Factors Influencing Brand Equity towards Laptop Computers: Evidence from Hawassa University Students

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ABSTRACT

The concept of branding is an important issue for developing trust between companies and customers. Nowadays, laptop computers can be properly utilized by students. Therefore, this study has been conducted with the prime objective of identifying the factors that affect brand equity toward laptop computers among Hawassa University students. The researcher has applied a multi-stage sampling technique to get 230 representative students to achieve the study's objective. A cross-sectional survey research design was adopted. The data collected through questionnaires were entered into SPSS software version 21 and analyzed using inferential statistics such as ordered logistic regression. The cumulative findings revealed that brand loyalty, perceived quality, and brand awareness are the major factors that affect brand equity. The study recommends that marketers or brand managers focus on brand loyalty, perceived quality, and brand awareness since these dimensions have a high significance in brand equity building.

Keywords: Brand Equity; Brand Awareness; Brand Associations; Perceived Quality; Brand Loyalty.

1.0 Introduction

In today's tough competitive world, everything can be easily done by employing laptop computers. Thus, this powerful tool can be properly utilized by students. The use of computers in education started in the 1960s. With the arrival of convenient microcomputers in the 1970s, computer use in schools has become widespread from primary education to the university level. It wasn't until 1981 that the first commercial portable computer became available (Webopedia, 2008). The next big event in the

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history of laptops came in. Although the personal computer (PC) industry began in the early 1970s, it was not until the summer of 1995 that Microsoft and Intel became the standard for the software (Windows) and hardware (Intel processors) used in laptops (Metafacts, 2009).

Since the 1980s, the notion of brand equity has grown in prominence, and the discipline has evolved significantly, with conceptual models (Aaker, 1991; Keller, 1993) being replaced by an increasing number of empirical models (Yoo *et al.,* 2000). Because of the growing scientific and corporate interest in brands, the concept of customer-based brand equity (CBBE) has become a core marketing concept. Brands distinguish themselves from the other elements of the marketing mix because they are capable of including the positive effects of all marketing activities, transforming them into effective quality signals (Erdem *et al.,* 2006), and they can remain on the market in the long term until products transform or disappear (Kapferer, 2005).

Several studies have reported that students need laptops to make learning easier regardless of their brand. However, modern students have grown up with technology and the convenience of a personally configured computer that students naturally use as a life tool. However, the marketer does not know the purchasing criteria of laptop brands set by the customers to make decisions. Commoditization of the laptop market created a challenge for manufacturers to identify the internal motivation among the consumer base that influenced their purchase of one brand over another. Therefore, this study aims to identify the factors influencing brand equity toward laptop computers among Hawassa University graduate students, Hawassa Ethiopia.

2.0 Literature Review

2.1 Brand awareness

Brand awareness is defined as "the capacity of a potential consumer to recognize or recall that a brand belongs to a specific product category" (Aaker, 1991). Brand awareness occurs when people are exposed to a brand. As a result, the first stage in developing brand equity is to raise brand awareness. To assess brand awareness, we must first assess brand recognition and recall (Keller, 1993; Aaker, 1996). Brand awareness means how a customer can distinguish and remember the unknown from known brands in purchase decision situations. This action can show the relationship between a brand and its associations in memory, such as name, logo, and sign (Bother, 2007).

2.2 Brand association

Brand associations represent what a brand means for a consumer and are "anything linked in memory to a brand" (Aaker, 1991). Any interaction or encounter a consumer has with a brand has the potential to generate, alter, or reinforce specific favorable or bad associations (Keller, 2003). Associations must be original, strong, and beneficial in order to have a good impact on brand equity. Aaker defines brand associations as "anything linked in memory to a brand" (Aaker, 1991). Brand associations are believed to contain the brand's meaning to consumers (Keller, 1993). Brand association is a set of information nodes attached to the brand in the mind of consumers, classified as attributes, attitudes, & benefits related to the brand. It is helpful to customers to retrieve information about some brands from their memory. When confronted with the brand, the associated benefits, experiences, or features will be reflected in the customer's mind (Keller, 2008).

2.3 Perceived quality

The perceived quality of a brand is defined as the consumer's judgment about a brand's overall excellence or superiority concerning its intended purpose relative to alternatives (Zeithaml, 1988; Aaker & Jacobson, 1994). Perceived quality is thought to be a sort of association worthy of being elevated to the status of a distinct dimension of a brand's equity (Pappu & Quester, 2006). The customers will have subjective satisfaction at the comprehensive quality or recognition level against the product or service offering under such a brand, perceived quality (Hu *et al.,* 2010).

