

Association for Information Systems AIS Electronic Library (AISeL)

PACIS 2014 Proceedings

Pacific Asia Conference on Information Systems
(PACIS)

2014

UNDERSTANDING POST-ADOPTION OF ONLINE SHOPPING CONTINUANCE USAGE THROUGH THE SOCIAL EXCHANGE THEORY

Chia Shiang Hsu

National Kaohsiung First University of Science and Technology, ours.hsu@gmail.com

Shih-Wei Chou

National Kaohsiung First University of Science and Technology, swchou@nkfust.edu.tw

Hui-Tzu Min

National Cheng Kung University, minhuitz@mail.ncku.edu.tw

Follow this and additional works at: <http://aisel.aisnet.org/pacis2014>

Recommended Citation

Hsu, Chia Shiang; Chou, Shih-Wei; and Min, Hui-Tzu, "UNDERSTANDING POST-ADOPTION OF ONLINE SHOPPING CONTINUANCE USAGE THROUGH THE SOCIAL EXCHANGE THEORY" (2014). *PACIS 2014 Proceedings*. 75.
<http://aisel.aisnet.org/pacis2014/75>

This material is brought to you by the Pacific Asia Conference on Information Systems (PACIS) at AIS Electronic Library (AISeL). It has been accepted for inclusion in PACIS 2014 Proceedings by an authorized administrator of AIS Electronic Library (AISeL). For more information, please contact elibrary@aisnet.org.

UNDERSTANDING POST-ADOPTION OF ONLINE SHOPPING CONTINUANCE USAGE THROUGH THE SOCIAL EXCHANGE THEORY

Chia-Shiang Hsu, College of Management, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan, R.O.C., ours.hsu@gmail.com

Shih-Wei Chou, Department of Information Systems, National Kaohsiung First University of Science and Technology, Kaohsiung, Taiwan, R.O.C., swchou@nkfust.edu.tw

Hui-Tzu Min, Department of Foreign Languages & Literature, National Cheng Kung University, Tainan, Taiwan, R.O.C., minhuitz@mail.ncku.edu.tw

Abstract

Electronic commerce researchers have retention of Consumers post-adoption continuance behavior attendees induce deep trust and service quality of online shopping behavior, thereby contributing to higher revenue and marketing strategy based on social exchange theory. This study provides additional information about the path from the service quality and trust to continuous usage. Also, this study investigates the different tendencies to continuance behavior by habit as a moderating effect within the conceptual model. According to the structural invariance test across moderating effect, it showed that: First, most of main effect paths showed significant positive signs only habit as moderator on trust in service provider is negative support. Second, the habit was supported as a moderator except for the trust in shopping-site to online shopping continuance interaction path. Unexpectedly, the positive moderating effect of habit tendency towards the path of trust in shopping-site to online shopping continuance in not significant. The theoretical and practical implications are discussed.

Keywords: Service quality, Trust, Post-adoption continuance, Habit

1 INTRODUCTION

Consumer purchases behaviour on electronic market place, this study need to define which situation will increase consumer online shopping adoption, shopping site platform or particular seller. Considering these issues, as well as some important theoretical contributions in IS continuance research, service quality, trust and habit in general. Service providers can influence consumers' ability to evaluate service quality (Jifeng, Sulin, & Han, 2012). Consumers' repurchase intention in post-adoption continuance online shopping behavior is affected by service quality (Y. Zhang et al., 2011), and the quality is critical to the development of the relationship between the consumer and the service provider (Zhao, Lu, Zhang, & Chau, 2012), outcome quality is when production processed to affect the consumer feel and the feedback intention (Zhao, Lu, Zhang, & Chau, 2012), such as the service delivery, tangible evidence and intangible valence, are included in this dimension (Lu, Zhang, & Wang, 2009).

Trust as mediation behavior may let consumer strengthen their post-adoption shopping intention (Saonee, Manju, Suprateek, & Kirkeby, 2011), in this shopping situation, we focus on the effect of trusted shopping-site, like amazon, eBay those platform provider. Consumers' trust in shopping-site will be influenced by the different trust effects within the post-adoption shopping-site behavior (D. Kim & Benbasat, 2009). Prior research on purchase continuance intention showed that trust has a positive significant effect on shopping behavior (Y. Zhang et al., 2011). Trust is related to repeating purchase and have an effect of consumers' behavior and habit is the most important and complex variable in this study parenting the role of positive and negative moderating effect on post-adopting continuance behavior with repeating purchase intention (Lankton, Wilson, & Mao, 2010). To identify the potential existence of dissonance between service quality and trust in post-adopting behavior by habit, this study incorporated service quality, trust, and continuance behavior on social exchange theory in order to support theoretical arguments as well as present solid empirical results supporting the hypotheses.

2 THEROETICAL BACKGROUND AND HYPOTHESES

2.1 Post-adoption and online shopping continuance usage

Consumers focus attention on the importance of purchase efficiency generated through technology-based interventions (Zhang, Agarwal, & Lucas, 2011), Researchers have identified that purchase efficiency can alter consumers' subsequent purchasing behaviors (Park, Cho, & Rao, 2012). In addition, service quality and trust have recently gained wider acceptance to define how to maximize online consumers' shopping continuance usage (C. Kim, Galliers, Shin, Ryoo, & Kim, 2012).

