Analyzing the Effects of Brand Innovativeness on Attitude towards the Brand Considering the Moderating Role of Consumer Innovativeness with a Case Study in Students of University of Isfahan

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Abstract

As Ouellet (2006) noted, introduction of really new products by organizations is not a risk-free strategy for companies, some having less success at it than others. Factors such as changing consumer behavior towards really new products based on segments of adopters, product-related issues (e.g. pricing of the product and physical characteristics of the product) influence adoption, along with firm- and market-related factors. Brand and brand innovativeness concept, as one of brand associations and perceptions, less have been noted across factors of adoption of new products. In the long run, one crucial factor of brands pursuing innovation certainly has to do with consumer reactions to said brands and the products they sign. Therefore, the objective of this research is analyzing the effects of brand innovativeness on attitude towards the brand considering the moderating role of consumer innovativeness with a case study in students of Isfahan University.

Brand innovativeness, consumer innovativeness, and attitude towards brand as the research variables were studied across students of Isfahan University, as the study population. The collection instrument is a questionnaire that 200 were distributed and 173 collected and analyzed. A random sampling procedure was applied and the validity of questionnaire was confirmed and reliability of it was calculated and confirmed by Cranach's Alpha. For data analysis and hypotheses testing has been used SPSS, AMOS, and PLS software. The results indicate that brand innovativeness, with regression weight equals' 0/78 and sig equals 0/000, has influenced on attitude towards bran. It means consumers have positive attitude towards brand if perceived brand innovativeness is high. Moreover, regression weight of the relationship is 0/732 for high-level consumer innovativeness and 0/651 for low-level consumer innovativeness and the calculated amount of t-value that equals 20/5853, indicates that the moderating influence of consumer innovativeness on the relationship has been confirmed.

Key words

Brand, Innovation, Consumer innovativeness, Brand innovativeness, Attitude towards brand

DOI: 10.6007/IJARAFMS/v3-i3/187 URL: http://dx.doi.org/10.6007/IJARAFMS/v3-i3/187

1. Introduction

In the recent decades the business environment has changed tremendously due to the advance of globalization and competition, changing the essentials for success. In this context, innovativeness appears to be a key ingredient to achievement and competitiveness in the new millennium. In today’s business environment, innovativeness is regarded as one of the most valuable assets of organizations. The astonishing pace of new technologies, changes in consumer demands and preferences and fierce competition requires businesses to stay innovative to survive and grow in the market (Kaplan, 2009).

Introduction of really new products by organizations is largely documented as a significant determinant of long term performance, a reality exacerbated by market globalization, faster introduction of second and
later entrant products, and shorter product lifecycles. However, the pursuit of innovation and constant introduction of new products is not a risk-free strategy for companies, some having less success at it than others (Ouellet, 2006). An understanding of influencing factors on adoption new services and products will allow organizations to create solutions and strategic plans to attract customers to use those (Giovanis et al, 2013). Consumer innovativeness, pricing of the product and other non-price issues such as technology and physical characteristics of the product also influence adoption, along with firm- and market-related factors. In the long run, one crucial factor of brands pursuing innovation certainly has to do with consumer reactions to said brands and the products they sign (Ouellet, 2006).

The American Marketing Association defines a brand as “a name, term, sign, symbol, or design, or a combination of them, intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of competitors.” A brand is thus a product or service whose dimensions differentiate it in some way from other products or services designed to satisfy the same need. These differences may be functional, rational, or tangible—related to product performance of the brand. They may also be more symbolic, emotional, or intangible—related to what the brand represents or means in a more abstract sense (Kotler and Keller, 2012).

Marketers are especially interested in consumers' attitudes towards brands. Essentially, attitudes are our predispositions with regard to things. An attitude shows whether we like something or not. Attitudes have three basic components: affective, cognitive and behavioral. Affective is related to our liking or feelings about an object. Cognitive is referred to beliefs about an object and behavioral component regards actions we take about that object. Agarwal and Malhotra (2005) have defined brand attitude as consumers' general evaluative judgment of a brand based on brand beliefs. Such beliefs concern product-related attributes, like practical and experimental benefits (Ranjbarian et al, 2010).

