

The Impacts of Utilitarian and Hedonic Motivations on Habit and Online Browsers' Behaviors

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Abstract—Online shopping is becoming increasingly popular. In this paper, the term "habit" is used to describe the "routine", "indispensable" yet "unspecific" phenomenon of "browsing online shops" and is explained through a model established from the motivation perspective. Data are collected from online shop browsers. All hypotheses were tested using AMOS (Analysis of Moment Structures). Results show that hedonic motivations can better help form a habit than utilitarian motivations and can best enhance online purchase frequency. People with utilitarian motivations emphasize "the importance of perceived information" the most. The significance of this study and the generated practical suggestions are listed in the end of this paper.

Keywords—utilitarian motivation, hedonic motivation, habit, purchase frequency, perceived information importance

I. Introduction

Online browsing and trading have become quite common for information acquisition and shopping. Without a doubt, the functionality and actual specifications of products is the key to satisfying consumers' needs [1]. Therefore, a utilitarian motivation that emphasizes rational shopping and cognition-oriented behavior forms the basis for explaining shopping behavior. As the emphasis shifts toward entertainment and experience, however, shopping motives at the psychological level are gradually gaining prominence. Simply put, utilitarian and hedonic motivations encompass the physical and psychological aspects of consumers' shopping process and become important references when predicting online consumption behavior [2]. Motivation-driven shopping-related activities, however, result in repetitive and regular shopping behaviors among consumers through constant learning and reinforcement. As consumers become more and more dependent on the Internet, many of them even gradually form habits when they search the Internet. This paper explores frequent unplanned and habitual online shop browsing activities in the real online world, and defines "habit" as online shop browsing behavior among consumers characterized by inattention or accustomization. To validate the aforementioned perspective, this paper uses "motivation" as the factor driving consumer behavior and establishes a model accordingly to explain the relationship between utilitarian, hedonic motivations and habits. Meanwhile, the comparison of

different motivations and habits and their influences on purchase frequency and perceived information importance are also explored. To sum up, there are three purposes in this paper: 1. to clarify the relationship between different motives and the web surfing habits, 2. to analyze the influence of the said three factors on web surfing and consumption behavior, and 3. to provide research implications and explanations.

II. Literature Review

A. Habit

Consumers appear to be highly attached to and dependent on the Internet, which sometimes can even trigger illnesses or indifferent behavior. The automatic and non-reflective thought presented in a habit follows a repetitive behavioral pattern, which makes it possible for businesses and the academic sector to forecast online shopping behaviors and preferences. Ouellette et al.[3] believed that a habit is a frequent behavior that exceeds the influence of cognition-based intention sometimes. Some scholars, on the other hand, believe that a habit is acquired through learning. As such, this paper combines related studies and defines "habit" as the phenomenon of treating "browsing online shops" as a "routine" that is "indispensable" and "unspecific." Habits indicates that the motive itself does not have a pre-set purpose (hedonic or utilitarian) but will lead to habitual use of the web. The formation of a habit has to do with multiple factors. Lankton et al.[4] indicated that prior IT use, satisfaction and importance has a positive influence on the formation of an information technology habit and continued IT use. As such, this study establishes a model on the basis of motivation and compares the importance of different motives in the formation of a habit while at the same time analyzing their influence on consumption behavior.

B. The Relationships among Utilitarian Motivation, Hedonic Motivation and Habit

Many studies start their investigation of online consumption behavior from the motivation perspective [5] because buying a product is a primary source of a sense of value among consumers [6]. The purpose and mission orientation emphasized in utilitarian motivation signifies the intention to obtain a product or service that meets one's expectations through buying activities. It emphasizes the cognitive and rational aspects of buying activities and the tangible and

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functional attributes of a product. Hedonic motivations focus primarily on psychological satisfaction, including emotional and entertainment satisfaction. Most of these emotional values are generated through buying experiences [7]. To fulfill their different purposes, consumers search for, browse, and purchase online to get spiritual and material satisfaction.