Consumers exhibit repurchase intention to a specific online store because it is more efficient for them to undertake the purchase at this online store (T. Zhang et al., 2011), previous research on repurchase intention, trust has been provided strong motivation to consumer. However, this study want to understand how consumer behavior will increase shopping continuance, with consumers' habit(C. Kim,

et al., 2012), because its important behavior to moderator user lock on shopping site provider or goods seller. This study will find out how habit effect on consumers' shopping continuance intention with different situation.

2.2 Habit as a Moderator

Habit is not a new research topic in the literature and has been examined according to the traditional consumer behavior theory (Khalifa & Liu, 2007). It belongs to the building and maintaining of social exchange theory (Woisetschläger, Lentz, & Evanschitzky, 2011). Habits are an important antecedent of both economic effect and social relationship. In conditions where a person has yet to develop his habits, consumers might have, instead, intentions that lead to reasoned repeating actions (Woisetschläger et al., 2011). Prior information systems studies related to habit mainly explore and verify the positive effects of habit on behavioral intention or the continual usage of information systems (Lu, Cao, Wang, & Yang, 2011). Post-adoption is customer will reflux to same shopping site (ex. Amazon; eBay) or rebuying with same seller, in this study we could distinguish two different situation base of trust. First one is shopping-site base people will drive by their internal habit to reuse same shopping-site's e-marketplace, second situation is people will purchase with same seller as service provider drive habit, because customer and seller have deeply interaction to build up their own close connection. While moderators as habit are related to the shopping of goods in general (Khalifa & Liu, 2007). Habit is the frequency of past behavior, the number of times that the past behavior has been performed, is not an indicator of habit, when habit strength is related to repeating behavior (Pahnila & Warsta, 2010).

2.3 The research model: trust and Service quality

As discussed, several instruments on service quality in information systems research have been developed, service quality such as information system field. Service quality is a multi-dimensional concept regardless of which measuring method is used (Lu et al., 2009; Zhao et al., 2012). Improving service quality to enhance consumers' post-adoption behavior is primordial for obtaining consumers-related economic benefits; thus, service quality is positive for continuous online shopping success (Benlian, Koufaris, & Hess, 2011). Consequently, the impact of failing to achieve consumers' expectations regarding service quality, such as platform availability or service provider is important for both consumers and the provider (Benlian et al., 2011). The quality of product searching with shopping can be evaluated before purchase while the quality of experience of purchasing goods can be ascertained only after purchase (Jifeng et al., 2012). A user-friendly website design enables consumers to obtain the needed quality information and reduce the impact of product uncertainty and service provider visibility of post-adoption purchase intention (Jifeng et al., 2012).

This study is based onto the social exchange theory, which lens to explain the relationship between service quality, trust and consumers' online shopping continuance usage. Trust may be defined as

consumer enjoys a position within a trusted network in the shopping-site (Saonee et al., 2011). When the effect of affective trust and online shopping continuance are considered, it was found that trust has an effect on repeat purchasing intention (Erciş, Ünal, Candan, & Yıldırım, 2012). In particular, trust is important for prosperity in online shopping behaviour, service quality through consumers' internal procedure of trust, could increase emphasis on e-commerce a perception of complex and uncertain economic relationships (Paul Resnick & Zeckhauser, 2002). To build better online trust, a service provider must infer each other's intentions to assess whether to trust service providers and whether the trustee will reciprocate their trust (Dimoka, 2010).

First, we use the service quality as interaction quality, which reflects the consumer-seller interaction of the service delivery process. This quality is critical to the development of the relationship between the consumer and the service provider (Zhao et al., 2012). Second, the dimension of service quality refers to outcome quality. This quality is defined as "what the consumers are left with when the production process is finished". Among outcome quality, punctuality is critical, especially for a more time conscious consumer (Lu et al., 2009).

This study conceptualizes seller-base mechanisms as trust in service provider, and platform-base mechanisms as trust in shopping-site. We present an approach to strengthen trust in e-commerce service provider (D. Kim & Benbasat, 2009). Such as trust in the service provider of repurchase intention on e-commerce Web sites for different product types is also limited (Benlian, Titah, & Hess, 2012). Prior research on continuance shopping intention showed that trust has a significant effect (Chou & Chiang, 2013), thus consumer trust is found to have a substantial effect on intention to buy. Because trust plays an important role in the shopping-site, it may also affect consumers' decision-making (Chang & Wong, 2010; Chou & Chiang, 2013). In addition, trust relieves anxiety about shopping-site privacy issues and improves transactions on the web (Chang & Wong, 2010). Finally, we integrate research in online shopping, online service quality, and social exchange theory (Chou & Chiang, 2013) to propose that the habit factor moderates the influence of trust on post-adoption continuance behavior.

2.4 Hypotheses

Figure 1 shows the research model of this study, including the relationships between trust in shopping-site and trust in service provider, service quality as interaction quality and outcome quality and online shopping continuance usage, and the moderating role of habit on the relationships between trust in shopping-site, trust in the service provider and repurchase intention.

