

What Drives Cyber Shop Brand Equity? An Empirical Evaluation of Online Shopping System Benefit with Brand Experience

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ABSTRACT

The purpose of this research is to determine whether online brand purchasing system benefit can influence the consumer's brand experience, and how brand experience can affect brand equity. The four antecedent constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT) model – performance expectancy, effort expectancy, social influence, and facilitating condition – are selected as the technology system benefit. Five online product categories are chosen to constitute the research setting since they are the top sales performers in each online product category. Data were collected through an online survey, and 685 useful questionnaires were used for the final analysis. A structural equation model (SEM) was used to analyze the research hypothesis. The final research results demonstrate that three constructs (performance expectancy, effort expectancy, and social influence) affect the brand experience, which in turn affects the brand equity. Finally, the managerial implications of these findings and future research directions are briefly discussed.

Keywords: UTAUT model, brand equity, brand experience, technology system benefit

1. INTRODUCTION

Since characteristics of the Internet such as convenience and generality have erased the boundaries of countries, huge business opportunities in Internet marketing have developed. E-commerce has spread around the world, and its potential as an international marketing tool is widely recognized [see, among others, Andersen, 2005; Nguyen and Barrett, 2006; Soopramanien and Robertson, 2007; Cheng et al., 2008]. The online shopping diffusion rate is astounding [Chen et al., 2009], and there has been an explosive growth of online shopping malls [Kwon and Chung, 2010]. The research on recent Internet use by home users in Taiwan found that, in one month during 2009 [Find, 2010], the approximate number of people engaged in online shopping exceeded 3.285 million. The report of the Marketing Intelligence Center (MIC) shows that the B2C e-commerce market value of Taiwan in 2011 is expected to be NTD 250 billion (US\$8.33 billion) [Li, 2011].

Compared with consumers in the off-line environment, consumers in the online environment appear to be more receptive to and dependent on online brands [McGovern, 2001]. The online native brands are no longer regarded as “white box” anymore. The online shops provide more service or preferential terms that attract consumers to purchase successfully, and, in doing so, build up their e-brand’s market share and value. Generally, consumers can shop at firms’ storefronts easily by pointing and clicking sequentially in their online purchasing system [Cheng et al., 2008]. Nevertheless, these consumers may feel anxious because of the intangible characteristics of online products/services [Park et al., 2004; Cheng et al., 2008]. Moreover, there is a lower entry barrier in the e-commerce market; so, the online shops need to provide diverse services or preferential terms to attract consumers’ purchase. The online purchasing system is the representative of the e-tailer that the online shopper meets first. The design of the online purchasing system thus plays an important role in the brand perception of e-tailers. Prior research has found that retail design experts, coordinating their efforts, could impact their success in heightening the brand experience [Morrison, 1999], and brand experience can increase brand loyalty [Gapper, 2004]. Unfortunately, there is sparse research that investigates the influence of online purchasing systems, or of the degree they benefit e-brand experience and brand equity.

The present study examines how an online brand purchasing system can influence the consumer's brand experience, which can affect brand equity. If significant influence exists, the key task for the e-tailer is to analyze ways to improve its online shop system to augment the brand experience and thus increase its brand equity.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESIS

This section discussed technology system benefit, brand experience, technology system benefit and brand experience, and brand experience and brand equity.

2.1. Technology System Benefit

The UTAUT model has been frequently used as a definitive model that synthesizes what is already known, providing a foundation to guide future research in the user acceptance area [Venkatesh et al., 2003].

There are four antecedent constructs in the UTAUT model. The concept of performance expectancy, including perceived usefulness, has been considered the most powerful tool for explaining the intentions to use a system regardless of the type of environment, be it mandatory or voluntary [Venkatesh et al., 2003]. Effort expectancy is "the degree of ease associated with the use of the system" [Venkatesh et al., 2003], referred to as perceived complexity and ease of use. Social influence is defined as the degree to which an individual perceives others' belief (particularly their close ones) that they should use a new system [Venkatesh et al., 2003]. Facilitating condition is "the degree to which an individual believes that an organizational and technical infrastructure exist to support the use of the system" [Venkatesh et al., 2003, p. 453], and is related to the concepts of perceived behavioral control and compatibility.