2.4 Brand loyalty

The essence of brand equity is brand loyalty. It is characterized as "a firmly held commitment to rebuy or repertories a favored product/service continuously in the future, resulting in similar repeated brand or brand set purchasing despite situational pressures and marketing efforts with the potential to promote switching behavior" (Oliver, 1997). According to Gil *et al.* (2007), loyalty is a crucial dimension of equity, and if brand loyalty is built, brand equity will follow. They define brand loyalty in terms of consumer perception. Brand loyalty provides significant value to a brand or company since it produces a group of purchasers who will remain loyal for a long time and are less likely to move to a competitor due to pricing.
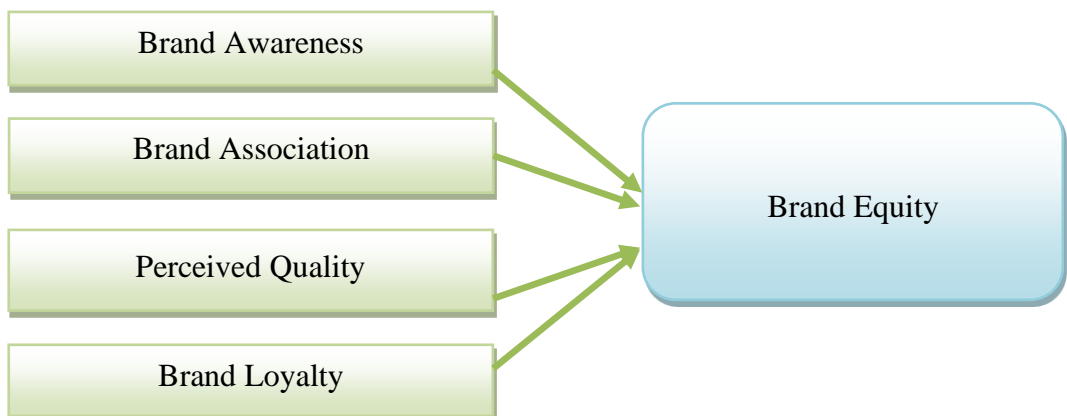
2.5 Brand equity

Brand equity has reaped considerable attention. Operationalization of customer CBBE usually falls into two groups: consumer perception and consumer behavior, e.g.,

Srivastava *et al.* (1991) claimed that the level of consumer perception could measure CBBE. While Farquhar (1989) claimed that brand equity is reflected by the change in consumer attitude while purchasing a product. Later researchers, besides using two approaches: consumer perception and consumer behavior, combined the two approaches, and some related brand equity to another variable as antecedents and consequences of brand equity, e.g., Keller (2003) mentioned brand knowledge as a combination between brand awareness and brand image, evaluated only perceptual dimensions and proposed a concept of global brand equity using brand strength. While Aaker (1996) incorporated the measurement and suggested measuring the four dimensions of brand equity: brand awareness, brand association, perceived quality, and brand loyalty. Considering its comprehensiveness, this study is based on the concept of brand equity, based on the four dimensions model of CBBE, in which the dimensionality has been tested by some researchers (Cobb Walgren *et al.,* 1995; Kim & Pike, 2010).

2.6 Conceptual framework

This study tried to identify the factors influencing brand equity toward laptop computers. It situates the topic under study within prior theoretical and empirical studies and explains key constructs and terms. The following self-developed conceptual framework is constructed in various theoretical and empirical studies. The selection of the variables under each category has been made as per the identified research gaps and according to the research hypothesis under study.

Figure 1: Conceptual Framework

Source: Adapted from (Cobb Walgren et al., 1995; Kim and Pike, 2010)

3.0 Hypothesis

H_{01}: Brand awareness has no significant effect on brand equity.
H_{02}: Brand association has no significant effect on brand equity.
H_{03}: Perceived quality has no significant effect on brand equity.
H_{04}: Brand loyalty has no significant effect on brand equity.

