The second step was finding the five tops emotional brands from the above sixteen brands through a consumer survey to understand brand preferences. The third step was finding products from the four tops emotionally appealing brands to analyze the product design features.

3.1. First step

The writers asked 10 specialists who were not involved in the main study to evaluate 1 out of 50 products on a scale that ranged from 1 ("highly unfavorable") to 7 ("highly favorable") and to report their subjective feelings toward the products on a scale that ranged from 1 ("very bad") to 7 ("very good"). Alba and Hutchinson (1987) suggested that increasing familiarity with a brand might create a better knowledge structure. Sheth, Mittal, and Newman (1999) proposed that brand familiarity was the experience of a consumer product (or service) purchase, consumption and information obtained. This study integrated the two perspectives to build the attribute assessments of the brand familiarity questionnaire, and with this questionnaire identified consumers who are familiar with the brand (shown in Table1).

Table 1: Attribute assessments of the brand familiarity questionnaire survey

Attribute assessments	
familiarity	I am familiar with this brand.
understanding	I understand this brand.
experience	I bought or used the products of this brand.

(Alba & Hutchinson, 1987; Sheth et al., 1999)

3.2. Second step

The authors asked 118 students from the Chinese Culture University to evaluate 2 out of 16 brands on a scale that ranged from 1 ("highly unfavorable") to 7 ("highly favorable") and to report their subjective feelings toward the brands on a scale that ranged from 1 ("very bad") to 7 ("very

good"). Carroll and Ahuvia (2006) proposed brand love of the consumers as an overwhelming emotion attribution to a particular brand, which including: attachment, positive emotion, passion. Brand love has positive brand feelings, covering brand loyalty. This study integrated the two perspectives to build the attribute assessments of the brand emotion questionnaire, and with this questionnaire identified consumer's feelings toward the brand (shown in Table2).

Table 2: Attribute assessments of the brand emotion questionnaire survey

Attribute assessments	
repurchase	I will continue to buy the products of this brand.
recommend	This is a good brand, and I would recommend it to other people.
attachment	This brand is my first choice when buying related products.
positive emotion	My love for this brand is incomparable to the other brand.
passion	This brand is very appealing to me.

(Carroll & Ahuvia, 2006)

3.3. Third step

The authors asked 109 undergraduates from the second step to evaluate 3 out of 20 products on a scale that ranged from 1 ("highly unfavorable") to 7 ("highly favorable") and to report their subjective feelings toward the products on a scale that ranged from 1 ("very bad") to 7 ("very good"). Attribute assessments of the brand familiarity questionnaire are shown in Table 3.

Table 3: Attribute assessments of the product emotional design characteristics questionnaire survey

Attribute assessments	
attractiveness	This product can convey cultural meaning.
	This product can impress people.
	This product has a fashion sense.
beauty	This product looks perfect proportion.
	This product has a sense of design.
	This product has pleasing appearance.
creativity	This product is a creative product.
	This product has a story.
	This product has a clever use of materials.

(Adapted from Lin, D.-G., 2012)

4. RESULTS AND DISCUSSION

4.1. Experiments 1

After 10 specialists have made their choice of brands, the result is the sixteen tops brands. The sixteen tops brands are shown in Figure 1. 3C and electronic brands are shown in blue bars; household brands are shown in orange bars, and the sports brand is shown in green bar.

