

Influence on Brand Equity from Brand Identification Within the Environment of Social Media – The Mediating Effect of User-Generated Content

Yanni LIU^a, Lingyu LIN^{b, 1} and Lei ZHANG^a

^a*Shenzhen University, College of Business, China*

^b*University of Maryland-College Park, Robert.H.Smith Business School, USA*

Abstract. Brand is generated when cognitive connection, value evaluation and emotional engagement are done by customers and introduce the brand into their personal self-concepts. As the development of social media platforms, customers interact with brand enterprises, communicate with other customers as well as release their evaluation of the brands through those platforms, which leads to the generation of a large amount of user-generated contents (UGC). Previous studies have proved that customers' interaction and communication on social media platforms have a positive influence on brand equity. In this paper, the author collates, analyzes and summarizes previous studies, constructs an integrated framework based on the constitution of brand equity in an environment with abundant social media platforms and systematically discusses the structure of brand identification as well as its influence on brand equity. Using an empirical research approach, the study shows the mediating effect UGC has on brand equity.

Keywords. User-generated content; Brand equity; Brand identity

Introduction

As the popularizing of Web 2.0 and developing of social media, customers now could influence the marketing result of a brand or enterprise by sharing users' experience and suggestions. This reflects the importance of a new concept "User-generated Content (UGC)", i.e. the content created by users and shared online with other users. The impact of UGC on a customer-based brand equity is larger than marketer-generated contents. An increasing number of scholars agree UGC influence customer-based brand equity [1][2][3][4]. Bruhn, for example, believes UGC is beneficial to promoting the brand image [5]. Other issues include brand attitude [6][7], brand relationship [8], etc.

Besides, strong brand equity is achieved when customers have favorable brand identification [9]. Studies show that brand identification affects brand loyalty [10][11] and thus has the greatest impact on brand equity [11][12]. Therefore, both brand identification and UGC affects brand equity.

In this paper, the author try to explore: (1) whether brand identification affects brand equity directly or through the mediating effect of UGC; (2) which effect has

¹ Corresponding Author, Mail: lingyu.lin@rhsmith.umd.edu

greater influence if both of them exist simultaneously. The author will collate and conclude the current literature, construct the integrated framework of customer-based brand equity in the social media environment, systematically discuss the framework of brand recognition as well as its impact on brand equity, and, by doing empirical research, show the intermediate function of UGC's influence on brand equity.

1. Conceptual development

1.1. User-generated Content

UGC, firstly proposed in 2005, refers generally to text, image, music, video, etc. that are created and posted in any forms online by users [13]. In this paper, the definition and features of UGC mainly come from the research of Christodoulides et al. [4], which defines UGC as content: a) generated in social media platform that are accessible for the public, e.g. the internet; b) shows certain degree of creativity of the customers; and c) created in ways that are unprofessional and free of charge.

As a newly-occurred and fast-developing concept that could affect brands, UGC develops in multiple perspectives of different fields, especially marketing. Studies about the category, features, formative reasons and influence on brands of UGC have all been done. O'Hern et al. divide UGC into four categories, namely, informing, pioneering, co-communicating and co-creating [14]. Baxter & Olesen [15] suggest that five motives drive people to interact with brands on social media platforms and co-creation, empowerment, brand community and self-recognition will form UGC and positively impact customers-brand interaction (ibid). Afterwards, scholars constantly study the practical significance of UGC [7][16][17].

In 2010, Burmann noticed the emergence of Brand-related User-generated Content (UGB) and introduced UGC as a tool to promote brand [18]. When studying the relationship between UGC and brand equity, researchers measure UGC for more specific results with definitions and dimensions of UGB. Hence, this paper will take research results of UGB as a reference to make research assumptions of UGC. In 2012, Smith et al. proposed a content framework for user-generated brand comparison [19]. It consists of six dimensions: self-presentation, brand centrality, interactivity, authenticity, the reaction to marketing campaign, and brand emotion, which would be used in this paper to measure UGB.

1.2. Brand Identification

Customers make purchase decisions due to brand identification [20]. So the key to build customers-brand relationship and create brand value is to gain identification from customers and produce strong resonance between brand and customers [21]. Aaker believes brand identification is a status customers approve and support the value, lifestyles, social status of brand users and brand personalities [22]. Schouten states that it is easier for customers to resonate with the brand and develop brand identification when brand personalities are closer to those they admired [23]. In terms of social ideology theory, brand identification is a psychological status, under which customers perceive, feel and evaluate their sense of belonging given by the brand.

