

An Investigation of Viral Marketing Effects on Costumer-Based Brand Equity In Mobile Market

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Abstract: Viral marketing, as a significant factor of modifying consumer behavior, is a new tool that persuades individuals to pass on a marketing message to potential customers, who like viruses has potential for exponential growth. On the other hand, extension of brand has been always as one of the most important strategies of brand promotion. Brand strength means customer loyalty, less vulnerability to reviewers, higher margin, customer support and effectiveness of marketing activities for enterprises. The critical question in this article is about the Impact of viral marketing as an effective way of entrepreneurial promotion on costumer-based brand equity in mobile market of Tehran, Iran. This study demonstrates the role of viral marketing on the costumer-based brand equity via a survey method among 500 consumers of Tehran mobile market. The collected data was analyzed through Lisrel 8.54 version software and with SEM method. The results indicate that viral marketing has a significant impact on costumer-based brand equity.

Key words: Viral marketing • Costumer-based brand equity • Mobile market • Structural equation model (SEM)

INTRODUCTION

Branding and promoting the brand position is one the tasks of firm marketing. As one of the entrepreneurial promoting procedures, the viral marketing can be a response to the perennial searches of marketing designers for finding creative and innovative techniques. In 2009, the global population statistics showed that approximately 27 percent of the world population, about 1.8 billion people uses the internet. As the studies shows on-line tools of social marketing has had unprecedented and inimitable growth. Inc magazine study has reported that 82 percent of private companies which has rapid growth used word of mouth and viral marketing techniques. A lot of users, directly or indirectly are associated with the internet companies. Generally internet and IT has not only created an opportunity for customers to share views about product and services but also become one the main tools of marketing promotions for companies. According to the non-negligible potential it seems that by using viral marketing we could put positive

impact on customer-based brand equity. In as much as from one hand the brand equity has been a criteria for the companies in order to measure it's brand power and on the other hand there has been a lot of attention to the viral marketing as a new approach in the world, hence the main question of the research is that, how the viral marketing components Impact on customer-based brand equity in Tehran mobile market. Thus the aim of the research is to survey and modeling the way of viral marketing impact on customer-based brand equity. Therefore with understanding the way of effecting from viral marketing components on customer-based brand equity mechanism, Due to unique characteristics of the promoting method, companies could use that for expansion of their own brand.

Review: Through the centuries, the brand has been a way to differentiate a company's products and services from the other. Extension and promotion of brand is a strategic method for growth of the company. Using existing brands to introduce new products can significantly reduce

Table 1: The research literature of the brand equity constructs

Construct	Research Literature
Brand Awareness	Keller, K., & Lehmann, D. (2004); Aaker, David A. (1996); Yoo, B., & Donthu, N. (2001); Yoo, B., Donthu, N. and Lee, S. (2000); Netmeyer <i>et al.</i> , 2004; Buil <i>et al.</i> , 2011; Kim, H-B. and Kim, W. G. (2005); Konecnik, M., & Gartner, W. C. (2007); Boo, S., Busser, J. and Baloglu, S. (2009).
Brand Association	Aaker, David A. (1996); Yoo, B., & Donthu, N. (2001); Baack, D. W. (2006).
Brand Loyalty	Aaker, David A. (1996); Yoo, B., & Donthu, N. (2001); Buil <i>et al.</i> , 2011; Kim, H-B. and Kim, W. G. (2005); Konecnik, M., & Gartner, W. C. (2007).
Perceived Quality	Pappu, R., Quester, P. and Cooksey, W.R. (2005); Yoo, B., & Donthu, N. (2001); Aaker, David A. (1996); Buil <i>et al.</i> , 2011; Konecnik, M., & Gartner, W. C. (2007); Boo, S., Busser, J. and Baloglu, S. (2009).

marketing costs of introduction of products and facilitates products breakthrough by increasing the acceptance of the retailers and customers. Brand equity is a set of assets and liabilities linked to a brand name and market which can increase or decrease the value of product or service for a company or customer [1].