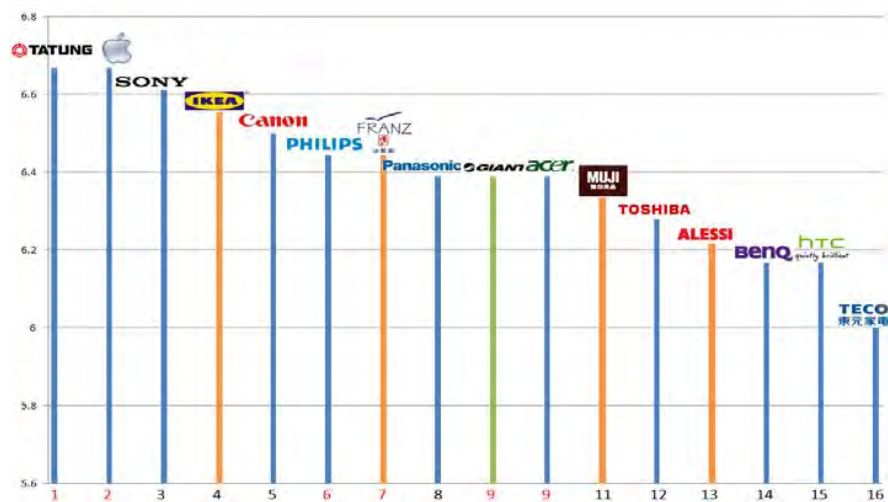


Figure 1: The sixteen tops brands from brand familiarity questionnaire survey

4.2. Experiments 2

Following the result of experiment 1, 118 students from the Chinese Culture University were asked to evaluate 2 out of 16 brands on a scale. The resulting data is the ten tops brands (shown in Figure 2). The four tops brands are MUJI, APPLE, IKEA and SONY. 3C and electronic brands are shown in blue bars; household brands are shown in orange bars. The finding is that most of the emotionally appealing brands have over 50 years of brand history.

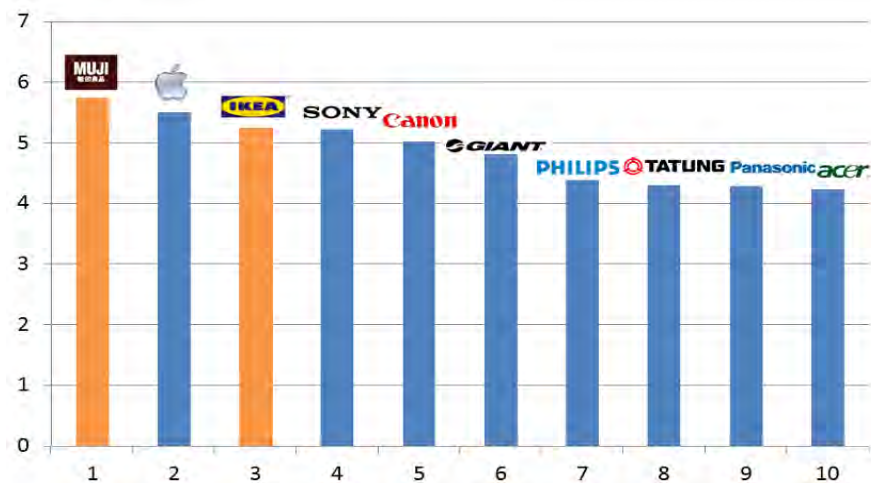


Figure 2: The ten tops brands from the brand emotion questionnaire survey

Table 4: Brand emotional score from the brand emotion questionnaire survey

Code	Brand	repurchase	recommend	attachment	positive emotion	passion
2	APPLE	5.24	5.42	4.99	4.75	5.42
4	MUJI	5.82	5.87	5.03	4.83	5.39
5	IKEA	5.20	5.32	4.76	4.43	4.90
7	SONY	4.97	5.20	4.38	4.14	4.55