Scholars study brand identification individually and socially from different customer self-defined drives. Rio et al. [24] divides brand identification into individual

brand identification and social brand identification. The former originates from the perception of the similarity degree between specific brand personalities and customers' while the latter from the characteristics of the brand that present customers' social status or that of a specific group (or the one they admired). Jin finds in an empirical study both individual and social brand identification significantly impact attitude loyalty and action loyalty [12]. Hence, the paper will take both kinds of brand identification into account.

1.3. Customer-based Brand Equity (CBBE)

Brand equity is always regarded as an important factor of marketing success. Aaker defines brand equity as a group of brand assets and liabilities being related to the name and sign of a brand [22]. It could increase or reduce the value brought to customers or companies via products and services. In the field of branding and marketing, researchers have studied the effect of different issues on brand equity, such as public relation [25], business social responsibility, advertising [26]. Also, people mainly based the definition of brand equity on customers. In 1993, Keller [9] formally proposed the concept of CBBE, defining it as customers' different reactions towards brand marketing caused by different brand knowledge. CBBE drives the improvement of finance-based brand equity [27]. Besides, CBBE is a reaction to direct performance of company marketing activities [28]. Researchers also measure the specific brand equity based on respects of customers [29]. It could reveal the relevant process of company marketing actions affecting customers' psychology (ibid).

Plenty of studies have been done on the component dimensions of CBBE and provided different measurable dimensions. Say, Keller has set up a brand pyramid model, defining brand equity from four dimensions: brand recognition, brand reflection, brand connotation as well as brand relationship. The research of Aaker constructed a model with component dimensions including brand awareness, brand association, perceived quality and brand loyalty etc.; Yoo et al. brought forward brand equity models on the basis of Aaker's research. Brand awareness, brand association, brand loyalty and perceived quality are four dimensions used most frequently in present brand equity model studies and become four general dimensions accepted by scholars [30]. Thus, the author chooses three of them (brand association, brand loyalty and brand perceived quality) to measure brand equity.

1.4. Brand Identification, Brand Equity(CBBE) & UGC

Firstly, brand recognition influence UGC. Individual and social brand identification of customers will largely influence their brand behavioral loyalty as well as attitude loyalty in a positive way [12]. In the social media environment, brand loyalty means active communication around the brand (e.g. public praise) rather than merely regarding the brand as the first choice when purchasing. Sundaram et al. studies that customers generate positive and negative information relevant to the brand owing to different motives [31]. While brand recognition urging customers to have different motives, it is more likely for customers to generate positive information about the brand if they are identified with it. For eWOM, defined as "any positive or negative opinions on the product or company that are produced by previous, existing or potential customers and accessible for different people or organization", is relevant to UGC [32].

Hence it could be inferred from conclusion above that brand identification would produced positive UGC on social media platforms.

Secondly, brand recognition would influence brand equity. Gaining identification from customers and realizing the resonance between customers and the brand is crucial for constructing customers-brand relationship as well as creating brand value [21]; individual and social brand identification would greatly impact customers' attitude and actions such as purchasing intention, recommending intention and the willingness to pay high price [24]; brand recognition would attract customers, generate public praise and influence the dimensions of brand equity such as brand perceived quality and brand association [33]; customers identified with a brand would keep a good attitude towards the brand even if they see negative information about it [34]. Therefore, customers' identification of a brand would affect their attitude towards the brand and their behavioral and purchasing intention. In general, as customer-based brand equity emphasizes not only the brand recognition but the attitude, behavioral intention and purchasing intention of customers, it could be inferred that brand recognition of customers greatly and positively impacts brand equity.

Thirdly, UGC is more influential on brand equity than company-created content. Company-created communication lacks interaction with customers on social media platforms [2]. Company communication, compared with communication among customers on social media platforms, could hardly impact any dimension of brand equity [35]. The influence from customers on brands is decided by customers' participation degree in brand interaction [36], value co-creation [37] and brand communication [38]. High interactivity brand information delivering is the key for business to successfully spread brand in the online brand community [39]. On social media platforms, customers play a leading role in both ways of communication (among customers; between customers and brands) and affect brand awareness, brand association and brand loyalty [2]. Thus, it could be assumed that UGC, as a communicative way between customers and brands, has an impact on brand equity.