Utilitarian motivations have always been considered to be the initial factor for a purchase to take place. Consumers first try to satisfy their material needs but discover the fun of information searches or web interactions during the process. This means that the satisfaction of needs inspires enjoyment toward the shopping process and implies that utilitarian motivation has positive influence on hedonic motivation. Thus, we propose:

H1: Utilitarian motivation is positively associated with hedonic motivation.

When looked at from the perspective of habit development, it is possible that consumers will make purchases to obtain specific products (utilitarian motivation) and find the fun associated with the shopping experience while they do it to accordingly reinforce the habitual behavior. However, comparisons of utilitarian and hedonic motivations show that constant searches are extremely likely to help consumers obtain more happiness. The emotional happiness inspires desires and needs; in other words, hedonic motivations forms an even larger incentive for consumers that constantly induces the consumers to use the Internet and accordingly form a habit. Thus, we propose:

H2: Hedonic motivation has a greater positive influence on habits than utilitarian motivation.

C. The Influence of Utilitarian Motivation, Hedonic Motivation and Habit on Purchase Frequency and Perceived Information Importance

Motivation is the initial drive for consumer behavior. When consumers have specific needs or desires, taking action is the most direct way for them to satisfy the need. The study of Lin et al.[8] shows that utilitarian motivations have a positive influence on the willingness to buy while hedonic motivations only indirectly influence the willingness to buy. But we should notice that in online shopping, however, "desires" are not necessarily equivalent to "requirements." A lot of shopping desires are inspired. When consumers have greater exposure to positions closer to product services or opportunities for impulsive buying, such as television shopping channels or the Internet, it often inspires impulsive buying [9]. With the evaluation or exposure time extended, hedonic motivations and inertial browsing behavior will expose shopping decisions to the accumulated influence of marketing tools over a long term to accordingly generate the willingness to buy.

Besides, many consumers use the Internet to be their most frequent access to useful information. For consumers that emphasize utilitarian value, whether it is possible to find

required products successfully in a rapid and effective way is an important goal of their search process [10]. As far as

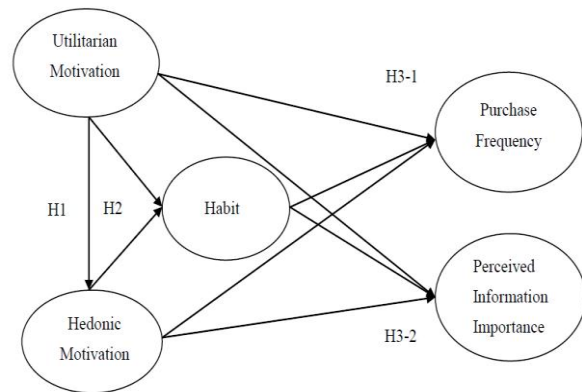


Fig. 1 Proposed research model

consumers with hedonic motivations and habit are concerned, it is likely that they do not have urgent information needs and it is not necessary for them to seek important information. Thus, we propose:

H3-1 Hedonic motivation will lead to higher purchase frequency among consumers than utilitarian motivation and habit.

H3-2 Utilitarian motivation will lead to a higher perceived information importance among consumers than hedonic motivations and habit.

The research framework explains that utilitarian motivation is the cause for hedonic motivation and that hedonic motivation has a greater influence on the formation of a habit than utilitarian motivation (see fig. 1). In addition, different motives and habits will trigger consumption and browsing activities to varied degrees.

III. Methodology

In the study, we employed AMOS (Analysis of Moment Structures) to do our hypotheses tests. First step was an examination of the overall model fit. To assess the differential effects of this model, standardized coefficients are used as path coefficients throughout this paper. The following are some descriptions about the research steps and methods.

A. Questionnaire Development and Measures

The questionnaire is design according to the theories brought up in online marketing literature, combined with our research objective and hypothesis. All multi-item variables in this study were measured using a five-point Likert scale: 1 for total disagreement and 5 for complete agreement. Utilitarian motivation, hedonic motivation scales are derived from Jones et al. and To et al. [11],[5]. Items for habit were developed from in-depth interview s including 20 online browsers who have frequent browsing experiences. In all, there are a total of

5 items were developed and used to measure the extent to which consumers treat "browsing online shops" as a "routine" that is "indispensable" and "unspecific." Purchase frequency was developed by the author to measure the times consumers purchase online each month. Finally, we modified scales from Kim et al.[12] to address perceived information importance to measure the extent to which consumers perceived the importance of information which is got from online browsing.