Regarding to brand equity a lot of different approaches have been defined up to now. The approaches cited in the literature, are the cognitive approach, the behavioral-cognitive approach and combined approach. The customer-based brand equity is derived from behavioral- psychological approach. The customer-based brand equity is the different impact of brand knowledge on the response of marketing brand customers [2]. Through the years because of the strategic roles plays in the company, the customer – based brand equity, has been one of the vital issues of researchers. [1], model is one of the first customer – based brand equity models. [1], considers five aspects in his model which are: brand loyalty, perceived quality, brand associations, brand knowledge and brand ownership. [2], also presents a model for customer – based brand equity, since he believes that whole of the marketing strives should finally cause enhancement in amount of sell, so establishing the brand cognition fundamentals in customers should be the first step in marketing. Thus he take the brand knowledge into consideration as an element for customer – based brand equity and divide it into two subtitle which are brand knowledge and brand image, he believes that the understanding of brand by customer is derived from brand association in customer’s mind. [3], have tried to create a comprehensive model on the basis of [1] model and also have tried to have a global look at customer – based brand equity.

Brand loyalty, brand knowledge, brand association, perceived quality and brand ownership are the five indexes they have in their model. In addition indexes such entry order advertisement share, brand profit, brand multiplicity, brand process, brand support, type of market and global potential can be seen in [3] model. [4], have

reviewed, context, transparency and validity of a brand in their customer- based brand equity and they claim that these elements can impact on perceived quality, information cost and perceived risk can also enhance or decline them. These effects, in turn, increases the customer’s expected profit and the expected profit to the customer is as well as value – added of products which results in a brand for a customer. In 2008 [5-8], presents another model about customer – based brand equity. This model consists of six aspects in four structured levels. Confidence located at the lowest level, image and efficiency are located subsequently, “emotion” and judgment located in upper level and finally, at the highest level, resonance take place. [9], using [2] and [10] models, provided a model that consists of four indicators: brand loyalty, brand association, brand awareness and perceived quality of brand. They have focused their study on cultural differences. In this sector due to frequent citations of texts and also generalizing the model to different products and cultures, [9] model has been considered as customer-based brand equity. Table shows variables associated with brand equity and history of each. Customer- based brand equity history supported with research constructs.

For the first time since 1989, the term, viral marketing, was used in magazine. A lot of researches have been done on the subject so far. Many definitions of viral marketing has been presented in the literature, despite having a common, somewhat different from each other, thus there is no comprehensive argument about any of them. For example [11], has defined viral marketing in 2004:” Any statement said about a company’s product and services that can be available for many people through the internet”. However rapid growth, informal communications between customers and doing it over the internet can be outlined as common points in definitions. In some studies, viral marketing has known as “electronic verbal advertising”. A lot of benefits are listed for viral marketing, including: very low cost and rapid acceptance, trust which is established in customers due to social

Table 2: The literature of viral marketing supported by research constructs

Construct	Research literature
Volume	Davis, A., & Khazanchi, D. (2008); Chan, Y., & Ngai, E. (2011); Lui, Y. (2006); Buttle, F. A. (1998).
Attraction	Chan, Y., & Ngai, E. (2011); Davis, A., & Khazanchi, D. (2008); Lui, Y. (2006); Buttle, F. A. (1998).
Visual cues(Image)	Davis, A., & Khazanchi, D. (2008).
Reviewer type	Davis, A., & Khazanchi, D. (2008).