2. Research Methodology

2.1. Research Design

This research uses a quantitative model (Figure 1). From all the conceptual theories the author get from collating, analyzing and summarizing previous studies, from each issue, the author mainly come up with an assumption. By doing online questionnaire survey and SPSS analysis, the author is trying to investigate the following assumptions:

- a1) brand identification have positive effect on UGC
- b1) UGC has effect on brand equity
- c1) brand identification has direct effect on brand equity
- c2) brand identification affects brand equity via UGC, UGC has the mediating effect

The testing methodology of this paper follows the test theory raised by Baron et al. [40], taking brand identification as the independent variable, UGC as the mediating variable, brand equity as the dependent variable to test if UGC's mediating effect reach the high significant level. The test will includes four stages of regression analysis to test the mediator model: a) brand identification must be a significant predictor of

dependent variable, i.e., brand identification should be of high significance; b) brand identification must be a significant predictor of UGC, i.e., brand identification should be of high significance; c) UGC must be a significant predictor of brand equity, i.e., UGC should be of high significance; d) taking brand identification and UGC into account, mediating variable should be of high significance, R2-values should largely increase. With the precondition that mediating variable is of high significance, if independent variable is statistically significant, then part of the mediating effect works, if independent variable lacks significance, then full mediating effect works.

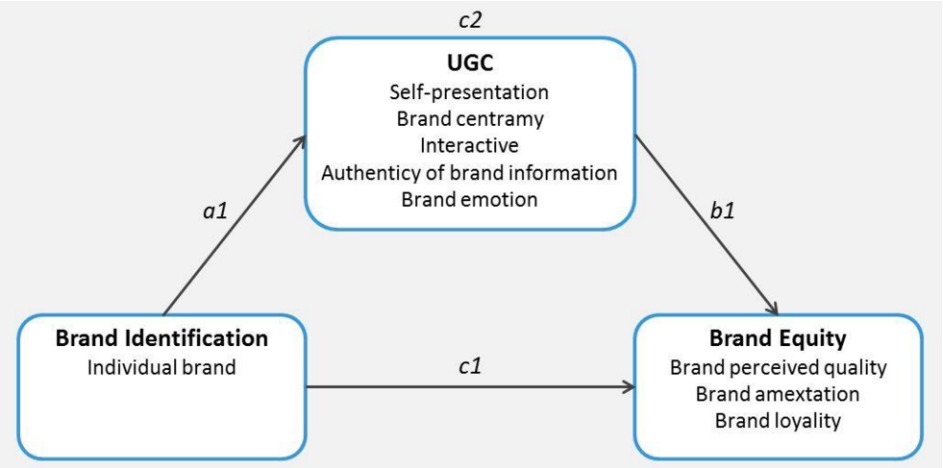


Figure 1. The model of brand identification, UGC and brand equity.

2.2. Sampling and data collection

The samples are collected by an online questionnaire including respondents from all ages without district restriction. The author choose the online questionnaire because the link of questionnaire can be shared by social media platform, which can be effective to help author to focus on respondents who use social media often. To get samples, two screening questions are set to judge whether or not respondents pay attention to specific brand and UGC in social media platforms. After two weeks, 400 questionnaires are collected. Excluding invalid ones, there are 265 effective copies. The response rate is 66.25%.

2.3. Measurement

The variables in this paper are mainly obtained on the basis of literature review, research objectives and mature scales. The items put in the questionnaire all come from previous studies, having been proved by scholars to be effective on evaluating all the variables. In line with the brand UGC hypothetical model, this paper firstly defines brand UGC from six dimensions, which is based on Smith’s research for UGC(2012) [19]. Since the author chooses three of four most general dimension accepted by scholars (brand association, brand loyalty and brand perceived quality) to measure brand equity. Therefore, there are 9 questions in total corresponds to three dimensions: 3 for brand loyalty, 3 for brand association and 3 for brand perceived quality [41]. The items studying brand recognition are adapted from of Rio’ s research [24]. That is,

measuring individual brand recognition through the consistency degree of the brand image perceived by customers with customers' "self-image, value as well as lifestyle" and social brand recognition by checking whether the brand individuality image reflects "social status, respects and distinction among social groups".

