A Kansei Engineering Approach to Evaluate Consumer Perception on Social Media: A Case Study of Giant Manufacturing Company

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Abstract
Nowadays, social media marketing is becoming increasingly important issue for companies to gain website traffics or attention from their customers. The main purposes of applying social medias, in marketing is as a communications tool that makes the companies and their products accessible to the target customers as well as potential customers. However, most companies do not know how to design and manage their social media websites, resulting in poor word-of-mouth, slow sales growth, and reducing brand value.

This paper develops a Kansei engineering methodology to help companies better understand how consumer perception on the social website influences consumer intension. The Facebook fan page of Giant Manufacturing Co., the world's largest bicycle manufacturer, is served as the study subject. The questionnaire is designed based on Kansei words collected from different sources and the concept of experiential marketing used to define design elements. Principle component analysis is used to reduce the number of perception variables and then regression analysis is applied to determine the ranking order of perception variables that have impacts on corporate site traffics.

The contribution of this research is to help firms better understand significant impacts of consumer perception for corporate fan pages on their website. The firm can apply the developed methodology to improve their fan page design and management, leading to better customer experience, higher conversion rate, and increased brand recognition.

Keywords: Social Media, Kansei Engineering, Experiential Marketing

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Introduction

Nowadays, social media marketing is becoming increasingly important issue for companies to gain website traffics or attention from their customers. McLaughlin (2010) classified social media into seven groups which are social networking site、blogging、microblogging、media sharing、social news and social bookmarking, Kaplan & Haenlein (2010) believed social media is a private space to exchange information and ideas through users of each other. In short, the main purpose of social media is that provide users a place for communication and interaction. They used different classification with McLaughlin to classify social media into six group which are collaborative projects、blog、content communities、social networking sites、virtual game worlds and virtual social worlds. According to the above described, social networking sites (Facebook,、Myspace) has been implemented in today's society, there are already a lot of people that publish their own exclusive content, expanding circle of friends, sharing, and searching for the newest information. In addition, Facebook is now one of the most popular social networking site. View from the browsing, Facebook is the top of website in the world, Facebook also has acquired some of APP (Instagram) and software to enhance the reputation and customer rates. Based on investigation of 2014, the activity number of Facebook is 1.31 billion for every month, revenue of $ 6.15 billion. If companies can join to Facebook, it can bring unlimited benefits.

Now, social media is not only for personal, but also for companies, more and more companies are using social media groups to communicate with consumers to increase their brand awareness and loyalty. A positive word-of-mouth recommendation can bring companies to the postive benefit, companies also tend to promote their brand and product through the consumer's "free" word-of-mouth recommendation to reach their goal. But another issue is negative word-of-mouth, companies have to avoid it.

In order to increase the company benefits and avoid the negative word-of-mouth on the social media, we need to find the consumer real requirements. Several techniques can be used to express consumer needs and perceptions into product or service design properties. These techniques involve quality function deployment (QFD) (Akao, 1990), conjoint analysis (Green and Srinivasan, 1978), and Kansei engineering (Nagamachi, 1995). Kansei engineering was proposed by Nagamachi, and had been increasingly applied to product design and developed since 1970s. The application framework of Kansei engineering had been discussed and extended into services quality design (Hartono and Tan, 2009).

This paper develops a Kansei engineering methodology to help companies better understand how consumer perception on the social website influences consumer intension. The Facebook fan page of Giant Manufacturing Co., the world's largest bicycle manufacturer, is served as the study subject. The questionnaire is designed based on Kansei words collected from different sources and the concept of experiential marketing used to define design elements. Principle component analysis is used to reduce the number of perception variables and then regression analysis is applied to determine the ranking order of perception variables that have impacts on corporate site traffics. The research findings have crucial impacts for companies to improve their Facebook fan page design, increase the page view frequency, and enhance the brand image or recognition.