Emerging conceptual and empirical evidence has advanced our understanding of factors that affect brand attitudes. Many factors including of cognitive and affective variables (Yoo and Macln尼斯, 2005), unit price increase tactics (Kachersky, 2011), Family communication and parental influence (Hsieh et al, 2006), sensory ad appeals (Yoon and Park, 2012), Event Satisfaction, Shopping Enjoyment (Leischnig et al, 2011), and perceived physical environment quality (Hwang and Ok, 2013) influence brand attitude. In this context, one of new and important approaches is brand innovativeness (Ouellet, 2006).

A brand association that many companies seem to foster is that of innovativeness. Brand innovativeness is consumers' perceptions about a brand’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes. Brand innovativeness involving perception by consumers, it should translate into the introduction of innovative new products or services and/or other actions such as innovative advertising, business models, distribution channels, and the like that are perceptible by consumers (Ouellet, 2006).

Consumer innovativeness can moderate relationship between brand innovativeness and brand attitude. Consumer innovativeness determines one’s tendency toward novelty-seeking and risk-taking behavior (Truong, 2013). There is no consensus in the definition of innovativeness. From “inherent novelty seeking,” which may have consequences other than new product buying behavior, to “predisposition to buy new products,” which defines the concept by its main consequence, through “independence in innovative decisions,” which could not be empirically validated, various authors have given different views of the concept. There is no consensus either on the roots of innovativeness of the need for stimulation, novelty seeking, independence in judgment and the need for uniqueness, which are true antecedents of innovativeness? Analysis of existing innovativeness scales may provide insights into these questions (Roehrich, 2004). Therefore, the objective of this paper is investigation effects laptop brand innovativeness on consumer brand attitudes considering the role of moderating role of consumer innovativeness.

2. Research background

2.1. Brand innovativeness

It has been long acknowledged that innovativeness is one of the most valuable assets of organizations. Tajeddini and Trueman(2008), point out that due to fierce competition in the marketplace, globalization and an explosion of technology in recent years, innovation and differentiation are considered as a necessity for every company. Therefore, today market success depends on how innovative the firm is, rather than its
capital, capacity or costs. The astonishing pace of new technologies, changes in consumer demands and preferences and fierce competition requires businesses to stay innovative to survive and grow in the market. Research reveals that innovativeness helps companies to stay on the field, while improving regional wealth at the same time (Kaplan, 2009). According to Mairresse and Mohren (2002), innovations directly and positively influence the productivity and contribute to the profits of the companies and countries. In the other word, Innovativeness has become a pre-requisite for a firm’s competitive advantage and survival and performance, in general (Jaehoon and et al, 2010). Innovations also play a key role in development of great brands, and substantially help the marketers in their marketing and branding efforts.

Different types of innovations have led to different definitions of this concept. Schumpeter (1934), defines innovation as “some form of new combination” either in the product (e.g., a new product or an improvement on the existing product), process (e.g., a new production method), market (e.g., entering to a new market), input (e.g., a new source for supply) and organization (e.g., establishing a new organizational entity or new ways to manage business). Neely and Hii (1998), define innovativeness as “the propensity to innovate” and suggest that organizational innovativeness research looks at the factors that contribute to an organization’s tendency towards innovation. Hult and et al (2004), define innovativeness as the capacity to introduce of some new process, product, or idea in the organization. In the context of “brand”, brand innovativeness is defined by Ouellet (2006) as “consumers’ perceptions about a brand’s tendency to engage in and support new ideas, novelty, experimentation, and creative processes. Brand innovativeness involving perception by consumers, it should translate into the introduction of innovative new products or services and/or other actions such as innovative advertising, business models, distribution channels, and the like that are perceptible by consumers.