B. Data Collections

All the questionnaires were e-mailed to consumers who had experience in online browsing in the recent month. Convenient sampling was undertaken as a fast and easy way to collect data. A two-wave emailing method, supplemented by an email reminder, was adopted in data collection. A total of 1,000 survey questionnaires were sent out. Respondents answered the questionnaire based on the most recent experience in using online shopping website. A total of 322 were accomplished and returned, representing 32.2% return rate.

iv. Finding

A. Sample Description

The composition of the sample is shown in Table I. It showed that most respondents were female (58.7%), in the age of 21-30 (29.5%) or 31-40 (28.9%) or 41-50 (22.1%), with university degree (49.2%), and purchase online 1-3 times a month (53.1%).

TABLE I. CHARACTERISTICS OF THE SAMPLE (N= 332)

Demographic items	Valid percentage	Demographic items	Valid percentage
Gender		Age	
Male	41.3%	Under 20	11.5%
Female	58.7%	21-30	29.5%
	100.0%	31-40	28.9%
		41-50	22.1%
		Over 51	8.0%
			100.0%
Education		Frequency of online purchase (each month)	
Senior high school	15.8%	1~3 times	53.1%
Vocational school	19.2%	4~6 times	25.5%
University	49.2%	7~9 times	12.7%
Post-graduate	15.8%	10~12 times	5.0%
	100.0%	over 13 times	3.7%
			100.0%

B. Data Analysis

The results of structural equation modeling obtained for the proposed model showed a chi-square of 429.131 (df = 128; p<0.001). The χ^2/df value for the model is 2.41 which is below the desired cut-off value of 3.0 [13]. Normed fit index (NFI) of 0.863 and incremental fit index (IFI) of 0.901 were near the required criteria. In our research, the RMSEA (root mean square error approximation) is 0.078 (less than 0.08) and indicate that an acceptable fit. The multiple fit indices indicates

an acceptable fit for this model and the data fit the conceptual model fairly well.

TABLE II. RELIABILITY AND VALIDITY

Constructs and indicators	Factor loadings	Cronbach's α	Average variance extracted	
Utilitarian motivation	UT1	0.615***	0.613	0.910
	UT2	0.633***		
	UT3	0.502***		
	UT4	0.501***		
Hedonic motivation	HE1	0.802***	0.884	0.958
	HE2	0.874***		
	HE3	0.756***		
	HE4	0.773***		
	HE5	0.674***		
	HE6	0.578***		
Habit	HA1	0.623***	0.854	0.936
	HA2	0.797***		
	HA3	0.810***		
	HA4	0.664***		
	HA5	0.798***		
Purchase frequency	-	-	-	--
Perceived information importance	IF1	0.855***	0.862	0.963
	IF2	0.760***		
	IF3	0.858***		

*P<0.05, **P<0.01, ***P<0.001

After the overall model was accepted, the constructs in our research model were evaluated in terms of discriminant validity and reliability. For a construct possess good reliability, the Cronbach's alpha coefficient should not smaller than 0.50. To assess discriminant validity, the square root of the average variance extracted (AVE) by a construct should be at least 0.707 (i.e. AVE > 0.5) and should exceed that construct's correlation with other constructs. The results demonstrate that all items and constructs have accepted reliability and validity. See Table II.

C. Correlation Analysis

Correlation Analysis matrix is showed in Table III.

D. The Standardized Regression Weights

Table IV shows that nearly all significant relationship between variables and latent constructs are in the hypothesized directions, which provides the initial evidence for the model.