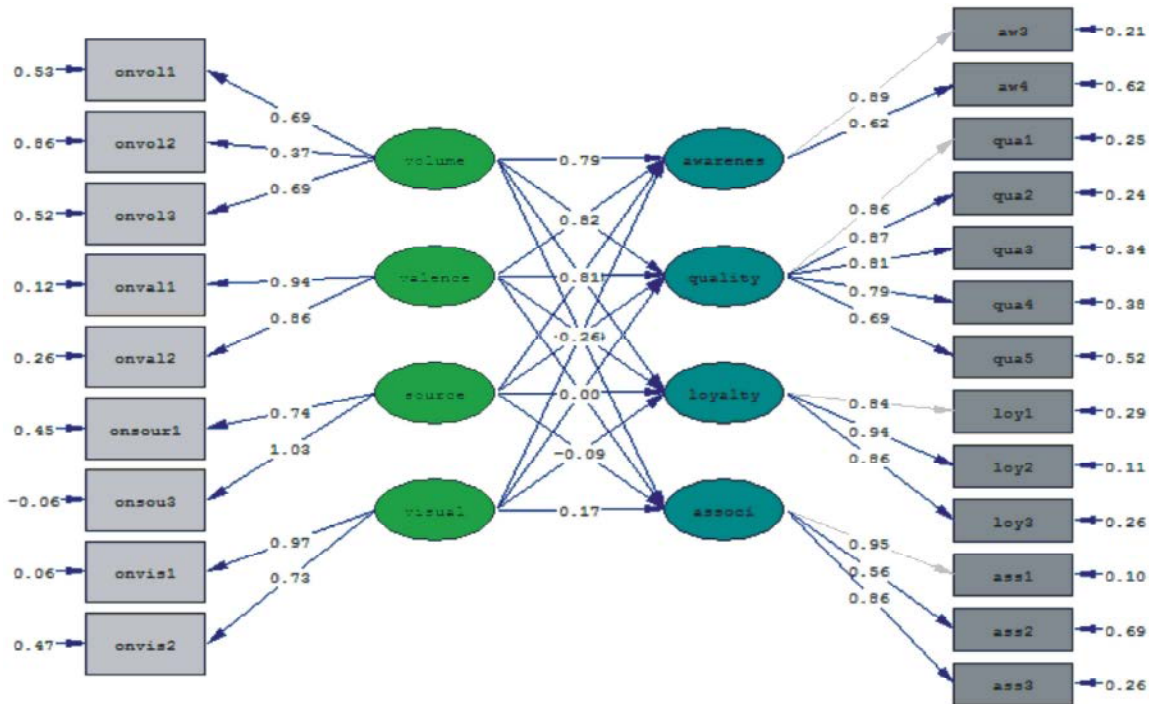


Fig. 1: The model of research. The impact of viral marketing on customer – based brand equity

network recommendations, more effective than traditional and conventional methods. Also many studies about on-line verbal advertising and viral marketing have been done, but there is no comprehensive model that could explain how it works, lacking so far. [19], by studying more than 92 articles, presented a conceptual model for viral marketing based on input – process – out put (IPO) approach. The framework explains that the concept of viral marketing contains input, process and output. These three steps are the building blocks of a comprehensive framework that shows the basic, processing and later or results of viral marketing process. Also [20] [21], has considered the volume, attraction, Visual cues and reviewer type as aspects of viral marketing in a model. Their marketing studies have shown that viral marketing can effect on cognitive conditions such as knowledge, attitudes, expectations, perceptions, intensions and customer behavior. In the model the volume of viral marketing means the total volume of transactions associated with viral marketing and attractions means being directed comments, positive or

negative comments. This means viral marketing can be positive or negative. Visual cues of message, including any image sending when a reviewer assesses the special characteristics of a products or service that can lead a customer when he or she evaluating certain characteristics of a product or service. Finally, the reviewer type is knowledge or experience of message sender about the product or service provided. Hence the people divided into two groups, experts and normal consumer. According to research literature, the [20] model is one of the most comprehensive models that have examined the viral marketing components. The model has been considered as the base model of viral marketing. Table 2 shows the variables associated with brand equity and history of each of them.

The Theoretical Framework: The word of mouth marketing association reports that according to a survey conducted in 2006, only five percent of customers refuse to release information about the brand, more than 40 percent of people who were studied, send the content

of brand issues to their friends. According to Andy Sernivitz, General Manager of word of mouth marketing association, people like to talk about brands. In the present, about 20 to 30 brands are used in everyday conversations throughout the day, so the debate is how to excite people to talk about our brand or business.

Viral marketing allows companies to promote their product and services with low cost and enhance the brand awareness of the customer, which was previously possible only through instant TV commercial advertising. [22], have pointed to the role of viral marketing on brand awareness. [23-19], have pointed to the impact of viral marketing on consumer loyalty. On the other hand [24], in their book, Connected marketing, have given some points about the role of viral marketing and online marketing that can be on brand and it's promotion, but relevant factors effect has not been studied and the subject hasn't been test and surveyed. According to the undeniable potential and note that by using viral marketing we can make a positive impact on brand equity and customer- based brand equity is important in all businesses. But until now a research on how viral marketing can affect customer – based brand equity components hasn't been done.

Accordingly, for the purpose of study, two models, customer – based brand equity model of [9] and viral marketing model of [20] have combines in order to get appropriate information about how viral marketing affect customer – based brand equity. The conceptual model is shown in Figure 1. and the following sub-research questions are discussed. The hypotheses have been presented in Table 4.

MATERIALS AND METHODS

In terms of research classification, the research is practical and in terms of data collection methods, it is descriptive of correlation based on structural equations. The data gathering tool was questionnaire, which has been tried in 26 questions to views of statistical population and to study and analyze. Range used in the study was also Likert range.