According to Keller and Aaker (1998), brand innovativeness is one of brand images and a key competitive weapon and a priority for firms when forging corporate reputations. Moreover, brands that are perceived as being innovative in the minds of consumers have been found to have a positive impact on firm credibility, making the firm appear to be more expert, more attractive, and more trustworthy (Aaker, 2007; Keller and Aaker, 1995). Therefore, from such a viewpoint, brand innovativeness is the degree to which brand is perceived innovative by consumers. In this sense, consumers’ subjective assessment of the innovativeness of a brand is seen to be a crucial aspect of innovation. In the context of marketing, brand innovativeness, as a brand images is important because it influences consumers’ subsequent behavior including intention and actual purchase (Johnson and Puto, 1987).

2.2. Brand attitude

Attitude, generally defined as summative evaluations of a product or brand, has provided a wealth of cumulative contributions in marketing and consumer research (Kwun, 2010). Attitudes represent a collection of feelings (i.e., favorable or unfavorable) toward an object, person, issue, or behavior. Over time these attitudes become learned through direct experience with, or through receiving information about any of the aforementioned. An attitude is therefore, “... a learned disposition to respond in a consistently favorable or unfavorable manner” (Walker and Heere, 2010). Attitudes have three basic components: affective, cognitive and behavioral. Affective is related to our liking or feelings about an object. Cognitive is referred to beliefs about an object and behavioral component regards actions we take about that object (Ranjbarian et al, 2010). Considerable research suggests that consumer attitude is a strong criterion construct in understanding consumers’ summative evaluations of a product or brand and of their behavioral intentions (e.g., Kwun, 2010; Ajzen, 2001; Fishbein and Ajzen, 1975).

In the context of “brand”, Brand attitude refers to an attitude that a consumer exhibits toward a particular brand (De Chernatony and Riley, 1998). According to Hyun and Han (2012), all consumers have a degree of emotional preference toward certain companies or brands. When consumers are faced with a new and unknown product, they largely rely on their existing brand attitude when making decisions regarding the new product. In an uncertain situation such as this, customers tend to select a product that is produced by a company for which they have a positive brand attitude (Hyun and Han, 2012). In other definition, Shamin and But (2013), define it as the psychological evaluation of an object, measured by its attributes. Mitchell and Olson (1981) further De Chernatony and Riley, defined brand attitude as an
individual’s internal evaluation of an object such as a branded product, and suggested that attitudes are often stable and enduring predispositions to behavior (Kim et al, 2011).

The concept of brand attitude has been in the spotlight in marketing research because it is strongly believed that customer behavior is influenced by brand attitude, which is formed by brand associations such as brand innovativeness (Ouellet, 2006; Chaudhuri and Holbrook, 2001; Keller, 2003; Suh and Yi, 2006). Added perceived brand innovativeness helps to create positive brand attitude. In light of this, brand innovativeness should be a key antecedent of attitude towards a brand. Therefore, based on the theoretical and empirical background the following hypothesis was derived:

\[ H1: \text{perceived brand innovativeness positively influences attitude towards brand.} \]

2.3. Consumer innovativeness

According to Steenkamp et al (1999), research in consumer behavior and new product marketing has shown that consumers differ in their attitude toward novelty and innovation. There are two different approaches in definition of consumer innovativeness including of behavioral and personality trait approach. In behavioral approach, consumer innovativeness is defined as the degree to which an individual is relatively earlier in adopting new ideas than the average member of his social system. This definition focuses on the level of innovativeness that is observable in behavior. Marketing researchers refer to this type of innovativeness as realized or actualized innovativeness (Vandecastelee and Geuens, 2010). In personality trait approach, consumer innovativeness is defined as an innovative predisposition related to the degree to which the individual adopts a new product without the influences of others’ previous purchasing experience (Chao et al, 2012). Midgley and Dowling (1978), are the first to point out that innovativeness is a hypothetical construct and is by definition unobservable. They refer to it as innate innovativeness and describe it as being situated on a higher, more abstract level than realized innovativeness (Vandecastelee and Geuens, 2010).