UTAUT is a useful model for those needing to assess the likelihood of success for introductions of new technology. It helps people understand the drivers of acceptance in order to proactively design interventions (including training, marketing, etc.) targeted at populations of users that may be less inclined to adopt and use new systems [Venkatesh et al., 2003]. Various areas provide empirical evidence regarding the applicability of the UTAUT model [see, among others, Neufeld et al., 2007; Park et al., 2007; Yeow and Loo, 2009]. The

current study attempts to extend (and thereby test) the four constructs of the UTAUT model to the online purchasing system benefits in the current study.

2.2. Brand Experience

One fundamental driver of the way consumers make up their mind is what is known as the “brand experience.” This term can be defined as the perception of the consumers at every moment of contact they have with the brand, whether it is in the brand images seen in advertising, during their first personal contact with the product, or the level of quality in the personal treatment they receive [Alloza, 2008].

Morrison [1999] argues that success in heightening the brand experience at the retail level depends on marketers and retail design experts coordinating their efforts. Marketers and retail designers, by thinking of the shopping path the consumer walks down toward the final purchase, can decide in advance what the appropriate message is at each point along that path [Morrison, 1999]. Being part of a brand’s design and identity, packaging, communications, and environments, brand experience is subject to internal consumer responses (sensations, feelings, and cognitions) and behavioral responses evoked by brand-related stimuli [Alloza, 2008]. Successful brand experience has attracted a lot of attention in marketing practice. Marketing practitioners have come to realize that understanding how consumers experience brands is critical to developing effective marketing strategies for goods and services [Brakus et al., 2009].

When people use a product or service, they experience the brand as well. Prior research has shown that experiences influence consumers when they search for products and consume them [Holbrook, 2000]. The product experiences come from direct contact or indirect information such as advertisement [Hoch and Ha, 1986; Kempf and Smith, 1998]. Consumption experiences come from the consumer’s interaction with a real environment, such as a salesperson, the decoration in the store, and the atmosphere [Boulding et al., 1993; Arnold et al., 2005]. As is the case with making a payment at brick and mortar shops, online purchase systems are one part of the online consumption experience as well. These experiences are multi-dimensional, subject to hedonistic quests, but they may also combine with pain [Holbrook and Hirschman, 1982; Thaler, 1999; Holbrook, 2000], and these experiences of the interplay of the emotions will influence the buyer’s behavior. Previous research shows pre-purchase activities

can influence consumers in making better purchase decisions [Punj and Richard, 1983], leading Gordon [2002] to cogently claim: “We are drawn to brands we trust.” In those cases when people have very satisfying experiences with an online brand, they would be likely to purchase the same brand again.

Every industry needs to create successful customers’ experiences of the company brand, essential to building a strong brand. There are, of course, a great many factors that influence brand experiences, pro and con. For instance, when the brand expectation does not fit the potential customer’s brand experiences, it may lead people to refuse using this particular brand [Jerry, 2000; Mitchell, 2001; Hanna et al., 2004; Burmann and Zeplin, 2005]. Employee’s verbal and non-verbal behaviors also directly or indirectly affect brand experiences [Henkel et al., 2007]. In service brands (those providing an intangible service), offering the whole experience for customer needs is typically integrated and organizationally coordinated. The goal is to give a customer a unique, memorable, or happy interaction with the service. In other words, a customer should be more than satisfied.

Brand experience constructs have been used for investigating service brands [Morrison and Crane, 2007] and online brands [Herbst and Allan, 2006]. The brand experience construct recently developed by Brakus et al. [2009] is captured in four dimensions – i.e., sensory, affective, behavioral, and intellectual. This study attempts to extend and validate the brand experience construct.

