THE RELATIONSHIP BETWEEN BRAND EQUITY, PRODUCT ATTRIBUTES AND PURCHASE INTENTION: A STUDY OF SONY DIGITAL CAMERAS IN BANGKOK

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ABSTRACT

This study examined the relationship between brand equity, product attributes and consumers' purchase intention toward Sony Cyber-Shot digital cameras in Bangkok. The researchers used four elements of brand equity (brand awareness, brand association, perceived quality, and brand loyalty) to study the relationship toward purchase intention. Product attributes for this study were durability, CCD resolution, memory card capacity, easy to use, zoom distance, compatibility, size, design, and video record function.

Data was collected from 400 respondents in 5 locations throughout Bangkok. Through the Spearman's Rho correlation coefficient analysis, it was found that (1) the relationship between brand equity (brand awareness, brand association, perceived quality, brand loyalty) and purchase intention was significant and positive and (2) the relationship between product attributes and purchase intention was also significant and positive.

INTRODUCTION

Today's business competition is dominated by its emphasis on brand building. The study of the impact of brand name on the perception and attitude of consumers has been a significant issue since competitors are keen on capturing higher market share. One issue that has emerged, as one of the most critical areas of marketing management, is brand equity (Cobb-Walgren, Ruble, & Donthu, 1995). Many researchers identify brand equity as the most important asset of a company (Farquhar, 1989; Aaker, 1991; Kapferer, 1997; Keller, 1998). Brand equity has been extensively studied and there is evidence that it can influence consumer recognition and purchase intention (Aaker, 1991; Cobb-Walgren et al., 1995; Lassar, Mittal and Sharma, 1995). More specifically, the elements of brand equity (e.g. brand awareness, brand association, brand loyalty, perceived quality) have also been studied in relation to consumers' purchase behavior (Aaker, Stayman, & Hagerty, 1986); Anantachart (1998); Grewal, Kavanoor, Fern, Costley, & Barnes (1997); Li, Daugherty & Biocca, (2002) Lin (2001); O'Cass & Lim (2002).

Many aspects of traditional marketing have changed since the brand equity concept emerged. In fact, the emergence of brands in firms which previously had resisted or were foreign to such concepts (industry, banking, the service sector, etc) vouched for the new importance of brands.

Consumers do not just buy a brand name, they buy branded products which are a combination of the tangible and intangible benefits created by the efforts of a company. Consumers select a product not just to satisfy their basic needs, they select a product that reflects their image, attitude, and personality. Therefore, consumers often consider a "brand" which is congruent with their personality. The brand is not the product but it gives the product meaning and defines its identity (Keller, 1998).

Companies convey the value of the brand to consumers through various instruments, such as advertising, channel relationship, marketing campaigns, etc. The perception of the brand, in turn, contributes to the meaning or value that the brand adds which influences consumers in some way. Consumers, then form positive or negative feelings toward the brand, which finally leads to purchase. Purchase

intention is a common effectiveness measure and often used to anticipate a response behavior (Li, Daugherty & Biocca, 2002). The intention to purchase a product can be defined by the tendency or likelihood to buy a product.

Beside brand equity, consumers select a product by considering physical functions, which refers to product attributes. Keller (1998) argued that product-related attributes are defined as the ingredients necessary for performing the product or service function sought by consumers, and non-product-related attributes are defined as external aspects of the product or service that often relate to its purchase or consumption in some way.

Thailand is emerging as one of the leading markets in the world for digital cameras. The Thai digital camera market is set to record a high rate of growth this year, with sales expected to exceed one million units, compared to 800,000 last year and 600,000 in 2003 (MCOT, 2005). Among the strong players, Sony is the leader in Thailand's digital camera market. In this paper, the researcher examined the elements of Sony's brand equity and product attributes and their relationship with Thai consumers' purchase intention.

CONCEPTUAL FRAMEWORK

The researcher developed a conceptual framework (Figure 1) for this research based on Aaker's (1991) brand equity concept. Moreover, the antecedents and consequences of the brand equity

model (Cobb-Walgren et al., 1995) were also used to support the framework for this study.

In the framework, brand equity includes brand awareness, brand association, perceived quality and brand loyalty. Product attributes includes durability, CCD resolution, memory card capacity, zoom distance, easy to use, compatibility, size, design, and video record function. Purchase intention was set as the dependent variable of this study.