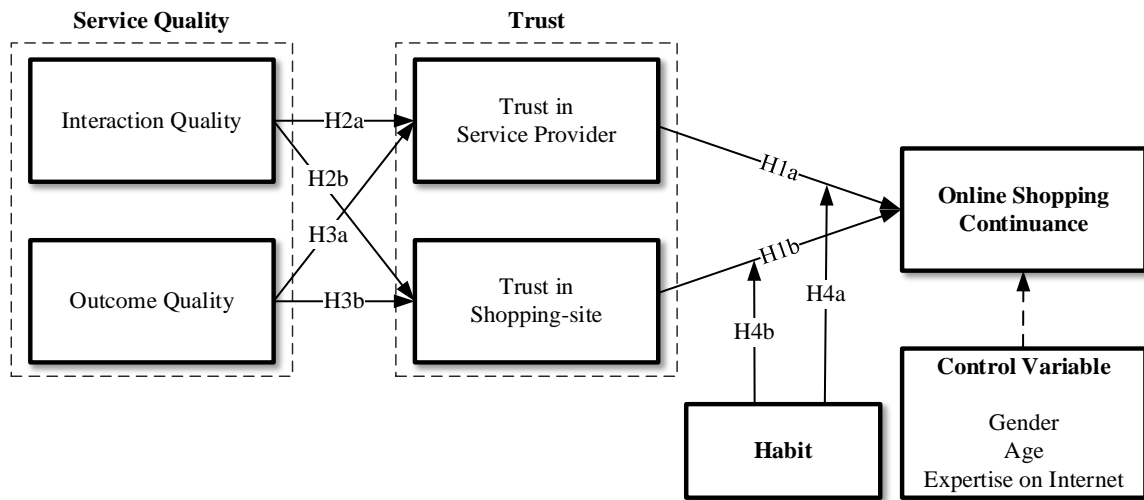


Figure 1. Research Model.

2.4.1 Hypotheses between trust and repurchase intention

Studies have identified purchase efficiency in online repurchase intention and consumer behaviors have theorized effect of trust (Park et al., 2012). In addition, trust has recently explained how to online consumers repeating purchase, on shopping-site (C. Kim et al., 2012). Riedl, Hubert, and Kenning (2010) have recently indicated that trust in online society domains reflects a wide range of relationships with the consumer, as trust in the service provider and trust in shopping-site each variable are make relationship with the consumer, first are consumer trust the online shopping platform as a service provider, second are consumer trust the shopping-site as the online shopping vendor. Thus, this research uses repurchase intention to analyze and define online shopping success. However, some cultural variables and buying habit turn out to be critical (Aksoy, Buoye, Aksoy, Larivière, & Keiningham, 2013). Previous research attempted to examine the relationship between trust and repurchase intention (C. Kim et al., 2012). However, to understand different types of trust as service platform provider and shopping-site as an online vendor on repurchase intention, we expect that trust positively affects online repurchase intention.

H1a. Trust in service provider positively affects online shopping continuance from the consumer.

H1b. Trust in shopping-site positively affects online shopping continuance from the consumer.

2.4.2 Hypotheses between service quality and trust

Studies on service quality, relationship with human trust, interaction between user and platform or seller, customer builds up their experience reflect on interaction quality and outcome quality (Y. Zhang et al., 2011). According to social exchange theory, the relationship between user's experience of service

quality and trust, service quality will be accumulation in customer's internal judgment to give feedback on their own trust in mind. Interaction quality reflects the consumer-seller interaction of the service delivery process. Interaction quality is the development of the relationship between the consumer and the online shopping site, which feeds back on service provider trust (Zhao et al., 2012). Trust in service providing with consumers' interactive behaviors on online shopping for the different service retailer and shopping platform as usefulness shopping-site to the customer (Benlian, Titah, & Hess, 2012). Trust will effect on consumers' decision-making continued usage (Chang & Wong, 2010; Chou & Chiang, 2013). Therefore, we expect that these investments allay customers' concerns about the interaction quality and trust in service provider and shopping-site.

H2a. Interaction quality positively affects trust in the service provider.

H2b. Interaction quality positively affects trust in shopping-site.

Similar to interaction quality, outcome quality can serve as the antecedent of trust in the service provider and trust in shopping-site simultaneously. This outcome quality affects customers' post-adoption of the trust in shopping-site as platform's quality to achieve the shopping task. It also captures the service provider sincerity and platform as shopping-site to consumers' continuance usage that better fits the customers' service quality and trust. Thus, we propose H3a–b.

H3a. Outcome quality positively affects trust in the service provider.

H3b. Outcome quality positively affects trust in shopping-site.

2.4.3 Hypotheses of the moderating effect of habit

According to the social exchange theory (McEvily, Perrone, & Zaheer, 2003), online Trust in the customer to seller and platforms' relationship are different to traditional retail setting (Anderson & Weitz, 1989). This moderating relationship may arise because habit lessens the need to access one's intentions. Thus, when habits grow high they have more influence on continued behavior, and when they are lower they have less influence (Lankton et al., 2010). Therefore, the present study theorizes that habit may make the consumer lock on familiar environment, so this study supposes that a customer may choose a familiar platform but may not choose the same service provider. This leads to H4a–b.

H4a. Habit negatively moderates the relationship between trusts in service provider and online shopping continuance.

H4b. Habit positively moderates the relationship between trusts in shopping-site and online shopping continuance.

3 RESEARCH METHODOLOGY

3.1 Participants and Procedures

The pilot data were collected from online shopping consumers in Taiwan. This study used an online survey system that sent requests to 500 consumers of the online shopping consumer within four shopping-sites in Taiwan. The response rate was 60 % (n=300) but 28 responses with missing data were discarded, resulting in a response rate of 54.4% (n=272), which is typical online shopping consumers in Taiwan. Table 1 shows that 51.8% of the respondents were male and 48.2% were female. Consumers' ages 21 to 30 years old comprised the largest category of the respondents, at 71.7%. And consumers' education background bachelor's degree is the largest category with 46.3%, Annual revenues of most consumers are below \$250,000 for 30.9%, finally over 61.8% consumers have expertise on the internet. Our sample focused on shopping-sites' members of firms, and we used questionnaires to assess service quality, trust, habit and repurchase intention of our subject.