2.3. Technology System Benefit and Brand Experience

The technology system benefits from the UTAUT model’s constructs are performance expectancy, effort expectancy, social influence, and facilitating conditions. Brand experience is the consumers’ perception of what they have touched during the first personal contact with the brand, or the quality perception they obtain from their specific personal treatment [Alloza, 2008].

2.3.1. Relationship Between Performance Expectancy and Brand Experience

Performance expectancy is defined as the degree to which an individual believes that using a system will help him or her attain gains in job performance [Venkatesh et al., 2003]. Good brand experience induces feelings and sentiments [Vogel et al., 2008]. Mao and Palvia [2006] suggest people will rely on performance expectancy when forming their attitude toward a technology. Given

the prevalence of competitive pricing and sales promotions, and rapidly improving and efficient use of time and security systems, it has become commonplace to perceive and identify online shopping as essentially a performative business. When people can purchase the product easily in an online shop, they will get the unencumbered great feelings and sentiments of the e-brand. Prior research has shown that the perceived usefulness of a system positively influences the attitude toward using a Web site [Heijden, 2003]. This argument leads us to make the following hypothesis:

Hypothesis 1: Performance expectancy positively influences brand experience using the online brand shopping system.

2.3.2 . Relationship Between Effort Expectancy and Brand Experience

Effort expectancy has been defined as the ease associated with the use of the system [Venkatesh et al., 2003]. Keaveney et al. [2007] suggest providing customers with easily accessible information, featuring the brand's relative advantages over competing alternatives – taking into account the ease of information search and alternative evaluations on the Internet. Torkzadeh and Dhillon [2002] and Madlberger [2006] also found that perceived convenience is a key determinant of online shopping behavior. Overall, convenience (e.g. availability of relevant information, richness of information, and ease of ordering) plays the most significant role in perceiving Web sites [Supphellen and Nysveen, 2001]. The more convenient consumers perceive online shopping to be, the more positive will be their perception toward the online shop brand. In the present study, the concept of effort expectancy refers to an online shop's perception that using the right online shopping system will help them promote an impression of convenience in their first personal contact with a potential consumer. This study can draw the conclusion that the easier it is to get product information, the more likely it is that the consumer will have a better brand experience. From this general point, it is possible to infer the following hypothesis:

Hypothesis 2: Effort expectancy positively influences brand experience using the online brand shopping system.

2.3.3. *Relationship Between Social Influence and Brand Experience*

Social influence has been defined as the degree to which an individual perceives the importance of other users' belief to use the new system [Venkatesh et al., 2003]. Communicability can also be thought of as the degree of "social acceptance" that is communicated to a consumer from other consumers [Blackwell et al., 2001]. Communication may take place among consumers via the Internet (e.g. in chat-rooms, newsgroups) [Hansen, 2005] and spread quickly. An online shop is viewed as a grocery-shopping channel, and frequently communicated brands gain high brand experience. Academic research reveals that Singaporean consumers with a higher degree of risk aversion than others tend to perceive Internet shopping to be a risky activity, unless a product is specifically endorsed by an expert or a celebrity because consumers will trust his or her product experience [Tan, 1999]. Therefore, this study infers the following hypothesis:

Hypothesis 3: Social influence positively influences brand experience using the online brand shopping system.

2.3.4. *Relationship Between Facilitating Conditions and Brand Experience*

"Facilitating conditions" refers to the degree to which an individual believes that e organizational infrastructural technology supports exist while he or she is using the system [Venkatesh et al., 2003]. While a consumer is shopping online, the facilitating condition is the e-retailer's willingness to help the consumer when he or she does not know how to use the online purchase system. In this context, facilitating conditions refer to the objective factors (e.g. campaigns, infrastructure, and recognition) in the cyber environment that facilitate the experience of online shopping. The successful online Web shop is one that is mature and receives higher brand experience perception. Because most e-tailers are without even indirect contacts with the consumer, they provide a response system that itself may be regarded as a part of the brand experience. Therefore, this study can reasonably infer the hypothesis:

Hypothesis 4: Facilitating conditions positively influence brand experience using the online brand shopping system.