4.0 Research Methodology

The study employed a cross-sectional survey design. In a cross-sectional survey, information on all variables would be collected at a specific time. Cross-sectional surveys are useful in assessing a population's practices, attitudes, knowledge, and beliefs. For a survey on the students in a university, the number of students to be selected in the sample has to be determined before starting the survey. For multi-stage sampling, sample sizes for all the stages should be specified in advance. To determine the size of a planned sample, importance should be given to the required precision, error of estimation, costs of sampling, financial resources, and the time available for the survey (Poduri, 2000). This research was conducted at Hawassa University. According to Hawassa university's registrar of 2013/14, the total numbers of graduate students were 1670. That was the studied population from which sample sizes were drawn. In order to draw a sample size from the whole population, a statistical formula, which was modified by (Yamane, 1967) was used.

$$n = \frac{N}{1 + N(e)^2}$$

$$n = \frac{1670}{1 + 1670(0.07)^2}$$

$$n \approx 238$$

Where: n = Sample size

N = Population Size

E = Precision error

The study used a multi-stage sampling technique. In the first stage of sampling, a stratified random sampling technique was used to classify the departments and schools using eight colleges. In the second stage, Probability Proportional to Size (PPS) sampling techniques were applied to get the proportional sample size from each

college. Accordingly, 60 students were selected from the Technology Institute, 16 students from Natural and Computational Science, 21 students from Medicine and Health, 36 students from the College of Agriculture, 23 from Forestry and Natural resources, 43 students from Business and Economics, 15 students from Social Science and 16 students from Law and Governance. Thus, the study sample would form 230 respondents. In the third stage, individual students from the selected college would be chosen by systematic random sampling technique. The data was collected via a closed-ended questionnaire and analyses using ordered logistic regression analysis with the help of SPSS-21 software.

5.0 Results and Interpretation

This section examines the relationship between selected brand equity measurement variables and brand equity itself among Hawassa University graduate students. The independent variables were brand awareness, brand association, perceived quality, and brand loyalty.

Table 1: Results of the Ordered Logistic Regression Model

Variables	B	S.E	Wald	P-value	Odds Ratio
Brand Awareness	0.282	.270	1.091	.296	1.326
Brand Association	0.874**	.299	8.559	.003	2.396
Perceived Quality	1.247***	.296	17.758	.000	3.479
Brand Loyalty	1.342***	.298	20.249	.000	3.827

Note: *B = Ordered logit coefficient, S.E = Standard Error, ** p<0.01 *** p<0.001*

The significant predictor variables in the bivariate analyses were selected for the ordered logistic regression. According to the ordered logistic regression output in Table 1, three predictors included in the model significantly affect brand equity. Since it has no value to present one of the insignificant variables (namely: brand awareness). The following few paragraphs describe only three of the four predictors.

It is evident from Table 1 that brand association has a positive and significant effect on brand equity. The ordered logit coefficient and P-value (B=.874, P<0.01) revealed that brand association has a statistically significant effect on brand equity, brand awareness, perceived quality, and brand loyalty in the group. It can also be concluded from the values of the odds ratio that if the students increase their agreement on the brand association by one unit, the response variable brand equity will

be expected to change by 2.396 in the ordered logit scale regardless of other independent variables in the model. More generally, if the students were to increase their agreement on the brand association score, they would be more likely to agree on brand equity.

According to the ordered logit model Table 1, the ordered logit coefficient and p-value (B=1.247, P<0.001) show that perceived quality has a statistically significant effect on brand equity given brand awareness, brand association, and brand loyalty in the group. The odds ratio values of the perceived quality show that with a one-unit increase in perceived quality, the brand equity level is expected to change by 3.479, given the other variables in the model are held constant.

The relationship between brand loyalty and brand equity is positive and significant (B=1.247, P<0.001). As shown in Table 1, since the P-value is less than 0.001, the regression coefficient for brand loyalty has a statistically significant effect on brand equity given brand awareness, brand association, and perceived quality in the group. It can also be concluded from the values of the odds ratio that if students were to increase their agreement on the way to brand loyalty by one unit, the response variable brand equity, will be expected to change by 3.827 in the ordered logit scale while the other variables which were included in the model are held constant. More generally, if a student were to increase his agreement on brand loyalty score, it can be expected that the students are more likely to agree on brand equity.

6.0 Conclusion and Recommendations

Branding plays a very vital role in today's competitive environment. Respondents purchase and use the most reputed and well-known brands of laptops. The major factors influencing graduate students towards brand equity were brand loyalty, perceived quality, and brand association. All these impacts were positive, but the levels of impact were different. Among the three factors, brand loyalty was the most significant brand equity. Then, it was followed by perceived quality, but brand association was the factor that had the least effect on brand equity. Therefore, the researcher recommends that marketers enhance laptop brand consumers' brand loyalty to increase the brand equity of their products. Likewise, laptop producers should not underestimate the value of other dimensions, as they are the main part of brand loyalty formation, which enhances brand equity. They should focus on high quality and maintain relationships with their loyal customers through loyalty programs or augmented products. Quality and loyalty dimensions should be the main focus of brand managers.

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