3. Data analysis

3.1. Factor Analysis and Reliability Analysis

The data shows the validity and reliability of the questionnaire (Table 1). The total variance explained of brand identification, brand equity and UGC are 75.892%, 78.134% and 52.033% respectively, all being over 50%, meeting the standard. The last column of the table reflects the reliability test result of this paper. The Cronbach's alpha of every factor is above 0.8 (that of brand equity is even over 0.9), confirming the validity and reliability of the questionnaire and the data collected by this method.

3.2. Regression Analysis

With SIG of 0.000 and F-value ranging between 57.551 -73.175, the regression path shows high significance of all the seven models. The R^2 -values (0.180-0.330) confirms the overall effect of the models. The result of the independent variable in parameter test shows all the B-values are over 1%, reaching the level of high significance. All being positive numbers, the 3 B-values indicates that the effects of all the factors are positive. This brings the results that a1, b1 and c1 are all supported.

Table 1. Regression analysis of brand identification, brand equity, UGC.

Model Path	B	R Square	t	F	SIG
Brand identification-UGC	0.494**	0.218	8.554	73.175	0.000
Brand identification-Brand equity	0.511**	0.330	11.378	129.456	0.000
UGC-Brand equity	0.356**	0.180	7.586	57.551	0.000

3.3. Meditating Test

The mediator model is about brand identification, UGC and brand equity (Table 2). The F-values of the 4 models are, respectively, 129.456, 73.175, 57.551 and 73.967, all being significant at the level of 0.01. So all the 4 models are, overall speaking, effective. The R^2 -values range from 0.180 to 0.361, being within the normal range. Observing the results of the parameter tests of all the models, it could be found that the independent and the mediating variable reach the significant level, meaning that both variables are of statistic significance. Therefore, part of the mediating effect is evident in the model.

Table 2. Mediating test of brand identification,brand equity and UGC.

Model Path	Model 1		Model 2		Model 3		Model 4	
	Brand equity		UGC		Brand equity		Brand equity	
	B Value	T Value	B Value	T Value	B Value	T Value	B Value	T Value
Predictors								
Brand identification	0.511**	11.378**	0.494**	8.554**	0.511**		11.378**	0.494**
Mediator								
UGC					0.180**	7.586**		
F Value	129.456**		73.175**		57.551**		73.967**	
R Square Value	0.330		0.218		0.180		0.361	

**p<0.01...*p<0.05

4. Conclusion and Suggestion

The study finds :1) Brand identification are positively related to brand equity. The higher brand identification customers have, the higher brand perceived quality and brand loyalty are and more positive brand associations is; 2) Brand identification affects UGC in a positive way. Customers identifying the brand are more willing to produce positive UGC on social media platforms; 3) UGC affects brand equity in terms of brand association, brand loyalty and brand perceived quality; 4) UGC acts as a mediator between brand identification and brand equity. Compared with the direct effect on brand equity from brand identification, the mediating effect of brand identification on brand equity via UGC has a greater influence.

The study suggests that brand business should integrate UGC into brand management and brand marketing. First of all, compared to traditional marketing communication, using UGC is a much effective and less costly way of communication. It's necessary to encourage UGC on social media and initiatively interact with customers for customers will help spread brand information when creating their comments and content. A good example way is organizing online activities on social media platform to encourage customers to share their own purchasing experience. Secondly, brand information delivered by UGC is more convincing and influential among customers. So company should also build brand communities established on social media to enhance communication between customers and the brand as well as that among customers, which could reinforce customers' brand recognition. During the process of strengthening the sense of belonging and self-concept, the brand and customers would be mutually connected and get into a process of co-creation. Thirdly, integrating UGC into brand management, companies can also improve competitive edge by embracing a competitive strategy: customer intimacy. Because UGC is an effective two-way communication tool, for companies, it is useful to collect customers' attitude towards brands, much easier to know customers' demands than before, and help to have greater adaptation of products. For customers, UGC can be used to reflect

their comments to brands and this also require companies to perfect internal mechanism like setting up specific department to create highly tailored problem solving capabilities. What's more, since customers with brand identification are more willingness to create positive UGC for companies, for customers, companies should allocate investment on brand management to set up more unique and valuable products, brand culture, brand symbols etc.

Acknowledgments

This article was supported by a grant from Humanities and Social Sciences Found for Youths of China Ministry of Education (No.12YJC630126).