2.4. Brand Experience and Brand Equity

Brand equity concepts have been widely investigated, and are typically divided and defined as two concepts. The first concept is the financial view toward the value of a brand to the firm. Simon and Sullivan [1993] define brand equity in terms of the incremental discounted future cash flows. The second concept is consumer perspective highlights, the value of a brand to the consumers – that is, exploring the brand's equity from the consumers' memory-based brand associations [Aaker, 1991; 1996]. Aaker [1991; 1996] defines brand equity as “a set of brand assets and liabilities linked to the name or symbol of the brand.” Keller [1993] defines the brand equity as “a term of the marketing effects uniquely attributable to the brand.” Brand equity can increase or decrease asset value for customers. The brand equity helps customers store the information about brands or products, so as to affect the customer's purchase decision. Higher brand equity generates higher purchase intentions [Chang and Liu, 2009], and buyers keep purchasing the same products or brand, responding to branding [Keller, 1993; Aaker, 1996; Helman et al., 1999].

According to an earlier literature review, when consumers use the product, they experience all attributes of the product, its qualities and performance, etc. The product attributes are one part of the brand attribute, and recognizing the brand attributes is one part of the brand equity [Keller, 1993]. These observations about increasing sales and consumer loyalty by managing brand experience as part of brand equity are mentioned in other literature [Aaker, 1991; Gobe, 2001; Gapper, 2004]. Therefore, while people are consuming the product, they get the brand experience and brand memory, and then respond to brand equity, which they help generate by their repurchasing behavior. Therefore, this study infers the following hypothesis:

Hypothesis 5: Brand experience positively influences brand equity toward the online retailer.

The five research hypotheses proposed by the current study support the online purchasing system benefit influence model described in Figure 1. We next summarize the methodology used to test our hypotheses.

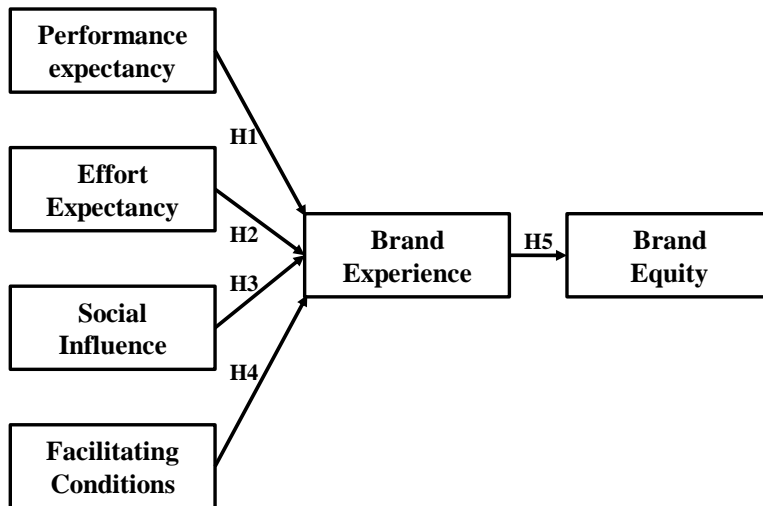


Figure 1. Conceptual Framework for the Current Study

3. METHODOLOGY

This section includes a discussion of measures used in the current study, the research setting, questionnaire design and pre-testing, and sampling and data collection.

3.1. Measures

Research construct scales were collected from prior related literature, with slight modifications to develop the base of the original scale items in this study. A seven-point Likert-type scale was used, ranging from “strongly disagree” (=1) to “strongly agree” (= 7).