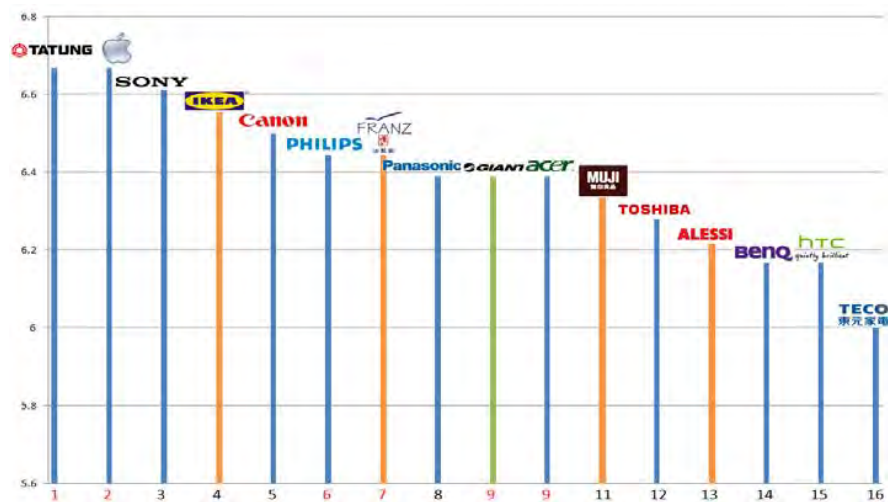


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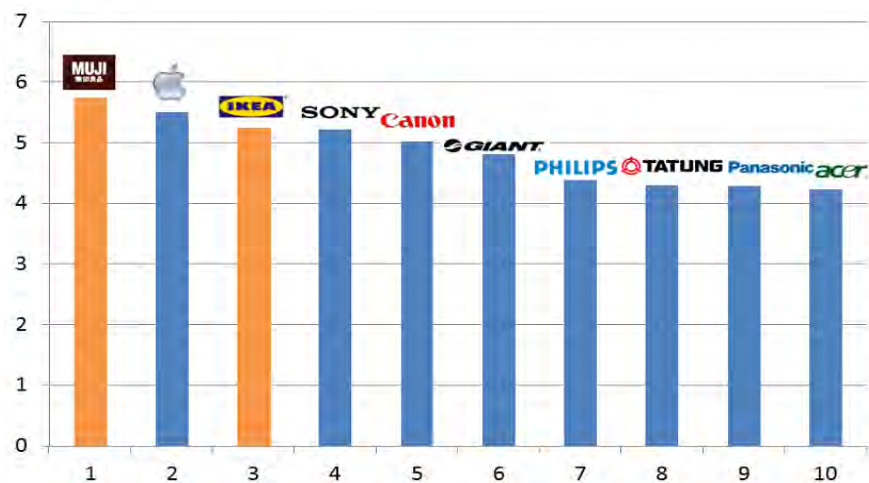


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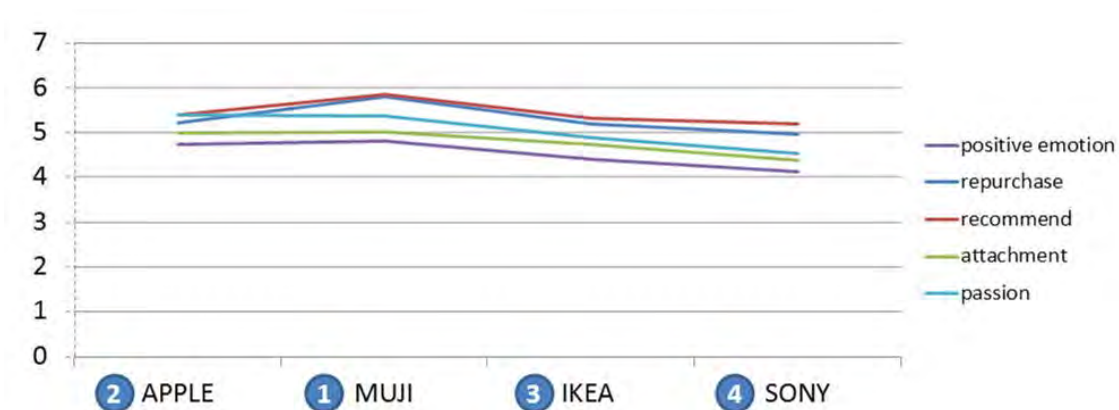


Figure 3: Brand emotional line chart from the brand emotion questionnaire survey

The finding is that emotionally appealing brands benefit more strongly from the user recommendation and repurchase. Overall brand emotion is significant in order to recommend more than repurchase, repurchase more than be passionate about it, passion greater than the attachment, and attachment greater than positive emotion.

4.3. Experiments 3

Following the result of experiment 2, the writers selected 20 products from the four tops brands, and 109 undergraduates from the second step were asked to evaluate 3 out of 20 products on a scale. These products currently sell products with higher visibility. Through the product emotional design characteristics questionnaire survey, the average value was 4 points or more of product attractiveness, product beauty and product creativity of emotional brands. The result is shown in Table 5 and Figure 4.