3.2 Constructs and Measurement

After the literature review, the instrument included questions for measurement of the theoretical model. A pilot test was used to filter the initial survey instrument by enhancing reliability, content validity, and construct validity.

Measure	Item	Frequency	Percentage
Gender	Male	141	51.8
	Female	131	48.2
Age	Below 20 years	17	6.3
	21 years -25 years	84	30.9
	26 years -30 years	111	40.8
	31 years -35 years	47	17.3
	Over 35 years	13	4.8
Education	Master's degree or higher	86	31.6
	Bachelor's degree	126	46.3
	Associate degree	60	22.1
Annual revenues (NT\$)	Below \$250,000	84	30.9
	\$250,000-\$400,000	54	19.9
	\$400,000-\$600,000	72	26.5
	\$600,000-\$1,000,000	50	18.4
	Over \$1,000,000	12	4.4
Expertise on Internet	Yes	168	61.8

	No	104	38.2
--	----	-----	------

Table 1. Sample characteristics (N = 272).

Measurement items for each construct were used, consistently with repurchase intention, adopted from the empirical study of (T. Zhang et al., 2011). Using a three item scale, and the service quality as an interaction quality, environment quality and outcome quality was adopted from the empirical study of (Zhao et al., 2012), and trust has adopted from (Riedl, Hubert, & Kenning, 2010), habit was adopted from (Khalifa & Liu, 2007). Most items were measured at 7-point Likert scales. All variables were greater than the alpha value almost 0.7, consistent with Nunnally's (1978) proposed threshold. Convergent validity used to measure Fornell & Larcker (1981), the proposed three proofs (1). Table 2 shows all factor loading was greater than 0.5; (2). As shown in Table 3, the CR values did not exceed 0.8, AVE values were greater than 0.5 and Cronbach's alpha are greater than 0.7. In this study all dimensions were in compliance with all three standards resulting in good convergent validity; (3). As for discriminate validity, Hair, Black, Babin, and Anderson (2009) suggest to test variance inflation factor (VIF), the range from 1.643 to 1.898 which is well below the suggested threshold of 3–5. Cross-factor loadings and VIF are shown in Table 4 and Table 5 show an entire variance covariance matrix.

3.3 Common method biases

As with all samples-reported data, there is a potential for common method biases resulting from multiple sources such as online shopping community (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). Following Podsakoff & Organ (1986), we performed statistical analyses to evaluate the severity of common method bias. First, a Harmon one-factor test (Malhotra, Kim, & Patil, 2006; Podsakoff & Organ, 1986), was conducted on the six research variables in our theoretical model including interaction quality, outcome quality, trust in provider, and trust in shopping-site, and habit, and repurchase intention. Results from this test showed that six factors are present and the most covariance explained by one factor is 40.5 %, indicating that common method biases are not a likely contaminant of our results. Second, following (Podsakoff et al., 2003) and (Chin, Thatcher, & Wright, 2012; Liang, Saraf, Hu, & Xue, 2007), unmeasured latent method construct, included all the principal constructs indicators and calculated each indicator's variances. The results demonstrate that the average substantively explained variance of the indicators is 0.616, while the average method based variance is 0.008. The ratio of the substantive variance of method variance is about 80:1. In addition, most method factor loadings are not significant. This study contends that the method is unlikely to be a serious concern for this study.

Construct	Item	Weight	Loading	S.E.	t-Value
Interaction Quality(INQ)	INQ1	0.363	0.764	0.041	18.738
	INQ2	0.435	0.833	0.027	31.352
	INQ3	0.438	0.824	0.025	33.539
Outcome Quality(OTQ)	OTQ1	0.422	0.754	0.038	19.756
	OTQ2	0.428	0.754	0.034	21.945
	OTQ3	0.446	0.804	0.030	27.202
Trust in Service Provider(TRP)	TRP1	0.432	0.795	0.032	24.729
	TRP2	0.414	0.834	0.023	36.156
	TRP3	0.400	0.778	0.037	20.992
Trust in Shopping-Site (TRS)	TRS1	0.425	0.761	0.047	16.194
	TRS2	0.446	0.730	0.048	15.208
	TRS3	0.453	0.775	0.038	20.348
Habit(HAB)	HAB1	0.459	0.797	0.030	27.021
	HAB2	0.400	0.809	0.026	31.686
	HAB3	0.398	0.781	0.033	23.663
Online shopping continuance (OSC)	RI1	0.442	0.756	0.036	20.870
	RI2	0.447	0.844	0.023	37.271
	RI3	0.399	0.724	0.042	17.051

Table 2. Weights and loading of measures (n=272)

Note: Both standard errors and t-values are for loadings, not weights.

Measures construct	Composite reliability	Cronbach's alpha	Average variance extracted (AVE)
Interaction Quality(INQ)	0.848	0.733	0.652
Outcome Quality(OTQ)	0.814	0.658	0.594
Trust in Service Provider (TRP)	0.844	0.723	0.644
Trust in Shopping-Site (TRS)	0.799	0.623	0.571
Habit(HAB)	0.838	0.711	0.633
Online Shopping Continuance (OSC)	0.819	0.667	0.602

Table 3. Results of reliabilities and AVE.