3.1.1. User Acceptance of Information Technology

The system benefit scale was mainly modified from the UTAUT work of Venkatesh et al. [2003]. The UTAUT scale has frequently been applied in a number of recent academic works [see, among others, Neufeld et al. 2007, Park et al., 2007, Yeow and Loo, 2009] and is believed well suited for the purpose of the current study. The measurement of Performance Expectancy comprised four items:

- “I would find the cyber shop system useful in my purchasing.”
- “Using the cyber shop system enables me to accomplish purchase tasks more quickly.”
- “Using the cyber shop system increases my productivity in purchasing.”
- “If I use the cyber shop system, I will increase my chances of getting better purchasing.”

The measurement scale for Effort Expectation also comprised four items:

- “My interaction with a cyber shop system would be clear and understandable.”
- “It would be easy for me to become skillful at using a cyber shop system for purchasing.”
- “I would find a cyber shop system easy to use for purchasing.”
- “Learning to operate the cyber shop system is easy for my purchasing.”

As for Social Influence, the scale contained four items:

- “People who influence my behavior think that I should use the cyber shop system for purchasing.”
- “People who are important to me think that I should use the cyber shop system for purchasing.”
- “The senior management of this business has been helpful in the use of the cyber shop system for purchasing.”
- “In general, the organization has supported the use of the cyber shop system for purchasing.”

Facilitating Conditions comprised three items:

- “I have the resources necessary to use the cyber shop system for purchasing.”
- “I have the knowledge necessary to use the cyber shop system for purchasing.”
- “A specific person (or group) is available for assistance with cyber shop system for purchasing difficulties.”

3.1.2. Brand Experience

The measurement of brand experience is modified based on the work of Brakus et al. [2009]. Originally, nine adapted items were developed to fit this research, but, from the pre-test process involving expertise response, it was determined that four items should be deleted. Finally, the measurement of brand experience comprised the five remaining items:

- “This cyber shop brand induces feelings and sentiments.”
- “This cyber shop brand is an emotional brand.”
- “I engage in physical actions and behaviors when I use this cyber shop brand.”
- “This cyber shop brand results in bodily experiences.”
- “This cyber shop brand is not action oriented (reverse coded).”

3.1.3. Brand Equity

This study measured brand equity, which focused on the overall perception of brand image, with four items, modifying the scale with one proposed by Vogel et al. [2008] that is an adaptation of brand equity scale. Vogel et al. [2008] suggest that a brand equity scale is useful for analyzing brand issues. Their scale was particularly relevant for this study, but the items of the scale were carefully adapted and adjusted to suit the consumer context. The measurement of brand equity comprised four items:

- “X is a strong brand.”
- “X is an attractive brand.”
- “X is a unique brand.”
- “X is a likable brand.”

3.2. Research Setting

In this study, five e-brand categories – desserts, clothes and accessories, beauty care, women’s shoes, and women’s purses – were chosen as the brand replacement. They were the top sales performers in each category of online products conducted by “Business next” in 2009 [Business next, 2010]. They were 86 Shop (beauty care), Tokyo Fashion (clothes and accessories), Skyblue (women’s purses), Grace Gift (women’s shoes), and Elate (desserts). Among the great many kinds of online shops, these product categories were the popular types of goods.

3.3. Questionnaire Design and Pre-Testing

A draft of the questionnaire was designed based on the above scales. It was used as the data collection instrument to examine the respondents' perceptions of the virtual brand. Because the investigation setting is Taiwan, these scales were translated into Chinese, and then translated back and compared with the original to ensure a fundamental cross-cultural validation [Mullen, 1995]. Then, this research conducted a pilot pre-test with 20 executives from online retailers in Taiwan in the categories of desserts, clothes, beauty care, women's shoes, and women's purses. To guarantee readability and the logical arrangement of questions, a sample of 126 users was pre-tested with the questionnaire. The questionnaire was then modified to remove ambiguities, and its completeness and clarity were strengthened by incorporating views and suggestions raised by the participants in the pre-test. Based on their response, four questions that were not suitable about brand experience were deleted and others questions were modified to fit the goals of this research.