Research Hypotheses
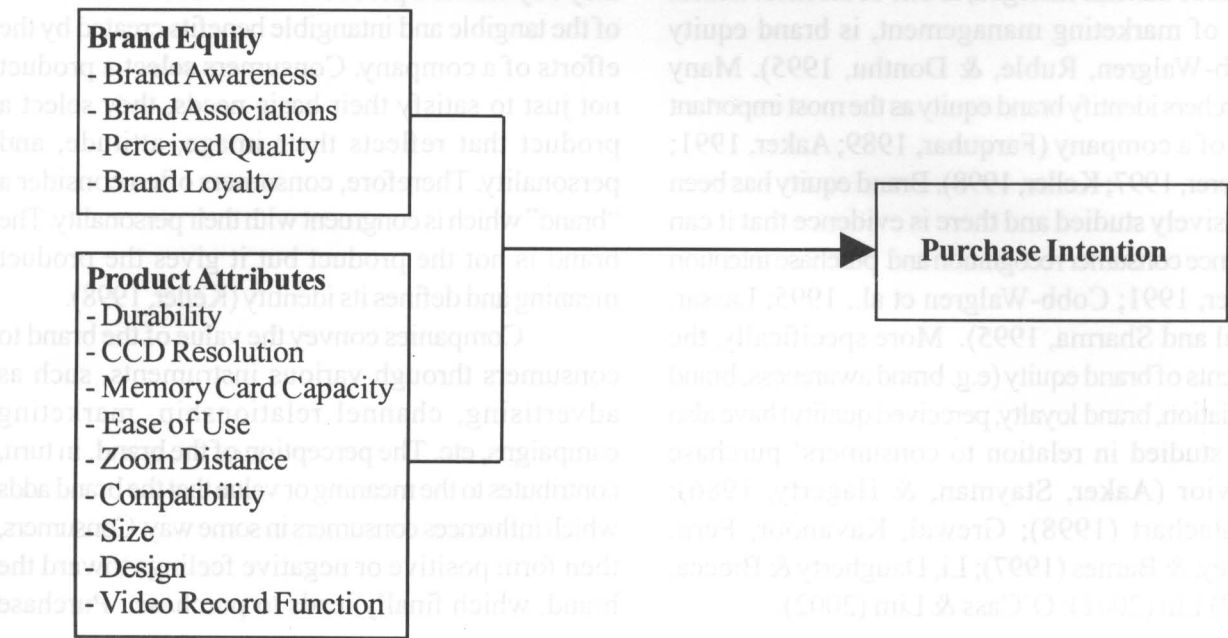
The following hypotheses were tested in the study:

Group A: Brand Equity and Purchase Intention

H1: There is a relationship between brand equity and purchase intention.

H2: There is a relationship between brand awareness and purchase intention.

H3: There is a relationship between brand association and purchase intention.

H4: There is a relationship between perceived quality and purchase intention.

H5: There is a relationship between brand loyalty and purchase intention.

Group B: Product Attributes and Purchase Intention

H6: There is a relationship between durability and purchase intention.

Figure 1: Conceptual Framework

Brand Equity
- Brand Awareness
- Brand Associations
- Perceived Quality
- Brand Loyalty

Product Attributes
- Durability
- CCD Resolution
- Memory Card Capacity
- Ease of Use
- Zoom Distance
- Compatibility
- Size
- Design
- Video Record Function

Purchase Intention

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H7: There is a relationship between CCD resolution and purchase intention.

H8: There is a relationship between memory card capacity and purchase intention.

H9: There is a relationship between ease of use and purchase intention.

H10: There is a relationship between zoom distance and purchase intention.

H11: There is a relationship between compatibility and purchase intention.

H12: There is a relationship between size and purchase intention.

H13: There is a relationship between design and purchase intention.

H14: There is a relationship between video record function and purchase intention.

RESEARCH DESIGN

The researcher used a survey method for obtaining information from respondents. Self-administered questionnaires were distributed to 400 consumers in Bangkok who were potential purchasers of Sony Cyber-Shot digital cameras. The respondents were both male and female over 18 years old. The respondents were interviewed in 5 of Bangkok's largest department stores which had Sony showrooms selling digital cameras, which are shown below:

Location	No. of Respondents
The Mall, Bangkapi	80
Central Ladprao	80
The Mall, Bangkae	80
Maboonkrong Center	80
The Mall, Ngamwongwan	80
Total	**400**

Each questionnaire consisted of 3 parts: (1) Brand Equity (2) Product Attributes and (3) Purchase Intention. All questions were stated in Likert Scales using 5 levels of agreement. Spearman Rank-Order Correlation Coefficient was used to analyze the relationship between the variables in this study.

The researcher used the mean of each question to interpret respondents' perception toward Sony Cyber-Shot digital cameras. Table 1 exhibits the mean and standard deviation.