This research has been analyzed, using structural methods and version 8.53 Lisrel software. The research sample (study population of research) is the all of mobile customers in the city of Tehran. Due to unlimited sample size of population, using the table of Morgan Jersey, the 95% confidence level and a margin of error of 0.05,

Table 3: Summary of statistical tests of reliability and validity of research variables results

Index	Volume	Attraction	Reviewer type	Visual cues	Brand knowledge	Perceived quality	Brand loyalty	Brand association
Cranach's Alpha	0.74	0.89	0.85	0.81	0.71	0.9	0.91	0.82
AVE	0.54	0.83	0.84	0.58	0.59	0.65	0.78	0.65
T- value Interval	7.75- 17.51	11.72-13.6	12.0- 14.9	11.54-14.12	11.8-16.80	14.17-19.64	18.76-22.64	10.87-20.19

Table 4: The results of the research

The number of Hypothesis	Hypothesis	Lisrel estimate (M.L)	T-value	Prove or disapprove of hypothesis
H1a	The impact of volume on Brand knowledge	0.74	12.93	Approve
H1b	The impact of volume on perceived quality of Brand	0.82	13.53	Approve
H1c	The impact of volume on Brand Loyalty	0.81	12.96	Approve
H1d	The impact of volume on Brand association	0.262	4.03	Approve
H2a	The impact of attraction on Brand knowledge	0.08	1.49	Disapprove
H2b	The impact of attraction on perceived quality of Brand	0.1	1.98	Approve
H2c	The impact of attraction on Brand Loyalty	0.19	3.58	Approve
H2d	The impact of attraction on Brand association	0.004	0.07	Disapprove
H3a	The impact of reviewer type on Brand knowledge	0.055-	1.01-	Disapprove
H3b	The impact of reviewer type on perceived quality of Brand	0.091-	1.78-	Disapprove
H3c	The impact of reviewer type on Brand Loyalty	0.044	0.87	Disapprove
H3d	The impact of reviewer type on Brand association	0.086-	1.48-	Disapprove
H4a	The impact of Visual cues on Brand knowledge	0.163	2.89	Approve
H4b	The impact of Visual cues on perceived quality of Brand	0.118	2.25	Approve
H4c	The impact of Visual cues on Brand Loyalty	0.055-	1.05-	Disapprove
H4d	The impact of Visual cues on Brand association	0.127	2.83	Approve

the number is 420. Researcher chose four widely used Nokia, Sony Ericson, LG and Samsung brands to conduct research. Content validity gained by using the approved form of questions. The questionnaire has been approved by 23 academic experts view, scholars of information technology and practitioners associated with mobile commerce, AVE has also been used as a statistical test which for all the structures it is higher than 0.50. To check the reliability of the research, the cronbach's alpha is used. Table 3 summarizes the results of statistical tests of reliability and validity. Based on the results of statistical tests, the measuring instrument which used for measuring different variables has a very high reliability and required conditions. Regarding sample size, 500 questionnaires based on random sampling on different days at different times of day in Tehran in November 2010 has been distributed and collected. Of those, 432 questionnaires were collected.

Relation between the reviewer types for customer – based brand equity has been rejected. Finally it can be seen that the relation between visual specification of message and brand awareness, perceived quality and brand associations exist and the relation between the Visual cues of message and brand loyalty, has been rejected. Fit pattern test, as shown in Table 4, shows that the χ^2 volume to freedom degree of model is lower than 3 and the RMSEA is less than 0.08. Model a (GFI) index was calculated as 0.91, so the fitted research model is appropriate. Other indicators of fitting model are presented in Table 4.

CONCLUSION

Building brand equity, which is building a strong brand, is successful strategy for distinguishing between competing brands and products. Customer – based brand equity creates sustainable competitive advantage. The purpose of this research is finding the effect and relationship of viral marketing components on customer – based brand equity dimensions in mobile market.

The result shows, volume and Visual cues of message is effective on brand awareness. The results of research are consistent with research findings of [22, 25, 26, 20]. The results also show that the volume and attraction of viral marketing are effective on brand loyalty which also has been approved in [23-19] researches. Reviewer type impact on perceived quality of brand, has been rejected, it also is in contrast with [20] research. Studying the factors controlling viral marketing can be a good complement to this research and will contribute to

a more operational study, thus it is suggested that future researches should consider it For future studies, it is recommended for better understanding of how a customer – based brand equity forms, other variables are also studied. Future research can expand the basket of goods which can enhance the generalizability of the results. Also, if possible, testing research hypotheses in different cultures can also play a significant role in order to boost the generalizability of the results.

This study showed that viral marketing is low cost but has high impact on the viable investment. Therefore, in addition to other marketing components a special attention should be on this because it is the most important factor influencing brand equity.

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