References

- [1] M. Andehn, A. Kazeminia, A. Lucarelli and E. Sevin, User-generated place brand equity on Twitter: The dynamics of brand associations in social media, *Place Branding and Public Diplomacy*, 2014(8), doi 10.1057/pb.2014.8
- [2] L. Zailskaitė-Jakstė and. R. Kuvykaitė, Conceptualizing the social media communication impact on consumer based brand equity, *Trends Economics and Management*, 2016, 25(1), pp. 68-74.
- [3] W. Lu and S. Stepchenkova. User-Generated Content as a Research Mode in Tourism and Hospitality Applications: Topics, Methods, and Software, *Journal of Hospitality Marketing & Management*, Vol. 24, 2015, No. 2, pp. 119-154.
- [4] G. Christodoulides, C. Jevons and J. Bonhomme, Memo to Marketers: Quantitative Evidence for Change: How User-Generated Content Really Affects Brands, *Journal of Advertising Research*, 2012(3), doi 10.2501/JAR-52-1-053-064.
- [5] D. Chang and C-H. Chen, Understanding the influence of customers on product innovation, *International Journal of Agile Systems and Management*, Vol. 7, 2014, Nos. 3/4, pp.348-364.
- [6] X. Wang and Y. Zheng, Effect of User-generated content on brand attitude in social business environment, *Journal of Zhengzhou Institute of Aeronautical Industry Management*, 2014, 32(3), pp. 78-81.
- [7] J. Qian and H. Pan. Effect of Using and Satisfaction of User-generated Content on Brand Attitude:An Example for Audio and Video of User-generated Content, *Finance and Trade Research*, 2012, 3, pp. 105-115.
- [8] S. Hudson, M.S. Roth, T.J. Madden, R. Hudson, The effects of social media on emotions, brand relationship quality, and word of mouth: An empirical study of music festival attendees, *Tourism Management*, Vol. 47, 2015, pp. 68-76.
- [9] K.L. Keller, Conceptualizing, measuring, and managing customer-based brand equity, *Journal of Marketing*, Vol. 57, 1993, pp. 1-22.
- [10] J. He, Advance on Measures of Customer-based Brand Equity-Scale Development, Validation and Cross-cultural Approach, *Business Economics and Administration*. 2006, 4.
- [11] C.K. Kim, D. Han, S.B. Park. The effect of brand personality and brand identification on brand loyalty: Applying the theory of social identification, *Japanese Psychological Research*, 2001, 43(4), pp. 195-206.
- [12] L. Jin, A Brand Equity Driving Model Based on Brand Personality and Brand Identification, *Journal of Beijing Technology & Business University*, 2006
- [13] Y. Zhao and Q. Zhu, The research of main drivers to affect User-Generated Content in Web 2.0 environment, *China Library Journal*, 2009, 9.
- [14] M.S. O'Hern and L.R. Kahle, The Empowered Customer:User-Generated Content and the Future of Marketing, *Global Economics and Management Review*, Vol. 18, 2013, pp. 21-29.
- [15] R. Baxter and K. Olesen, Using Structuration Theory to Analyse Relationship Value Creation, *24th IMP-conference, Uppsala*, 2008.
- [16] H. Pan and X. Wang, Brand Positions in the Virtual Community:Empirical Research Based on Point-wise Mutual Information of User-generated Content, *Finance and Trade Research*, 2011, 22(4), pp. 111-118