Construct	Item	INQ	OTQ	TRP	TRS	HAB	OSC
Interaction Quality(INQ) <i>VIF=1.898</i>	INQ1	0.764	0.563	0.447	0.416	0.515	0.426
	INQ2	0.833	0.488	0.383	0.497	0.589	0.511
	INQ3	0.824	0.548	0.441	0.463	0.589	0.515
Outcome Quality(OTQ) <i>VIF=1.818</i>	OTQ1	0.529	0.754	0.481	0.491	0.502	0.443
	OTQ2	0.442	0.754	0.492	0.399	0.391	0.449
	OTQ3	0.545	0.804	0.433	0.450	0.430	0.468
Trust in Service Provider(TRP) <i>VIF=1.643</i>	TRP1	0.325	0.480	0.795	0.403	0.366	0.471
	TRP2	0.449	0.527	0.834	0.425	0.426	0.450
	TRP3	0.488	0.454	0.778	0.530	0.502	0.436
Trust in Shopping-Site (TRS) <i>VIF=1.736</i>	TRS1	0.426	0.486	0.515	0.761	0.435	0.429
	TRS2	0.431	0.430	0.394	0.730	0.407	0.450
	TRS3	0.433	0.398	0.370	0.775	0.482	0.456
Habit(HAB) <i>VIF=1.796</i>	HAB1	0.492	0.492	0.458	0.480	0.797	0.514
	HAB2	0.550	0.507	0.428	0.447	0.809	0.448
	HAB3	0.540	0.359	0.387	0.467	0.781	0.445
Online Shopping Continuance (OSC)	RI1	0.495	0.428	0.423	0.472	0.524	0.756
	RI2	0.483	0.483	0.496	0.475	0.431	0.844
	RI3	0.419	0.459	0.390	0.423	0.421	0.724

Table 4. Cross-factor loading. Note: VIF: variance inflation factor.

Item	Mean	S.D	Gender	Age	EI	INQ	OTQ	TRP	TRS	Habit	OSC
Gender	141 Male; 131 Female		N/A								
Age	2.835	0.948	-0.189	N/A							
Expertise on Internet	0.618	0.903	0.168	-0.002	N/A						
Interaction Quality	5.124	1.182	-0.111	0.097	-0.001	0.807					
Outcome Quality	5.225	1.069	-0.015	0.010	-0.054	0.656	0.770				
Trust in Provider	5.308	1.046	0.020	0.058	-0.044	0.522	0.607	0.802			
Trust in Site	5.115	1.086	0.088	0.020	-0.049	0.570	0.579	0.562	0.756		
Habit	5.173	1.182	0.021	0.050	-0.016	0.701	0.571	0.535	0.585	0.796	
Online Shopping Continuance	5.337	0.917	0.009	-0.009	-0.052	0.602	0.587	0.564	0.590	0.593	0.776

Table 5. Correlation among constructs and the square root of the AVE.

Note: S.D.: standard deviation; the shaded numbers in the diagonal row are square roots of the average variance extracted (AVE).

4 ANALYSIS AND RESULTS

4.1 Main effect

The structural model was assessed by estimating the path coefficients using smart-PLS. S. S. Kim and Son (2009) which is similar to a multiple regression test for relationships between dependent and independent variables (table 6). Hypotheses testing, path regression, in which we compare the results of three models; model one is shown control variable to dependent variable, but the control variables are not significant in model one. Model two is shows that main effect model, and each path are significantly except control variable. Model three shows the moderator interaction effect, habit as a moderation effect on interaction quality and outcome quality with online shopping continuance. Table 6 shows, model three indicated that all paths exhibit a P-value of less than 0.05 except H4b. The significance of all paths was assessed via 350 bootstrap runs. R^2 shows the amount of variance explained by the online shopping continuance usage and the predictive power of the model is 53%. Table 6 demonstrates the path coefficient and R^2 value, supporting main effect H1-H3.

Independent variable → Dependent variable	Model I	Model II	Model III
Control variable (Gender)→Online shopping continuance	0.0735 (0.749)	-0.042 (0.919)	-0.044 (0.981)
Control variable (Age)→Online shopping continuance	0.0454 (0.438)	-0.051 (1.204)	-0.050 (1.250)
Control variable (Expertise on Internet→ Online shopping continuance	0.0482 (0.575)	0.029 (0.642)	0.024 (0.567)
Trust in service provider→Online shopping continuance (H1a)		0.245*** (3.626)	0.132* (2.058)
Trust in shopping-Site→Online shopping continuance (H1b)		0.281*** (4.192)	0.344*** (4.969)
Interaction quality → Trust in service provider (H2a)		0.226** (3.192)	0.226** (3.204)
Interaction quality → Trust in shopping-Site (H2b)		0.342*** (5.070)	0.324*** (5.236)
Outcome quality → Trust in service provider (H3a)		0.460*** (7.246)	0.460*** (7.399)
Outcome quality → Trust in shopping-Site (H3b)		0.369*** (6.155)	0.369*** (6.455)
Habit→Online shopping continuance		0.300*** (4.476)	0.280*** (4.298)

Independent variable → Dependent variable	Moderating effect		
Trust in Service Provider * Habit →Online shopping continuance (H4a)			-0.284*** (4.960)
Trust in Shopping-Site * Habit →Online shopping continuance (H4b)			0.118 (1.277)
R-square	0.013	0.482	0.530
ΔR -square		0.469	0.517
f^2		0.025	0.027
Test of differenced R-square		30.590***	29.432***

Table 6. Correlation among constructs and the square root of the AVE.

$$F(0.1,1,261)= 2.724; F(0.05,1,261)= 3.877; F(0.01,1,261)=6.732$$

* $p < 0.1 = t > 1.96$; ** $p < 0.05 = t > 2.58$; *** $p < 0.01 = t > 3.29$; with one-tailed test.