Literature Review

2.1. Kansei Engineering

Kansei engineering was first proposed from Japanese who calls Nagamachi. Nagamachi introduced Kansei engineering as a powerful product design development methodology which has a strong ability to express consumer emotional needs (Nagachi, 1995). Kansei engineering can be used to translate consumer emotional needs into specific design elements through engineering (Schutte et al., 2004). As a consequence, it can minimize subjectively to explain the emotions or feelings. Moreover, this methodology is able to modify and improve product properties which are not directly detectable or visible, such as atmosphere of environment (Schutte et al., 2008).

Traditional approaches of Kanesi engineering focused only on designing products that generate significant impact on consumer emotional needs. However, in some situations, consumers experience focus not just on physical but non-physical (emotion/feeling) objectives. Therefore, Kansei engineering had to be capable of conducting examination of both product and service characteristics in a single study (Schutte et al., 2004).

There are two phases of Kansei engineering process. In a first phase, consumers obtain Kansei words from website, magazines, journals, and so on, and then reduce words from implementing semantic differential which can currently be considered the most powerful quantitative technique for estimating the affective significance of concepts (Ishihara et al., 1997). In a second phase, after obtaining consumers' affective dimensions (Kansei words), we attempt to find and create the design elements which can influence Kansei words. Since we need to understand consumer perception on Facebook fan page, we used experiential marketing as design elements to see their requirements in different dimensions.

From these reviews, Kansei engineering had been researched and discussed for products and services for many years. Nowadays, the website has become crowded with e-commerce website features that have many players: the big brands, new inventors, network marketing, giant to home businesses. Kansei engineering is essential required on the website to understand human affective responses and needs (Lokman and Noor, 2006). Therefore, this study uses Kansei engineering to focus on the website and tries to obtain the consumer emotional needs which can help company better understand them.

2.2. Experiential Marketing

Experiential marketing related with the marketing of products or services through an experience, such that the consumer becomes emotionally involved with the object of the experience (Mathurs, 1971).

Nagasawa (2008) said experiential marketing is to create consumer experience value by exploring the psychological aspects of the consumers' emotion, which functional values cannot provide. In other words, the functional values give physical requirement and satisfaction, and the experiential marketing provides psychological and emotional

satisfaction. Schmitt (1999) proposed the concept of strategic experiential modules (SEMs) that provide sensory, emotional, cognitive, behavioral, and related values that replace functional values. Pine & Gilmore (1999) thought experiential marketing offerings become increasingly important; it must be made to provide consumers with memorable consumer experiences for achieving the advantages of competition and consumer satisfaction.

Experiences are not an incidental value but an essential value that the products and services are understood from the consumer's viewpoints as these requirements by the company and the brand images. The objective of marketing, which creates "Experiential marketing", is not to provide products and services as tangible objectives to consumers, but to give the internal affect and consumer' lifestyles to consumer. In addition, experience can interpret their behavior by appealing to their senses and feelings in the process (Nagasawa, 2008).

Margaret and Russell (2011) discussed experiential marketing of online shopping and tried to explain consumer's behavioral intention on online. This study uses SEMs to categorize five types of design elements. In the other hand, we extend SEMs from products or services into Facebook fan page design.

Research Methodology

3.1. Research Framework

This study proposes Kansei Engineering methodology. The purpose is to use Kansei words and experiential marketing design elements to identify consumer perception on social media Facebook fan pages.

These design elements are identified based on the SEMs framework (Schmitt, 1999) to manage marketing experience, which includes sensory experience (Sense), affective experience (Feel), cognitive experience (Think), physical experiences、 behavior and lifestyles (Act), and social-identity experiences that result from relating to a community or culture (Relate). Sensory through the concept of multi-sensory vision, hearing, touch, smell to form the experience. With events to stimulate people feel about the event, and provide customers special memories; Emotional experience is a manifestation of emotional heart of the customer. Testers need to know what kind of stimulation can trigger certain emotions and explore the interaction of information to increase customer confidence and attitude; Thinking experience is to encourage customers to perform logical and creative thinking through surprise, inspire, discuss issues, allowing customers to generate interest in solving problems; Action experience is to provide short and long term experience activities, allowing customers to experience through the body, interactive lifestyle or to strengthen and enrich people's lives; Related experience is a combination of the above four, beyond the personal emotions and cognition, increasing the experience of culture from other people, which includes the sense of belonging to groups, cultural values, and social values.