- [17] R. Wallis, J. Stjepandić, S. Rulhoff, F. Stromberger and J. Deuse, Intelligent utilization of digital manufacturing data in modern product emergence processes, *Moving Integrated Product Development to Service Clouds in the Global Economy - Proceedings of the 21st ISPE Inc. International Conference on Concurrent Engineering, CE 2014*, IOS Press, Amsterdam, pp. 261-270.
- [18] C. Burmann, A Call for 'User-Generated Branding', *Journal of Brand Management*, 18, 2010, 1, pp. 1-4.
- [19] A.N. Smith, E. Fischer and Y. Chen, How Does Brand-related User-generated Content Differ across YouTube, Facebook, and Twitter?, *Journal of Interactive Marketing*, 2012, 26(2), pp. 102-113.
- [20] S. Onkvisit and J. Shaw, Self-concept and image congruence: some research and managerial implication, *The Journal of Consumer Marketing*, Vol. 4, 1987, No. 1, pp.13-23.
- [21] K.L. Keller, Building Customer-Based Brand Equity: A Blueprint for Creating Strong Brands, *Marketing Management*, 2001, No. 7/8, pp. 15-19.
- [22] D. Aaker, Measuring brand equity across products and markets, *California Management Review*, 38(3), 1996, pp. 102-120.
- [23] J. Schouten, Selves in Transition: Rites of Symbolic Passage and Consumption Personal Identity Reconstruction, *Journal of Consumer Research*, 2012, 17-4, pp. 412-425.
- [24] A.B. Del Rio, R. Vazquez and V. Iglesias, The effects of brand associations on consumer response, *Journal of Consumer Marketing*, 2001, 18(5), pp. 410-425.
- [25] Z. Fang, Y. Yang, M. Jiang, W. Li and S. Li, Research on the Influence of Protecting Brand Equity in the Event of Defensible Product Harm Crisis by Appropriate Remedial Response: Moderating and Mediating Effects, *Nankai Business Review*, 2011, 14-4, pp. 69-79.
- [26] F. Salvador Alves, A.P. Segatto and E. De-Carli, Theoretical Framework about Relational Capability on Interorganizational Cooperation, *J. Ind. Intg. Mgmt.*, 01, (2016), 1650012.
- [27] W. Lassar, B. Mittal and A. Sharma, Measuring customer-based brand equity, *Journal of Consumer Marketing*, 1995, 12-4, pp. 11 – 19.
- [28] H. Zhang, C. Bai and S. Hao, The New Perspective of Brand Equity Management - the Research of Staff-based Brand Equity, *Foreign Economics & Management*, 2011, 33,9.
- [29] Y. Liu and G. Wang, Measuring Brand Equity and Operation Efficiency—An Empirical Study Based on Customer, *Chinese Soft Science*, 2010, 10.
- [30] F. Zhang, A Review and Construct of a New Model for Customer-Based Brand Equity, *Chinese Journal of Management*, 2011, 8, 4.
- [31] D.S. Sundaram, K. Mitra and C. Webster, Word-of-Mouth Communications: A Motivational Analysis, *Advances in Consumer Research*, 1998, 25, pp. 527-531.
- [32] T. Hennig-Thurau, K.P. Gwinner, G. Walsh and D.D. Gremle, Electronic Word-of-Mouth Via Consumer Opinion Platforms: What Motivates customers to Articulate Themselves on the Internet?, *Journal of Interactive Marketing*, 2004, 18, 1, pp. 38–52.
- [33] J.S. Wolter and S. Brach and J.J. Cronin Jr. and M. Bonn, Symbolic drivers of consumer-brand identification and disidentification, *Journal of Business Research*, 69, 2016, pp. 785-798.
- [34] S.Y.Y. Cheng, T.B. White and L.N. Chaplin, The effects of self-brand connections on responses to brand failure: A new look at the consumer-brand relationship, *Journal of Consumer Psychology*, 2012, 22, pp. 280–288.
- [35] B. Schivinski, G. Christodoulides and D. Dabrowski, Measuring Consumers' Engagement With Brand-Related Social-Media Content: Development and Validation of a Scale that Identifies Levels of Social-Media Engagement with Brands, *Journal of advertising research*, 2016, 56-1.
- [36] L.D. Hollebeek, M.S. Glynn and R.J. Brodie, Consumer brand engagement in social media: Conceptualization, scale development and validation, *Journal of Interactive Marketing*, 2014, 28(2), pp. 149-165.
- [37] P.R. Smith and Z. Zook, *Marketing Communications: Integrating Offline and Online with Social Media*, 5th ed, Kogan Page, Philadelphia, 2011.
- [38] J. van Doorn, K.N. Lemon, V. Mittal, D. Pick, P. Pimer and P.C. Verhoef, Customer Engagement Behavior: Theoretical Foundations and Research Directions, *Journal of Service Research*, 2010, 13-3, pp. 253-266.
- [39] F. Zhou, Y. Ji and R. J. Jiao, Predicting Product Adoption in Large Social Networks for Demand Estimation, *Moving Integrated Product Development to Service Clouds in the Global Economy - Proceedings of the 21st ISPE Inc. International Conference on Concurrent Engineering, CE 2014*, IOS Press, Amsterdam, pp. 890-899.
- [40] R.M. Baron and D.A. Kenny, The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations, *Journal of Personality and Social Psychology*, 1986, 51, pp. 1173-1182.
- [41] B. Yoo, N. Donthu and S. Lee, An examination of selected marketing mix elements and brand equity, *Journal of the Academy of Marketing Science*, 2000, 28(2), pp. 195-211.