4.2 Moderating effect

Moderating test the research model we used smart PLS by comparing the difference between the main effect and the moderating effect models (Chou & Chiang, 2013). Measurement invariance represents the under different conditions in measurement operations of the differenced R-square test, Model two R_2^2 of the main effect model (Horn & McArdle, 1992), including the independent variable, moderator, and the dependent variable only. Then, model theory R_3^2 of the moderating effect model was examined, we calculate the effect size of f^2 from $(R_3^2 - R_2^2 / 1 - R_3^2)$ and a pseudo F-value by multiplying f^2 with $(n - k - 1)$, where n is the sample size and k is the number of independent variables in the regression equation. 0.03, 0.15, and 0.35 of f^2 indicate small, medium, and large interaction effects respectively shown on Table 6. Finally, as can be seen in Figure 2, Habit significantly dampens the relationship between trust in the service provider and online shopping continuance usage. As indicated by the solid line in the graph, online shopping continuance usage dampens with decreasing habit when trust in service provider is high, and the effect is attenuated with discernible impact when habit is high. These results support Hypothesis 4a ($\beta = -1.84^{***}$, t -value = 4.960), which states that habit negatively impacts on consumer choices by reducing online service provider on online shopping continuance usage. Consumers will not lock down on only one service provider, and habit may not increase the online shopping behavior. Figure 3 shows that, habit does not significantly strengthen the positive relationship between trust in shopping-site and online shopping continuance usage. As indicated by the solid line in the graph, online shopping continuance usage is *strengthen* with increased habit when trust in shopping-site is high, and the effect is attenuated with discernible impact when habit is high. These results do not support Hypothesis 4b ($\beta = 0.118$, t -value = 1.277), which therefore is not significant, but that habit have positively impacted both the online shopping by increase the positive impact of trust in shopping-site for online shopping continuance usage.

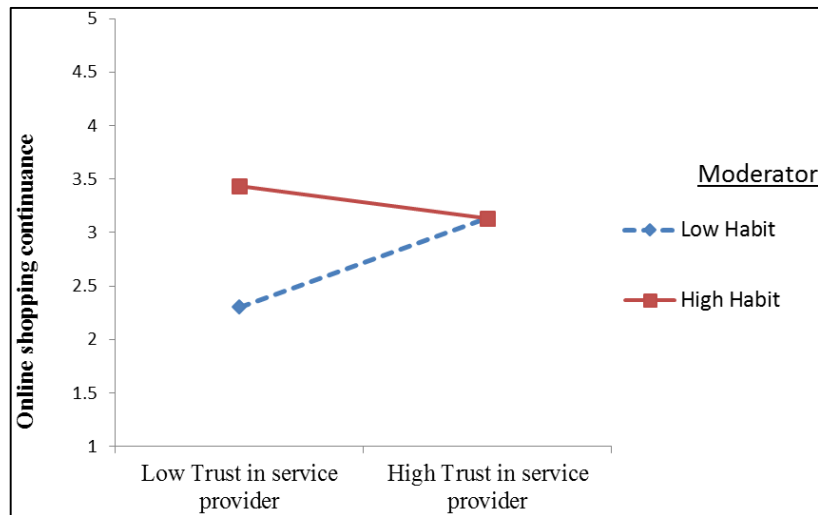


Figure 2. *Habit dampens the positive relationship between Trust in Service Provider and online shopping continuance.*

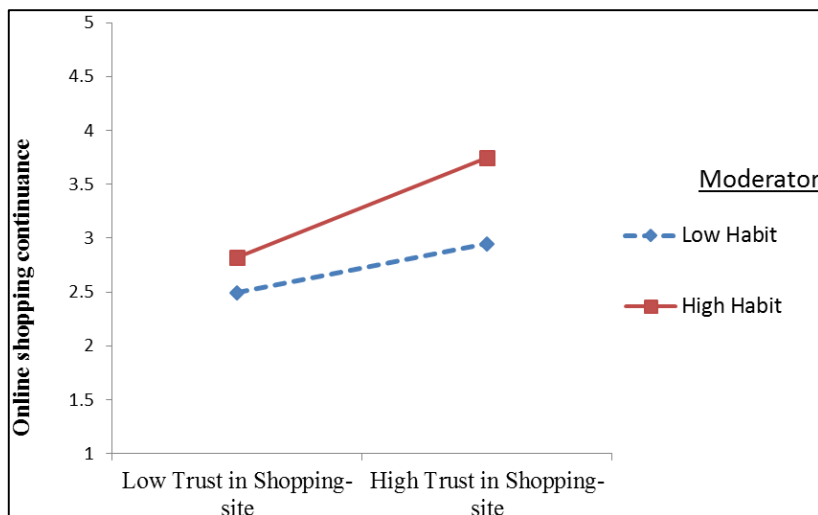


Figure 3. *Habit strengthens the positive relationship between Trust in Shopping-Site and online shopping continuance.*