Based on it, first, we collected Kansei words and design elements form website, journals, and papers and delivered the pretest questionnaire to reduce the Kansei words. Second, we created a new questionnaire for combining Kansei words and design elements, and invited three experts to determine the adequacy of items. The

questionnaire involves demographics, strategy experiential modules questions, the four questions for consumer's behavioral intention of Facebook fan page which are intention of browsing fan pages, intention of becoming fans, intention of positive comments, and intention of sharing fan page to friends. A 5 point Likert scale that from strongly agree to strongly disagree was used for evaluating each questions.

The domain was chosen to be use Facebook fan page, and through online questionnaire to deliver on the social media such as fan page, Bulletin Board System (BBS), and Line. Besides, Giant manufacturing company is the one of the most popular company in the world, so we consider the Giant manufacturing company Facebook fan page as the study sample for respondents.

We used SPSS 19 to conduct the reliability analysis, validity analysis, and used SmartPLS 3.0 to conduct the regression analysis to determine the influence between design elements and consumer's behavioral intention of Facebook fan page. Then according to those results, some suggestions are provided to improve Facebook fan page design.
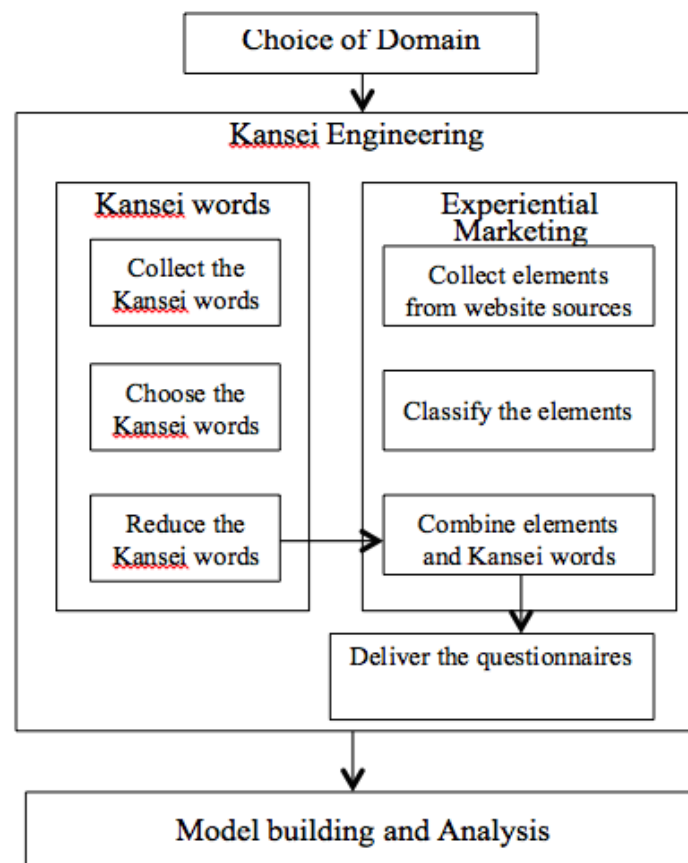
Fig 1. The study framework

3.2. Selected Kansei words

This study collected Kansei words from papers and other sources (Laros & Steenkamp, 2003; Quan & Ren, 2010). Questionnaire survey was used to evaluate the importance of Kansei words which can be used to express Facebook fan page consumers' emotion. According to the respondents, 34 Kansei words were selected.