3.4. Sampling and Data Collection

The customers of the final online brands selected in Taiwan represent the research population for the current study. These people were regarded as capable of appropriately completing the questionnaire for this study. In order to contact the prospective participants, we used the biggest survey research Web site in Taiwan; namely, the 104 Market Survey Company. The survey database of this company represents the Taiwanese population; thus, our study could verify the generalizability of the data and findings. Using random sampling, the Company sent out the official invitation emails to ask the sample members to navigate to <http://www.104survey.com>, and complete the questionnaire. All participants were asked to read the questionnaire instructions carefully before entering their responses, and each was awarded an incentive membership bonus after filling in the questionnaire completely. It was emphasized that all the responses were completely anonymous and that there were no right or wrong answers to any of the questions. In all, 1,012 questionnaires were collected, of which 327 were invalid (without usefulness except for the bonus purpose). The 685 useful questionnaires were used in the final analysis. This study adapted an equation of a defined size by Daniel [2010] to test the representative sample size of a population. The required sample size was calculated to be 385. The 685

useful questionnaires collected for this study, therefore, constituted a sample large enough for the final analysis.

4. DATA ANALYSIS AND RESULTS

This section discusses the respondents' profile, the accuracy of the information collected, and hypothesis testing.

4.1. Respondents' Profile

In the sample used for this study, 36% of the respondents were male and 64% were females. This composition is in line with the fact that the five top online product categories are female-oriented; e.g., women's clothing and women's purses. Of the total respondents, 73.7% held a college/university degree or above. About 75.7% of the respondents were under the age of 35. In terms of income, about 37.1% had monthly incomes from TWD\$10,001 to TWD\$30,000. Finally, more than 80% of the respondents had more than five years' experience using the Internet, a fact that reflects the popularity of this industry. Detailed descriptive statistics are shown in Table 1.

4.2. Accuracy of the Information

Construct reliability and validity were established using confirmatory factor analysis (CFA), and the results are presented later in Table 2. The CFA model was computed with the Amos software package. In the dimension of Brand Experience, the factor loadings for three items, and in the construct of Facilitating Conditions, the factor loading for one item were lower than 0.5; so, these were deleted in order to make the model significant. The criteria for the CFA are considered a good fit, as follows –

NFI, IFI, and CFI are greater than 0.90 [Hair et al., 1998].

GFI and AGFI index exceeds 0.8 [Joreskog and Sorborn, 1993; Mueller, 1996].

Chi-square/df is smaller than 5 and RMSEA is less than 0.08 (Hair et al., 1998).

All the goodness-of-fit values were acceptable:

Chi-square/df = 3.9

CFI = 0.94

GFI = 0.89

AGFI = 0.86

NFI = 0.92

IFI = 0.94

RMSEA = 0.065

Consequently, the basic fit of the model was good.

Table 1
Descriptive Statistics on Respondents' Profile

Income	Freq.	%	Gender	Freq.	%
< = NT\$10,000	152	22.2	Male	247	36.10
NT\$10001-NT\$30,000	254	37.1	Female	438	63.90
NT\$30,001-NT\$50,000	204	29.8	Age	Freq.	%
> = 50,001	75	10.9	< =20	46	6.7
Education	Freq.	%	21-25	125	18.2
< =junior high school	11	1.6	26-30	175	25.5
senior high school	88	12.8	31-35	173	25.3
College/university	505	73.7	36-40	79	11.5
Graduate	81	11.8	41-45	44	6.4
Internet Use	Freq.	%	> = 45	43	6.3
< =1 year	7	1.0	Brand Consumer	Freq.	%
1-3 year(s)	27	3.9	Skyblue	141	20.6
3-5 years	52	7.6	86 Shop	279	40.7
> 5 years	599	87.4	Tokyo Fashion	175	25.5
			Grace Gift	30	4.4
			Elate	60	8.8

This study first ensures that all the factors should be significant, and then examines individual item reliabilities and validity. There were two methods to assess reliabilities: composite reliabilities (CR), and Cronbach alpha. The CR and Cronbach alpha should exceed 0.8 [Cronbach, 1951]. All the alpha and CR values, ranging from a low of 0.82 for Performance Expectancy to a high of 0.93 for Effort Expectancy (see Table 2 following) exceeded the minimum suggested value of 0.8. Thus, the results provide evidence of reliability.