Consumer innovativeness moderates the relationships between brand innovativeness and brand attitude (Ouellet, 2006). This moderation effect is stronger for high consumer innovativeness than low consumer innovativeness. Therefore, based on the theoretical and empirical background the following hypothesis was derived:

\[ H2: \text{Consumer innovativeness moderates the influence of brand innovativeness on brand attitude.} \]

3. Methodology of research

3.1. Data Collection

Information was obtained from randomly selected students from University of Isfahan through survey questionnaires during June-July 2013. University of Isfahan is one of the major universities in the fields of science, human science and engineering. A total sample of 173 participants was obtained. The sample was composed of 130 men (75/1 percent) and 43 women (24/9 percent). A random sampling procedure with age, sex, degree and marriage as main control variables was applied. The age of the respondents ranged from 22 to 40 years, with a mean of 31. The questionnaire was standard and confirmed the validity of it and reliability of it was calculated and confirmed by Cranach’s Alpha.

3.2. Measures

The study uses multi-item scales to measure the constructs in our model. All items in the questionnaire were measured on a seven point Likert-type scale anchored from “strongly disagree” (1) to “strongly agree”
(7). All of the measures were available in the literature and suit with this particular context. To measure brand innovativeness we used seven items. Brand attitude and consumer innovativeness were measured with five items and eleven items, respectively.

In order to measure reliability of questionnaire, 30 questionnaire have been pre-tested through pilot studies. Then, amount of confidence coefficient has been calculated by method of Cronbach’s alpha for which 0.95 % is obtained. This number shows that the applied questionnaire enjoys confidentiality or in other words the necessary reliability.

4. Results

4.1. Measurement Model

Measurement model Structural equation modeling with Amos 21 and the maximum likelihood (ML) method was used to analyze the data. Amos implements the general approach to data analysis known as structural equation modeling (SEM), also known as analysis of covariance structures, or causal modeling that traces structural relations in set of data (Arbuckle, 2012). Structural equation modeling was used because it allows to estimate multiple and interrelated dependence relationships and unobserved factors can be represented in these relationships. Additionally, measurement error in the estimation process is accounted for (Hair et al., 1998).

The model is assessed with fit indexes including of CFI, GFI, AGFI, RMSEA, IFI, TLI, $\chi^2$/df, P. The measurement model provided a good fit to the data: (CFI= 0.99, GFI= 0.94, AGFI= 0.91, RMSEA= 0.039, IFI= 0.99, TLI= 0.99, $\chi^2$/df= 1.26, P= 0.1). All values of indexes meet the standards suggested by Hu and Bentler (1999). The fit of the structural model is good and is reported in below table:

<table>
<thead>
<tr>
<th>Fit index</th>
<th>Standard statistic</th>
<th>Statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>P≥0</td>
<td>0/1</td>
</tr>
<tr>
<td>$\chi^2$/df</td>
<td>$\chi^2$/df≤3</td>
<td>1.26</td>
</tr>
<tr>
<td>GFI</td>
<td>GFI≥0/90</td>
<td>0.94</td>
</tr>
<tr>
<td>AGFI</td>
<td>AGFI≥0/80</td>
<td>0.91</td>
</tr>
<tr>
<td>RMSEA</td>
<td>RMSEA≥0/08</td>
<td>0.039</td>
</tr>
<tr>
<td>CFI</td>
<td>CFI≥0/90</td>
<td>0.99</td>
</tr>
<tr>
<td>IFI</td>
<td>IFI≥0/90</td>
<td>0.99</td>
</tr>
<tr>
<td>TLI</td>
<td>TLI≥0/90</td>
<td>0.99</td>
</tr>
</tbody>
</table>

In the following we will test our hypotheses and consequently report the standardized path coefficients. In order to test the effects of brand innovativeness on attitude towards the brand, regression analysis was conducted where brand innovativeness was set as independent variable, and attitude towards the brand as the dependent variable. As shown in below, all hypotheses are empirically supported and confirmed. The effect of brand innovativeness on attitude towards the brand is significant (standardized path coefficient = 0.78). This shows that the higher brand innovativeness, the more positive attitudes towards the brand. Results of the first hypothesis are shown in Table 2.