5 DISCUSSION AND CONCLUSIONS

5.1 Discussion

We proposed and tested a moderation model to understand how habits' effect on social exchange relationship to trust and post-adopting continuance behavior. It is especially important to note the main effect of H1-H3, H1a is supported by consumers' shopping continuance usage affect by trust in the service provider, in the virtual shopping world, when buyer trust the shipping service provider, seller provide product cost/prices as capacity led the buyer to trust, as seller as a good service provider will

increase consumers' continuance shopping intention. As H1b is the other way to affect buying continuance, according to many IS adopted research, shopping-site is the platform as online shopping entrance interface, the system must be fluent, friendly and safe enough so that buyer will gain their trust in this shopping-site be locked down to continuance usage, it's will support our hypothesis 1b. H2a shows that interaction quality to trust in the service provider path is supported. Consumers have better experience decide to exchange the shopping intention procedure and make the interaction with service provider to build up trust base continuance shopping behavior, it will increase the buyers' trust on online service provider. On the other side the shopping-site must provide a friendlier interface to buyer, led the fluency better and cash flow system, that interaction will increase buyer's trust in shopping-site, thus H2b is supported. This study extended previous research on service quality, other similar factor is outcome quality, H3a is supported by the buyer's experience of service provider, it will affect by outcome quality. And it increases the buyers' trust in the service provider. H3b, outcome quality focus on increase buyers' trust in the platform, including product diversity, internet security and product shipping both of that could meaning outcome quality, and that really will affect buyers' trust.

The habit was found to moderate consumer post-adoption continuance intention across trust in the service provider and trust in shopping-sit, our finding the expectation that the habit to decrease the consume' trust in service provider behavior will dampen repeat purchase continuance, but the other way habit will increase the trust in shopping-sit to buyer shopping continuance. Unfortunately, H4b is not significant in this study, which examined how and in what ways consumer' habit can contribute to the shopping behavior situation. We also examined that when adding an habit moderating effect, the consumer may be not locked on the familiar shopping service provider, when people need some fresh and new product, or fashion flow habit can't lock down the consumers' continuance behavior, especially is an online shopping mall, it's different to other situation of habit as moderation, because online shopping is easy to change the service provider, but not really easy to change platform.

5.2 Conclusions

This study investigates the relationship between service quality, trust, habit, and post-adoption continuance. We selected shopping-sit consumer in firms in Taiwan. Such a study of habit increases our understanding of the complex relationship between service quality and repurchase intention. This suggests that the habit of consumers may need to be increased to fullest effect shopping-site and service providers' service quality to consumers. To follow up on the current research niche, this study investigated conference attendee behaviours from the perspective of habit in a fine-grained approach that captured a richer and more detailed picture of attendee behaviours to repurchase intention. Thus, multiple association meetings should be examined in a future study to enhance external validity. This study looked at the moderating effect of habit to disclose the differential effect of high and low habit. To precisely unveil the mechanism of post-adoption continuance, a future study should integrate both habit and gender across continuance intention construct and investigate its moderating effect by dividing

gender into high and low shopping habit groups. The findings will present more accurate information about the post-adoption continuance mechanism by measuring it on both dimensions of behaviour and continence usage.

6 REFERENCES

- Aksoy, Lerzan, Buoye, Alexander, Aksoy, Pelin, Larivière, Bart, & Keiningham, Timothy L. (2013). A cross-national investigation of the satisfaction and loyalty linkage for mobile telecommunications services across eight countries. *Journal of Interactive Marketing*, 27(1), 74-82.
- Anderson, Erin, & Weitz, Barton. (1989). Determinants of continuity in conventional industrial channel dyads. *Marketing Science*, 8(4), 310-323.
- Benlian, Alexander, Koufaris, Marios, & Hess, Thomas. (2011). Service quality in software-as-a-service: developing the saaS-qual measure and examining Its role in usage continuance. *Journal of Management Information Systems*, 28(3), 85-126.
- Benlian, Alexander, Titah, Ryad, & Hess, Thomas. (2012). Differential effects of provider recommendations and consumer reviews in e-commerce transactions: an experimental study. *Journal of Management Information Systems*, 29(1), 237-272.
- Chang, Hsin Hsin, & Wong, Kit Hong. (2010). Adoption of e-procurement and participation of e-marketplace on firm performance: Trust as a moderator. *Information & Management*, 47(5-6), 262-270.
- Chin, Wynne W., Thatcher, Jason Bennett, & Wright, Ryan T. (2012). ASSESSING COMMON METHOD BIAS: PROBLEMS WITH THE ULMC TECHNIQUE. *MIS Quarterly*, 36(3), 1003-A1011.
- Chou, Shih-Wei, & Chiang, Chun-Hsiung. (2013). Understanding the formation of software-as-a-service (SaaS) satisfaction from the perspective of service quality. *Decision Support Systems*, 56(0), 148-155.
- Dimoka, Angelika. (2010). What does the brain tell us about trust and distrust? evidence from a functional neuroimaging study. *MIS Quarterly*, 34(2), 373-A377.
- Erciş, Aysel, Ünal, Sevtap, Candan, F. Burcu, & Yıldırım, Hatice. (2012). The effect of brand Satisfaction, trust and brand commitment on loyalty and repurchase intentions. *Procedia - Social and Behavioral Sciences*, 58(0), 1395-1404.
- Fornell, Claes, & Larcker, David F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research*, 382-388.
- Hair, Joseph F, Black, William C, Babin, Barry J, & Anderson, Rolph E. (2009). *Multivariate data analysis*.
- Horn, John L, & McArdle, J Jack. (1992). A practical and theoretical guide to measurement invariance in aging research. *Experimental Aging Research*, 18(3), 117-144.
- Jifeng, Luo, Sulin, Ba, & Han, Zhang. (2012). The effectiveness of online shopping characteristics and well-designed websites on satisfaction. *MIS Quarterly*, 36(4), 1131-A1139.
- Khalifa, Mohamed, & Liu, Vanessa. (2007). Online consumer retention: contingent effects of online shopping habit and online shopping experience. *European Journal of Information Systems*, 16(780-792).