感動的 (Throbbing)	愉悅的 (Pleasing)	生動的 (Vivid)	很酷的 (Cool)	驚喜的 (Surprise)	幸福的 (Happy)	有趣的 (Interesting)	豐富的 (Abundant)	有創意的 (Creative)
新穎的 (Novel)	親切的 (Kind)	互動的 (Interactive)	吸引的 (Attractive)	美麗的 (Beautiful)	細心的 (Careful)	詳細的 (Detailed)	清楚的 (Clear)	即時的 (immediate)
快速的 (Rapid)	便利的 (Convenient)	良好的 (Good)	完善的 (Perfect)	有用的 (Useful)	有深度的 (Profound)	有價□性的 (Valuable)	知識性的 (Informative)	話題性的 (Controversial)
在地的 (local)	限時的 (Time-Limited)	大型的 (great)	區域性的 (Regional)	熱鬧的 (Lively)	激勵人心的 (Inspiring)	令人興奮的 (Exciting)		

Fig 2. The selected Kansei words

3.3. Strategy Experiential Modules

The questionnaire was designed based on the strategy experiential modules proposed by Schmitt (1999) and combined with the selected Kansei words. It totally has 54 items.

A. Sense experience
1. I think the fan page has vivid profile pictures or cover photos is very important
2. I think the fan page has beautiful profile pictures or cover photos is very important
3. I think the fan page has a clear home page is very important
4. I think the fan page has a beautiful home page is very important
5. I think the fan page has an attractive home page is very important
6. I think the fan page has abundant pictures or videos is very important
7. I think the fan page has vivid pictures or videos is very important
8. I think the fan page has attractive pictures or videos is very important
9. I think the fan page has beautiful pictures or videos is very important
10. I think the fan page share novel posts or blogs is very important
11. I think the fan page share abundant posts or blogs is very important
12. I think the fan page share attractive posts or blogs is very important
13. I think the fan page has a vivid title is very important
14. I think the fan page has an attractive title is very important

B. Feel experience
1. I think the fan page has creative profile pictures or cover photos is very important

2. I think the fan page has a cool home page is very important

3. I think the fan page regularly publish interactive posts is very important

4. I think the fan page regularly publish throbbing posts is very important

5. I think the fan page regularly publish pleasing posts is very important

6. I think the fan page regularly publish happy posts is very important

7. I think the fan page is frequently updated immediate information is very important

8. I think the fan page has a kind reply is very important

9. I think the fan page has a careful reply is very important

10. I think the fan page with detailed profiles (or contact information) is very important

C. Think experience

1. I think the fan page share interesting links and website is very important

2. I think the fan page share inspiring links and website is very important

3. I think the fan page share profound links and website is very important

4. I think the fan page share valuable links and website is very important

5. I think the fan page publish interesting posts and blogs is very important

6. I think the fan page publish inspiring posts and blogs is very important

7. I think the fan page publish informative posts and blogs is very important

8. I think there fan page conduct controversial investigation is very important

9. I think there fan page conduct interesting investigation is very important

10. I think there fan page conduct useful investigation is very important

D. Act experience

1. I think the fan page has a rapid reply is very important

2. I think a convenient bridge between the fan page and fans is very important

3. I think a good bridge between the fan page and fans is very important

4. I think the fan page provide prefect services for fans' requirement is very important

5. I think the fan page design interesting game is very important

6. I think the fan page held time-limited online activities is very important

7. I think the fan page held interesting online activities is very important

8. I think the fan page held great online activities is very important

9. I think the fan page held time-limited offline activities is very important

10. I think the fan page held great offline activities is very important

11. I think the fan page held lively offline activities is very important

12. I think the fan page held inspiring offline activities is very important

13. I think the fan page held exciting offline activities is very important

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E. Relate experience

1. I think if joining the fan page can have a good interacting experiences with friends is very important

2. I think if joining the fan page can have a convenient interacting experiences with friends is very important

3. I think if joining the fan page can have a pleasing interacting experiences with friends is very important

4. I think the create regional fan pages (eg: Taipei etc.) is very important

5. I think the fan page has good information about other related fan pages is very important

6. I think the fan page has abundant information about other related fan pages is very important

7. I think the fan page has a local experience (eg: Taipei etc.) is very important

Fig 3. Design elements of SEMs

Analysis and Results

4.1. Data collection

After interview three experts to modify the questionnaire, we delivered the questionnaire on the Facebook platform and Bulletin Board System (BBS). Totally 336 samples had been collected, there were 3 samples are not useful because they did not used Facebook fan page before. Therefore, 333 valid samples were used to do the research and analysis. There are two parts. The first part is experiential marketing questions and the consumer's behavioral intention of Facebook fan page, and totally has 58 questions. The second part is for demographics and totally has 7 questions.