As for the test of convergent validity, there were two measurements to confirm the validity. First, factor loadings were significantly examined to check for convergent scale validity. Second, if the average variance extracted (AVE) of a construct was greater than 0.5, this meant that there was convergent validity for the construct [Fornell and Larcker, 1981]. As shown in Table 2, the factor loadings of the six constructs are all significant and all the AVEs of the six constructs are greater than 0.5. These values indicate that there is convergent validity in this study. Discriminant validity was evidenced by the correlation estimate of each pair of any two dimensions less than 1.0; acceptable CFA model fit and AVE should be greater than squared correlations between each of the latent dimensions. In this study, all discriminant validity indicators fell within acceptable ranges (see Table 2 and Table 3). Thus, it was concluded with confidence that the analysis results provided supports for convergent and discriminant validity.

4.3. Hypotheses Testing

Structural equation modeling (SEM) was conducted to analyze the modeling test. Before analyzing the path coefficients of our research model, a variety of statistics may be used to test goodness-of-fit of a model to the data, including absolute, incremental and parsimonious fit measures. All six indices indicate that the model fit is acceptable for assessing the results for the structural model:

Chi-square/df = 4.14

CFI = 0.93

GFI = 0.88

NFI = 0.91

IFI = 0.93

RMSEA = 0.07

Table 2
Statistics on Measurement Analysis

Core Constructs	Factor Loading	α	C.R. Value	AVE
Performance Expectancy	0.87	0.82	0.82	0.55
	0.90			
	0.53			
	0.59			
Effort Expectancy	0.82	0.93	0.93	0.76
	0.91			
	0.92			
	0.85			
Social Influence	0.74	0.84	0.84	0.58
	0.84			
	0.64			
	0.81			
Facilitating Conditions	0.91	0.89	0.89	0.73
	0.79			
	0.85			
Brand Experience	0.70	0.84	0.84	0.51
	0.76			
	0.78			
	0.64			
	0.69			
Brand Equity	0.85	0.92	0.92	0.73
	0.81			
	0.92			
	0.84			
CFA Model Fits	Absolute-Fit measures GFI= 0.89, CFI=0.94, RMSEA=0.065 Chi-square/df=3.9 Incremental-Fit measures AGFI=0.86, NFI=0.92, IFI=0.94			

Table 3
Correlation Matrix of Dimensions

Research constructs	PE	EE	SI	FC	EXP	EQU
Performance Expectancy (PE)	1.00					
Effort Expectancy(EE)	0.68	1.00				
Social Influence(SI)	0.46	0.54	1.00			
Facilitating Conditions(FC)	0.74	0.68	0.54	1.00		
Brand Experience(EXP)	0.38	0.44	0.43	0.32	1.00	
Brand Equity(EQU)	0.49	0.44	0.33	0.47	0.64	1.00

Path coefficients of performance expectancy, effort expectancy, social influence, and facilitating conditions on brand experience are 0.16 ($p < 0.05$), 0.16 ($p < 0.001$), 0.15 ($p < 0.001$), and -0.02 ($p < 0.18$). Therefore, performance expectancy, effort expectancy, and social influence appear to have a significant positive influence on brand experience, respectively. Facilitating condition is insignificant. Besides, the effect of brand experience on brand equity is 0.94 ($p < 0.001$). Thus, hypotheses H1, H2, H3, and H5 are supported. Hypothesis H4 is not supported. The result is shown in Figure 2.