- Kim, Changsu, Galliers, Robert D., Shin, Namchul, Ryoo, Joo-Han, & Kim, Jongheon. (2012). Factors influencing Internet shopping value and customer repurchase intention. *Electronic Commerce Research and Applications*, 11(4), 374-387.
- Kim, Dongmin, & Benbasat, Izak. (2009). Trust-assuring arguments in B2C e-commerce: impact of content, source, and price on trust. *Journal of Management Information Systems*, 26(3), 175-206.
- Kim, Sung S., & Son, Jai-Yeol. (2009). Out of dedication or constraint? A dual model of post-adoption phenomena and its empirical test in the context of online services. *MIS Quarterly*, 33(1), 49-70.
- Lankton, Nancy K., Wilson, E. Vance, & Mao, En. (2010). Antecedents and determinants of information technology habit. *Information & Management*, 47(5-6), 300-307.
- Liang, Huigang, Saraf, Nilesh, Hu, Qing, & Xue, Yajiong. (2007). Assimilation of enterprise systems: the effect of institutional pressures and the mediating role of top management. *MIS Quarterly*, 31(1), 59-87.
- Lu, Yaobin, Cao, Yuzhi, Wang, Bin, & Yang, Shuiqing. (2011). A study on factors that affect users' behavioral intention to transfer usage from the offline to the online channel. *Computers in Human Behavior*, 27(1), 355-364.
- Lu, Yaobin, Zhang, Long, & Wang, Bin. (2009). A multidimensional and hierarchical model of mobile service quality. *Electronic Commerce Research and Applications*, 8(5), 228-240.
- Malhotra, Naresh K., Kim, Sung S., & Patil, Ashutosh. (2006). Common method variance in IS research: a comparison of alternative approaches and a reanalysis of past research. *Management Science*, 52(12), 1865-1883.
- McEvily, Bill, Perrone, Vincenzo, & Zaheer, Akbar. (2003). Trust as an organizing principle. *Organization science*, 14(1), 91-103.
- Nunnally, Jum. (1978). Psychometric methods. *McGraw-Hill, New York, NY*.
- Pahnila, Seppo, & Warsta, Juhani. (2010). Online shopping viewed from a habit and value perspective. *Behaviour & Information Technology*, 29(6), 621-632.
- Park, Insu, Cho, Jeewon, & Rao, H. Raghav. (2012). The effect of pre- and post-service performance on consumer evaluation of online retailers. *Decision Support Systems*, 52(2), 415-426.
- Paul Resnick, & Zeckhauser, Richard. (2002). Trust among strangers in internet transactions: Empirical analysis of eBay's reputation system. *Advances in Applied Microeconomics*, 11, 127-157.
- Podsakoff, Philip M, MacKenzie, Scott B, Lee, Jeong-Yeon, & Podsakoff, Nathan P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of applied psychology*, 88(5), 879.
- Podsakoff, Philip M, & Organ, Dennis W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of management*, 12(4), 531-544.
- Riedl, René, Hubert, Marco, & Kenning, Peter. (2010). Are there neural gender differences in online trust? : an fMRI study on the perceived trustworthiness of eBay offers. *MIS Quarterly*, 34(2), 397-428.
- Saonee, Sarker, Manju, Ajuja, Suprateek, Sarker, & Kirkeby, Sarah. (2011). The role of communication and trust in global virtual teams: a social network perspective. *Journal of Management Information Systems*, 28(1),

273-309.

- Woisetschläger, David M., Lentz, Patrick, & Evanschitzky, Heiner. (2011). How habits, social ties, and economic switching barriers affect customer loyalty in contractual service settings. *Journal of Business Research*, 64(8), 800-808.
- Zhang, Tongxiao, Agarwal, Ritu, & Lucas, Jr Henry C. (2011). The value of IT-enabled retailer learning : personalized product recommendations and customer store loyalty in electronic markets. *MIS Quarterly*, 35(4), 859-A857.
- Zhang, Yixiang, Fang, Yulin, Wei, Kwok-Kee, Ramsey, Elaine, McCole, Patrick, & Chen, Huaping. (2011). Repurchase intention in B2C e-commerce: a relationship quality perspective. *Information & Management*, 48(6), 192-200.
- Zhao, Ling, Lu, Yaobin, Zhang, Long, & Chau, Patrick Y. K. (2012). Assessing the effects of service quality and justice on customer satisfaction and the continuance intention of mobile value-added services: An empirical test of a multidimensional model. *Decision Support Systems*, 52(3), 645-656.