4.2. Reliability Analysis

For reliability analysis, the Cronbach's α value needs to be higher than 0.7. Cronbach's α if item deleted value must be higher than total Cronbach's α value. If not, we would delete the item.

There are 58 items. The Cronbach's Alpha is 0.945 and each item for Cronbach's α if item deleted value is lower than total value. So, these items are very reliable.

Items	Numbers	Cronbach's α
A. Sense	14	
B. Feel	10	
C. Think	10	
D. Act	13	0.945
E. Relate	7	
O. Intention	4	

Table 1. Cronbach's Alpha value of all questions

4.3. Validity Analysis

This study used exploratory factor analysis. Principal components factor analysis was used to obtain the independent dimensions or semantic axes which the consumers to express their emotions in the relation to the objective (Basilevsky, 1994; Flury, 1988). The factors were chosen following the criterion of eigenvalues greater than one. The results were gotten from factor loading of a Varimax rotation of axes. Finally, internal consistency of the dimensions was used to evaluate by Cronbach's Alpha (Streiner, 2003).

Factor analysis reduced the original item from 54 to 43 items because of those items had lower factor loading which were "A3 clear homepage" "A7 vivid pictures" "A9 beautiful pictures" "A10 novel posts" "A12 attractive posts" "B1 creative profile pictures" "B2 cool homepage" "B3 interactive posts" "B10 detailed profile" "D4 prefect services" "D5 interesting games" and classify them to 11 dimensions. Based on the Kaiser-Merer-Olkin Measure of Sampling Adequacy (KMO) is 0.864 and significant is 0.000, also the variance explained is 69.041%, this study is suitable to do factor analysis.

Axes	Items with factor loading	Cronbach's Alpha
1st axis	D10(0.846).D9(0.845).D11(0.837).D13(0.819).D8(0.807). D7(0.769).D12(0.762).D6(0.759)	0.936
2nd axis	C3(0.790).C4(0.745).C7(0.701).C6(0.668).C2(0.620)	0.845
3rd axis	E2(0.751).E1(0.741).E3(0.702).E6(0.638).E5(0.596)	0.842
4th axis	D3(0.712).D2(0.705).D1(0.679).B7(0.600)	0.758
5th axis	C9(0.698).C8(0.686).C10(0.596).C5(0.582).C1(0.541)	0.799

6th axis	B6(0.793).B4(0.784).B5(0.667)	0.771
7th axis	A2(0.808).A1(0.675).A4(0.640).A5(0.574)	0.756
8th axis	A6(0.763).A11(0.758).A8(0.562)	0.709
9th axis	A14(0.822).A13(0.809)	0.775
10th axis	B9(0.818).B8(0.777)	0.816
11th axis	E4(0.805).E7(0.611)	0.624

Table 2. Factor axes with the items and factor loading

Cronbach's Alpha values for 11 dimensions ranged from 0.700 to 0.845, showing that these scales were very reliable. However, the 11 axis "regional fan page and local experience" was lower than 0.7, we decided to eliminate it from the analysis.

Next step was to rename the 10 semantic axes. Axis 1 corresponds to "great and time-limited online/offline activities"; Axis 2 to "profound and valuable links"; Axis 3 to "convenient and good interacting experiences with friends"; Axis 4 to "have a good and convenient bridge between fans and fan pages"; Axis 5 to "conduct an interesting and controversial investigation"; Axis 6 to "happy and throbbing posts"; Axis 7 to "beautiful and vivid profile pictures/homepage"; Axis 8 to "abundant pictures/posts"; Axis 9 to "attractive and vivid title" and finally Axis 10 corresponds to "careful and kind responses to the fans".