<table>
<thead>
<tr>
<th>Construct</th>
<th>Path</th>
<th>Construct</th>
<th>Standardized coefficient</th>
<th>t-value</th>
<th>Significant</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand innovativeness</td>
<td>Attitude towards the brand</td>
<td></td>
<td>0.78</td>
<td>8.77</td>
<td>Yes</td>
</tr>
</tbody>
</table>
To test our second hypothesis, we first partitioned respondents into high/low consumer innovativeness sub-groups following a median split. We used the following formula to calculate regression coefficients to be significantly different in both models:

\[
t = \frac{\text{Path}_{\text{sample1}} - \text{Path}_{\text{sample2}}}{\sqrt{\text{SE}_{\text{sample1}}^2 + \text{SE}_{\text{sample2}}^2}} > 1.96
\]  

(1)

As shown in Table 3, results confirmed this difference to be significant at the .05 level for brand innovativeness and thus that consumer innovativeness does moderate the effects of brand innovativeness on attitude towards the brand. In other words, our research confirms that brand innovativeness has more positive effects on high CI consumers’ brand attitude than low CI consumers. Results of second hypothesis are shown in Table 3.

### Table 3. Results of second hypothesis

<table>
<thead>
<tr>
<th>Statistics</th>
<th>Low CI consumers model</th>
<th>High CI consumers model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standardized coefficient</td>
<td>.651</td>
<td>.7322</td>
</tr>
<tr>
<td>Standard error</td>
<td>.0753</td>
<td>.0469</td>
</tr>
<tr>
<td>Calculated t-value</td>
<td>20.5853 &gt; 1.96</td>
<td></td>
</tr>
</tbody>
</table>

#### 5. Discussion and conclusion

The purpose of this study is analyzing the effects of brand innovativeness on attitude toward the brand considering the moderating role of consumer innovativeness. As anticipated, the findings clearly revealed that the more innovative a brand is perceived, the more positive attitude towards the brand. In other words, the findings reveal that the perceived innovativeness of a brand positively influences attitude towards the brand. On the other hand, results of this study demonstrate that consumer innovativeness does moderate the effects of brand innovativeness on attitude towards the brand. In other words, our research confirms that brand innovativeness has more positive effects on high CI consumers' brand attitude than low CI consumers. This result confirms outcomes of the previous research by Ouellet (2006).

This indicates that firms should invest more in brand innovativeness as a brand association in order to enhance consumers’ attitude towards the brand. As Kaplan (2009) noted, Perception of innovativeness is important for firms, as it is ultimately reflected in the brand knowledge, particularly brand image. Given the tendency of consumers to value innovativeness very highly, the brand can extremely benefit from such a policy.

This study has some limitations. The primary limitation of the present research relates to generalizability. The sample was restricted to students in University of Isfahan and this limits our results to be generalized, too. Another relevant consideration is that numerous girl students in University of Isfahan are more than its boy students. Also, this study relied exclusively on questionnaires to assess influence brand innovativeness on attitude towards the brand and to assess influence consumer innovativeness on that, whereas this relationships need to be more investigated. On the other hand, our results are relational and not causal; therefore, it cannot be concluded from this study whether attitude towards the brand is only cause or result of brand innovativeness.

In this study the goal was to indicate the influence perceived brand innovativeness on attitudes of students in University of Isfahan toward the brand considering the moderating role of consumer innovativeness. The result of this study indicated that positive and significant relationship between brand innovativeness, consumer innovativeness and attitude toward brand. By analyzing the output resulting from testing hypotheses, it can be concluded that brand innovativeness has directly influence on attitude toward the brand and consumer innovativeness moderates that relationship.

As a theoretical contribution, this study provides evidence for the relationship between perceived brand innovativeness, consumer innovativeness and attitude toward the brand. The study also validates the
use of BI Scale that was developed by Ouellet (2006) as a potential tool to measure perceived brand innovativeness.

Further research should include the validation of the findings of this study, especially for other brands classes. Second, research is needed to retest the scale used in this paper for other brands and in other cultural settings. Finally, future researches should put more effort into making strong believable explanations for how brand innovativeness and consumer innovativeness are able to have significant influence on attitude toward brand.

References