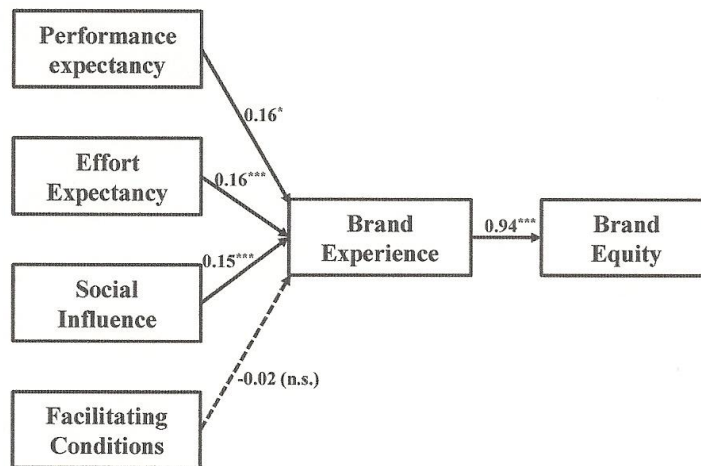
5. CONCLUSION

This section includes a discussion of the study, its implications, and future research directions.

5.1. Discussion

Purchasing a product through an online channel is popular in Taiwan. This research study sought to investigate whether the perceptions of an online brand purchasing system affect the consumer's brand experience, which in turn will affect brand equity. The research findings suggest that performance and effort expectancy along with social influence affect the brand experience positively, and brand experience has a positive influence on brand equity. The reason the construct of facilitating conditions has no influence on brand

experience is that it is possible consumers will search for help from other people, such as family and close friends, or will think online purchase systems are easy to use, and thus they do not need to use resources such as the Web site support service. As for all respondents with online use experience in this study, their brand consumption experiences positively affect their perception for the brand equity. The findings imply that constructing an excellent consumer brand experience will take more performance when the retailer extends the brand equity into site improvement.



n.s. = non significant; * $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Figure 2. Result of Structural Equation Model Analysis

5.2. Implications

The research findings suggest alternative ways to add to e-tailers' positive impressions of their brand/product. First, given the constructs of performance expectancy and effort expectancy, e-retailers should design more ease of use regarding the often complicated Internet interaction interface. Second, because social influence reveals the online user, reviews have become an important resource of information to consumers. E-retailers, therefore, can use a strategy

that is similar to word-of-mouth marketing to attract users. Prior research has also displayed to the online user how favorable reviews will increase e-retailers' sales [Chevalier and Mayzlin, 2006]. For example, both the quick response system and the transparent operational purchase system tend to increase brand equity through brand experience. Third, e-brand consumption experiences do indeed positively influence consumers' brand equity evaluation. E-retailers, therefore, should focus on understanding and improving the experience their brands provide for their customers, recognizing that, through such factors as emotional attachment, they can target an assessment, plan, and track it to improve their brand equity.

5.3. Future Research Direction

In this research study, five online product categories were chosen to constitute the research setting because of what they have accomplished; that is, they are the top sales performers in each category of online products in Taiwan. They all offer a real product without intangible service, and the major product categories are female products. The latter fact explains the unbalanced gender frequency of our survey respondents. Future research efforts can add male products to the research setting, or more general products or services, in order to explore different patterns of perception and behavior.

Furthermore, this study solicited information only from people who had purchased the five e-brands. In fact, the product categories selected for this study are famous e-brands. It is possible that some people like and use the e-brands (friends sharing), but are not accustomed to online shopping. Online business is steadily increasing every year, but this growth is not entirely due to purely Web-based retailers, but also involves innumerable multi-channel retailers who conduct business both online and off-line [Hahn and Kim, 2009]. Future research could focus on the purchase intention lying behind online brand switching, comparing it with off-line brand switching by people with and without the online brand purchasing experience. Finally, further research could investigate the long-term consequences of brand experiences on other brand-related stimuli.

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