Table 5: The average value obtained from the product emotional design characteristics questionnaire survey

Code	Brand	Product	attractiveness	beauty	creativity
1	APPLE	iPhone	5.68	6.07	5.45
2		MacBook Air	5.60	6.19	5.46
3		iPod shuffle	4.88	5.26	4.84
4		iPad Air	5.32	5.92	5.20
5		iPod classic	4.95	5.31	4.83
6	MUJI	Wall Mounted CD Player	4.89	5.63	4.72
7		Beech wood Clock	4.63	5.02	4.55
8		Ultrasonic fragrance spray	4.63	5.14	4.57
9		Taxi Watch	4.16	4.38	4.38
10		Lightweight folding portable speaker	4.08	4.22	4.24
11	IKEA	SKOVEL Wall clock	4.42	4.48	4.36
12		STOCKHOLM Vase	4.71	4.90	4.69
13		PS 2012 LED Wall lamp	4.94	5.24	4.95

14		SKURAR Pillar candle lamp holder	4.47	4.78	4.50
15		HURRIG Mug	4.32	4.74	4.47
16		Xperia Z1	4.80	5.27	4.65
17		Bluetooth Speaker Ball	4.62	4.91	4.62
18	SONY	Sony DSC-QX 10	4.96	5.06	5.10
19		VAIO® Duo 13	4.59	4.94	4.81
20		Bass headphones	4.45	4.87	4.42

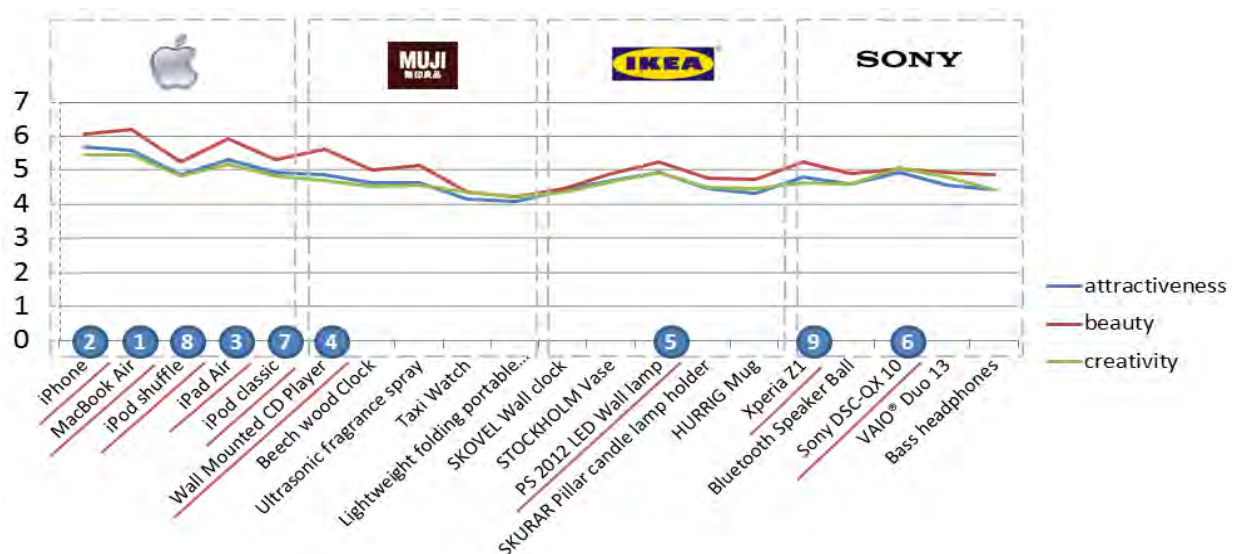


Figure 4: Design characteristics line chart from the product emotional design characteristics questionnaire

The finding is that the product design features of an emotionally appealing brand include product attractiveness, product beauty and product creativity characteristics, especially in the beauty products section. Apple products are in the three tops of all brands, and the three tops products are the most popular products amongst the young people. The top four product is from MUJI, and the top five product is from IKEA. Here we also found more than half of the ten tops products are 3C products. Daily life products have the potentials for product creativity, and IKEA is better than MUJI.

The above findings confirm the past studies. Product aesthetics may stimulate positive and pleasant sensory responses, arouse emotional feelings/expression and create symbolic meanings (Rahman, 2012). Therefore, the interface of product aesthetics gives people a sense of beauty and impression; it also encourages people to consume and collect (Yen, Lin, & Lin, 2013)

5. CONCLUSIONS AND FUTURE WORK SUGGESTIONS

There are three findings suggested by this paper. First: most of the emotionally appealing brands have over 50 years of brand history, so brands need to be in business for the long-term; the new brand must continue to insist on branding and product emotional design. Second: consumer's direct emotional expression toward the brand is action, so consumer's repurchase and recommendation of emotionally appealing brands are important for new products. Third: product design should enhance product creativity and product attractiveness of the emotionally appealing

brands; and the emotionally appealing brands should collaborate with young designers to inspire more creativity. The results from this study can provide a guide for future product design development endeavors and growth of an aesthetic economy.