Axes	Meaning of Factors
1st axis	Great and time-limited online/offline activities
2nd axis	Profound and valuable links
3rd axis	Convenient and good interacting experiences with friends
4th axis	Have a good and convenient bridge between fans and fan pages
5th axis	Conduct an interesting and controversial investigation
6th axis	Happy and throbbing posts
7th axis	Beautiful and vivid profile pictures/homepage
8th axis	Abundant pictures/posts
9th axis	Attractive and vivid title
10th axis	Careful and kind responses to the fans

Table 3. Meaning of the factor axes

4.4. Partial Least Square (PLS)

Partial least square (PLS) is a method for constructing predictive models when the factors are many and highly collinear that bears some relation to principal components regression. The methodological considerations are relevant to the application of PLS in a management research context: determining the appropriate nature of the relationships between measures and constructs; and interpreting path coefficients, determining model adequacy, and selecting a final model from the available set of alternatives (Hulland, 1999).

The 10 axes were ordered according to the relation with the consumer's behavioral intention of Facebook fan pages using PLS regression. However, we separated the intention into two part; Intention of browsing and intention of becoming fans defined to passive intention; Intention of positive comments and intention of sharing to other people defined to active intention. Therefore, the 10 axes each were tested to influence these two intentions.

Factor ordering according to influence on the passive intention			
Item	Standard Error	T-Statistics	P-value
3. convenient and good interacting experiences with friends	0.074	4.070	0.000
9. attractive and vivid title	0.049	3.407	0.000
10. careful and kind responses to the fans	0.055	2.509	0.006

Factor ordering according to influence on the active intention			
Item	Standard Error	T-Statistics	P-value
1. great and time-limited online/offline activities	0.061	2.742	0.003
6. happy and throbbing posts	0.066	2.413	0.008
7. beautiful and vivid profile pictures/homepage	0.057	1.770	0.039
8. abundant pictures/posts	0.061	1.924	0.028

Table 4. Factor ordering according to influence on the intention of Facebook fan page (regression analysis)

4.5. Results

With the PLS regression, Axis 3 "convenient and good interacting experiences with friends", Axis 9 "attractive and vivid title", and Axis 10 "careful and kind responses to the fans" can influence passive intention. On the other hand, Axis 1 "great and time-limited online/offline activities", Axis 6 "happy and throbbing posts", Axis 7 "beautiful and vivid profile pictures/homepage", and Axis 8 "abundant pictures/posts" can influence active intention. Axis 2 "profound and valuable links", Axis 4 "have a good and convenient bridge between fans and fan pages", and Axis5 "conduct an interesting and controversial investigation" do not have influence on each one. Axis 3 "convenient and good interacting experiences with friends" and Axis 9 "attractive and

vivid title" have the greatest influence on the passive intention with p-value less than 0.000. If companies try to increase the browsing rates and the number of memberships, they need to pay more attention on these two axes. The next important factors are Axis 1 "great and time-limited online/offline activities" and Axis 6 "happy and throbbing posts", and these factors can help enhance the brand images and recognition.

Conclusions

This study proposed a Kansei engineering methodology that analyzes how consumer perception (Kansei words) influences on the consumer's behavioral intention of Facebook fan pages. The PLS was established in the regression analysis which presented the relationship between different semantic axes and the consumer's behavioral intention of Facebook fan pages.

This methodology has been developed using different emotional and functional words to measure the subjective component of the emotional state which consumers are able to recognize. In addition, the emotional attributes were used to find the relationship with design elements defined by consumers. It ensured that the consumer perceptions were really collected and evaluated.

The research findings provide useful information for companies better understanding significant impacts of consumer perceptions and determine suitable strategies to improve the page view frequency as well as enhance brand images or recognition.

Therefore, there are some recommendations for companies. For enhancing consumers' passive intention, companies should establish a platform to let consumers interact with other people and spend more time on making an attractive or vivid title, as well as train employees having attentive and friendly attitude to the fans. For consumers with active intention, companies should hold great online/offline activities, and need to pay more attention for posts, pictures, profile pictures, and homepage.