In terms of brand equity, brand association gained the highest mean score (4.0600), followed by perceived quality (4.0275) and brand awareness (4.0250). Brand loyalty was perceived lowest with a mean score of 3.6425.

For product attributes, CCD resolution obtained the highest mean score (4.4275), followed by durability (4.3675), ease of use (4.3175), zoom distance and memory card capacity (4.2575), compatibility (4.2475), size (4.0450), design (4.0000)

Results

Table 1: Summary of Mean and Standard Deviation

	$\bar{x}$	S.D.
Brand Equity		
Brand Awareness	4.0250	0.68597
Brand Associations	4.0600	0.72298
Perceived Quality	4.0275	0.65407
Brand Loyalty	3.6425	0.90926
Product Attributes		
Durability	4.3675	0.72024
CCD Resolution	4.4275	0.67519
Memory Card Capacity	4.2575	0.78596
Ease of Use	4.3175	0.76692
Zoom Distance	4.2575	0.78277
Compatibility	4.2475	0.73661
Size	4.0450	0.84247
Design	4.0000	0.80412
Video Record Function	3.8500	0.88570

Summary of Hypotheses Testing

Table 2: Summary of Hypotheses Testing Results

Hypothesis	Level of Significance	Correlation Coefficient
H1: There is a relationship between brand equity and purchase intention.	0.000	0.739*
H2: There is a relationship between brand awareness and purchase intention.	0.000	0.525*
H3: There is a relationship between brand association and purchase intention.	0.000	0.579*
H4: There is a relationship between perceived quality and purchase intention.	0.000	0.655*
H5: There is a relationship between brand loyalty and purchase intention.	0.000	0.741*
H6: There is a relationship between durability and purchase intention.	0.000	0.341*
H7: There is a relationship between CCD resolution and purchase intention.	0.000	0.312*
H8: There is a relationship between memory card capacity and purchase intention.	0.000	0.299*
H9: There is a relationship between ease of use and purchase intention.	0.000	0.325*
H10: There is a relationship between zoom distance and purchase intention.	0.000	0.322*
H11: There is a relationship between compatibility and purchase intention.	0.000	0.254*
H12: There is a relationship between size and purchase intention.	0.000	0.308*
H13: There is a relationship between design and purchase intention.	0.000	0.330*
H14: There is a relationship between video record function and purchase intention.	0.000	0.449*

* Correlation is significant at the level 0.01 level (2 tailed).

and video record function (3.8500), respectively. Thai respondents, therefore, considered CCD resolution as the most important attribute followed by durability, ease of use, while the attribute that they considered least was the video record function.

CONCLUSION

The relationships between elements of brand equity and purchase intention are moderately positive (H1-H4). Such relationships demonstrate that the intention or likelihood to purchase Sony Cyber-Shot digital cameras will increase when consumers' perception of brand equity increased. Among elements

of Sony Cyber-Shot's brand equity, respondents awarded high scores to brand association, especially brand image and trustworthiness, while brand loyalty obtained the lowest score.

The relationships between product attributes (durability, CCD resolution, memory card capacity, ease of use, zoom distance, compatibility, size, design, and video record function) and purchase intention are weak. The results of H6-H14 indicate that product attributes slightly affect purchase intention toward Sony Cyber-Shot digital cameras. Respondents consider CCD resolution as the most important attribute for digital cameras, while video record function is the least important.

RECOMMENDATIONS

The findings of this research provide useful information for Sony's brand managers and staffs. It offers better insights into Thai consumers' perception of Sony Cyber-Shot cameras which will help them in setting appropriate marketing strategies. Moreover, the findings on product attributes could be important for managers to adapt or improve various features of forthcoming models of Sony Cyber-Shot digital cameras. From the results Sony should maintain or increase the level of advertising exposure, to ensure that consumers receive full information related to product attributes of Sony Cyber-Shot cameras. As the results show a relatively lower brand loyalty among consumers, Sony has to find ways in which to increase this factor among its consumers.

Even though the hypothesis testing of product attributes and purchase intention are relatively weakly correlated, it is important to know that respondents considered certain features more important than others. As a result, Sony should invest more in R & D to enhance the innovative attributes that will generate a more positive perception of Sony Cyber-Shot cameras.

FURTHER RESEARCH

Further research could be directed at Sony Cyber-Shot's brand image, price and value perception, organizational association, consumer expectation and satisfaction, and the performance of brand as measured by market share. Moreover, the sources of generating brand equity, such as, advertising that creates the value of the brand should be examined. Further research should also examine the comparative brand equity value between Sony and other major players in the digital camera market.

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