From the perspective of emerging brands, the product design of emerging brands in addition to paying attention to product attractiveness, beauty, creativity and balanced development in all aspects, can enhance brand image and brand emotion. Product design of emerging brands achieve high standards of product attractiveness, beauty and creativity, and influence the outcome as to whether it will cause the consumers to repurchase, recommend, be attached, have a positive emotion and passion towards it, which will have to be discussed in future in-depth studies on the matter.

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BIOGRAPHY

Hui Yun Yen is a lecturer of department of advertising, Chinese Culture University. She is also a Ph.D. candidate of graduate school of creative industry design at National Taiwan University of Arts. Her articles on cultural creative design and multimedia design are in more than 15 publications. She has presented five international and national conferences last three years. Her recent publications include "A study of applying Qualia to business model of creative industries" and "Analysis of cognition difference of visual and imagined haptic inputs on product texture" (HCI International 2013), "A Study of value-added from Qualia to business model of cultural and creative industries" (Journal of National Taiwan College of Arts, 2012), and "Paradise ambiance in interactive art: a case study of the National Palace Museum in Taipei" (2012 AHFE International Conference).

Po-Hsien Lin Ph.D. is a professor of graduate school of creative industry design at National Taiwan University of Arts. His articles on art education, aesthetics, and cultural creative design are in more than 20 publications. He has presented at more than 10 international and national conferences. He has been granted NSC (National Science Council) research fellow since 2009. His recent publications include "A study of applying Saisait Tribe's buttocks bell into cultural creative industry from a cross-disciplinary perspective" (2012 AHFE International Conference), "The revival of Taiwanese crafts" (Journal of Taiwanese Crafts, 2011), and "Design for aesthetic experience" (HCI International 2011).

Rungtai Lin is a Professor of the Graduate School of Creative Industry Design, National Taiwan University of Arts, Taipei, Taiwan. He is also the President of Taiwan Design Center. Professor Lin was President of Mingchi Institute of Technology, Taipei, Taiwan (1996-2002), and Chang Gung Institute of Technology, Tao-Yuan, Taiwan (2002-2003). He received his d Ph.D. degree in Engineering Design at Tufts University, MA, USA. in 1992. Lin authored numerous publications, authored or co-authored over 150 papers, and presented over 100 papers at professional conferences throughout the world. Recently, his research has been involved in Cultural and Creative Product Design.

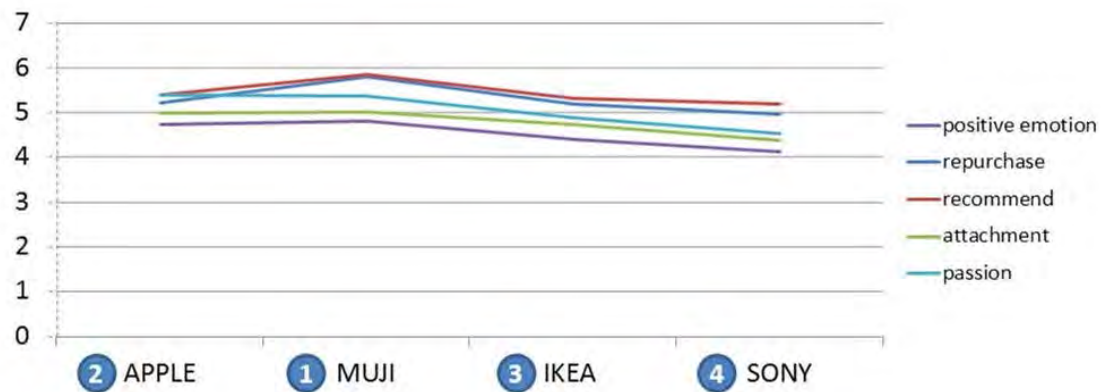


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