TABLE III. CORRELATION ANALYSIS MATRIX

	1	2	3	4	5
1.Utilitarian motivation	1				
2.Hedonic motivation	0.278**	1			
3.Habit	0.228**	0.468**	1		
4.Purchase frequency	0.156**	0.353**	0.368**	1	
5.Perceived information importance	0.488**	0.401**	0.453**	0.273**	1

P<0.1, **P<0.05, ***P<0.01, ****P<0.001



TABLE IV. STANDARDIZED REGRESSION WEIGHTS

Paths	Hypotheses	Standardized path coefficients
Utilitarian motivation→Hedonic motivation	H1	0.298***
Utilitarian motivation→Habit	H 2	0.149***
Hedonic motivation→Habit		0.445***
Utilitarian motivation→Purchase frequency	H 3-1	-0.006
Hedonic motivation→ Purchase frequency		0.289***
Habit→ Purchase frequency		0.218***
Utilitarian motivation→Perceived information importance	H 3-2	0.554***
Hedonic motivation→ Perceived information importance		0.304***
Habit→ Perceived information importance		0.089***

*P<0.1, *P<0.05, **P<0.01, ***P<0.001

The results show that the hypothesis1- "utilitarian motivation is positively associated with hedonic motivation " was supported ($\beta=0.298$, $p<0.001$). Besides, the impact of hedonic motivation on habit ($\beta=0.445$, $p<0.001$) is higher than the impact of utilitarian motivation on habit ($\beta=0.149$, $p<0.001$); it shows that the hypothesis 2- "hedonic motivation has a greater positive influence on habits than utilitarian motivation" was supported. The above two supported hypotheses also implies that hedonic motivation might plays a mediating role in the relationship between utilitarian motivation and habit.

The influence of hedonic motivation on purchase frequency ($\beta=0.289$, $p<0.001$) is higher than habit ($\beta=0.218$, $p<0.001$) and utilitarian motivation; it shows that the hypotheses-H3-1 "hedonic motivation will lead to higher purchase frequency among consumers than utilitarian motivation and habit" was supported.

The influence of utilitarian motivation on perceived information importance ($\beta=0.554$, $p<0.001$) is higher than hedonic ($\beta=0.304$, $p<0.001$) and habit ($\beta=0.089$, $p<0.001$); it shows that the hypotheses-H3-1 "utilitarian motivation will lead to a higher perceived information importance among consumers than hedonic motivations and habit" was supported.

I. Conclusions

This paper features a model established to explore the cause for a habit to take shape. Besides analyzing the influence of different motivations on habits, it also compares the differences between motivations and habits in their influence on the consumption and browsing patterns on the Internet (purchase frequency and perceived information importance).

Analysis of empirical data shows that both utilitarian and hedonic motivations have a positive and significant influence on habits. It is also found that hedonic motivations play the role of mediating between utilitarian motivations and habits.

Compared to utilitarian orientation rational shopping, the emotional and experiential aspects of the browsing or shopping enjoyment are even more influential on the formation of habits. This indicates that the enjoyment during

the web surfing process forms positive inspiration and incentives that induce consumers to form web browsing habits. It seems that by enhancing the entertaining and sensory experiential elements of a web page, businesses are reacting consumers indulging themselves in or becoming accustomed to using the Internet. Utilitarian motivations will lead to higher information demand among consumers than hedonic motivations and habits. This can also be explained through the previous descriptions. Under the premise that consumers must satisfy their shopping needs, informative websites seem to better meet their needs. Our finding also suggest that online businesses must pay attention to web design or interaction in order to satisfy the demand of people with "utilitarian or hedonic motivations" as well as the necessity to precisely control the expectations of different target client

Besides, the high purchase frequency presented by hedonic motivations and habit are in favor of steady long-term profits. This makes it necessary to adequately adjust web design and the orientation of use in order to meet the demand of different consumers.

A tension exists between various shopping orientations [13], the consumer mindset might consist of complex factors and hence present combinations to varied degrees. In a realistic shopping environment, despite the drive by high utilitarian motivation, it seems that some consumers do not enjoy the online shopping experience or form a habit. What exactly are the factors that block the linkage in this part of relationship? Price awareness, perceived control or other variables? What are the important roles they play? This will be an interesting issue for future research to explore.

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