Finally, the limitations of this study are that there are too many items involved in the questionnaire. We need to reduce some questions which cannot express the consumers requirements and reclassify the items in more appropriate dimensions.

References

Chinese reference

曾華. (2012). 以感性工程與 Kano 模型觀點探討社群媒體的體驗行銷策略-以王品旗下舒果 Facebook 粉絲專頁為例. 中興大學科技管理研究所學位論文, 1-97.

English reference

Akao, Y. (1990). History of Quality Function Deployment in Japan. The Best on Quality, IAQ Book Series Vol. 3. pp. 183-196. International Academy for Quality.

Basilevsky, A. T. (2009). Statistical factor analysis and related methods: theory and applications (Vol. 418). John Wiley & Sons.

BOIK, R. J. (1988). Common Principal Components and Related Multivariate Models.Statistical Foundations of Econometric Modelling, 259.

Green, E. P., & Srinivasan, V. (1978). Conjoint analysis in consumer research: issues and outlook. Journal of Consumer Research, 5(2), 103-123

Hartono, M., & Chuan, T. K. (2009). A proposed framework of Kansei Engineering application in dealing with customer emotional needs in services. In Proceedings of 17th World Congress on Ergonomics.

Hartono, M., & Chuan, T. K. (2011). How the Kano model contributes to Kansei engineering in services. Ergonomics, 54(11), 987-1004.

Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. Strategic management journal, 20(2), 195-204.

Ishihara, S., Ishihara, K., Nagamachi, M., & Matsubara, Y. (1997). An analysis of Kansei structure on shoes using self-organizing neural networks.International Journal of Industrial Ergonomics, 19(2), 93-104.

Kaplan, A. M., & Haenlein, M. (2010). Users of the world, unite! The challenges and opportunities of Social Media. Business horizons, 53(1), 59-68.

Laros, F. J., & Steenkamp, J. B. E. (2005). Emotions in consumer behavior: a hierarchical approach. Journal of business Research, 58(10), 1437-1445.

Llinares, C., & Page, A. F. (2011). Kano's model in Kansei Engineering to evaluate subjective real estate consumer preferences. International Journal of Industrial Ergonomics, 41(3), 233-246.

Lokman, A. M., & Noor, N. L. (2006). Kansei engineering concept in E-commerce website. In Proceedings of the First International Conference on Kansei Engineering & Intelligent System KEIS (pp. 117-124).

Luo, M. M., Chen, J. S., Ching, R. K. H., & Liu, C. C. (2010). An examination of the effects of virtual experiential marketing on online customer intentions and loyalty. The Service Industries Journal, 31(13), 2163-2191.

Nagamachi, M. (1995). Kansei engineering: a new ergonomic consumer-oriented technology for product development. International Journal of industrial ergonomics, 15(1), 3-11.

Nagamachi, M. (2002). Kansei engineering as a powerful consumer-oriented technology for product development. Applied ergonomics, 33(3), 289-294.

Nagasawa, S. Y. (2008). Customer experience management: Influencing on human Kansei to management of technology. The TQM Journal, 20(4), 312-323.

Pine, B. J., & Gilmore, J. H. (1998). The experience economy. Harvard Business Review, 76(6).

Quan, C., & Ren, F. (2010). A blog emotion corpus for emotional expression analysis in Chinese. Computer Speech & Language, 24(4), 726-749.

Schmitt, B. (1999). Experiential marketing. Journal of marketing management,15(1-3), 53-67.

Schütte, S. T., Eklund, J., Axelsson, J. R., & Nagamachi, M. (2004). Concepts, methods and tools in Kansei Engineering. Theoretical Issues in Ergonomics Science, 5(3), 214-231.

Streiner, D. L. (2003). Starting at the beginning: an introduction to coefficient alpha and internal consistency. Journal of personality assessment, 80(1), 99-103.

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