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An Exploratory Study on Maximizing Tendency and Continuance Intention of Web Sites

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Although research on acceptance of information systems provides useful insights in understanding users' behavior, we need to further understand factors that cause long-term or continued use. This article therefore examines the role of users' maximizing tendency (i.e., individual differences in pursuing the best option) in continuance intention of Web sites. By controlling for disconfirmation, ease of use, and product involvement, we empirically investigate the relationships between satisfaction, usefulness, and continuance intention to online bookstore Web sites. As suggested by the information technology continuance model, the effects of satisfaction to and perceived usefulness on continuance intention to Web sites are positive for individuals with low maximizing tendency (i.e., satisficers). Satisfaction and usefulness, however, are not associated with continuance intention for individuals with a high maximizing tendency (i.e., maximizers). The implications for both researchers and practitioners are discussed.

Keywords : IS Usage, Maximizing Tendency, IT Continuance, Satisfaction, Usefulness

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Ⅰ. Introduction

As an essential interface for the interaction between businesses and consumers, a variety of Web sites are used by people to acquire information about products and to subsequently purchase their preferred selection. As such, the acceptance and continued use of Web sites is a key area of electronic business research. While the Information Systems (IS) literature has many studies that address the initial stage of use and adoption of IS, recently, continuance intentions and the continuance of the use of IS are gaining attention [e.g., Bhattacherjee, 2001a; Bhattacherjee, 2001b; Choi and Kim, 2006; Hong *et al.*, 2008; Karahanna *et al.*, 1999; Seo *et al.*, 2007]. As noted by Bhattacherjee [2001b], "long- tem viability of an IS and its eventual success depend on its continued use rather than first-time use." We are therefore interested in adding to the accumulation of knowledge about which factors are essential to the continued use of Web sites after users' initial acceptance.

According to adaptation level theory [Brickman and Campbell, 1971; Helson, 1964], consumers' intensity of the pleasure that they experience after their initial acquisition of a commodity diminishes over time. This apparent "hedonic treadmill," or the tendency of a person to remain at a relatively stable level of happiness despite a change in fortune or the achievement of major goals [e.g., Kahneman, 1999], has been studied in terms of changes in user satisfaction of product or service use over time.

Consumers are sometimes easily influenced by point of sale stimuli and tend to look forward to new and different experiences. However this kind of satisfaction that is experienced during the acceptance stage does not imply long-term usage or repurchase of a product or service. Similarly, after acquisition of new customers on commercial Web sites, their long-term retention is essential [e.g., Reichheld and Schefter, 2000], and therefore research on continuance and post-adoption of Web sites has a clear value to firms that do business on the Web. Since individuals may also engage in the use of a variety of Web sites, continued use is critical issue for practitioners who are interested in differentiating their Web sites and e-services from their competitors. We are therefore motivated to investigate the relationships among individual differences, satisfaction, and continuance intention in an online business-to-consumer context.

The rest of this paper proceeds as follows. The next section discusses the theoretical background on continuance intention of Web site use and defines and discusses the posited moderating effects of maximizing tendency on satisfaction and usefulness. This is followed by our research methods, the empirical results, and conclusions and implications for future research.

Ⅱ. Theoretical Background and Hypotheses

2.1 Continuance Intention of Web sites

There have been several studies on continuance use of IS in the workplace [e.g., Bhattacherjee *et al.*, 2008; Cooper and Zmud, 1990], and in the business-to-consumer context such

as online brokerage services [Bhattacherjee, 2001a], online banking services [Bhattacherjee, 2001b], Web portal services [Lin *et al.*, 2003], use of the Web [Hsu *et al.*, 2004], and mobile Internet services [Hong *et al.*, 2006; Thong *et al.*, 2006]. Most of the studies of continued use of IS in the consumer context are theoretically based on the expectation-disconfirmation theory [Oliver, 1980]. Using this framework, the information technology (IT) continuance model [Bhattacherjee, 2001b] and its extended model [Bhattacherjee *et al.*, 2008] suggest that users' continuance intention is determined primarily by their satisfaction with and perception of usefulness of the target IS.

Satisfaction, the degree of users' affect with prior use [Bhattacherjee, 2001b], is also an important predictor in the IT continuance model. Satisfaction is often modeled as a key determinant for IS success [e.g., DeLone and McLean, 1992], and is widely used to examine loyalty behaviors such as repurchase or word of mouth in the marketing literature and is important when building and retaining a loyal base of long-term consumers [e.g., Hsu and Chiu, 2004; Shun and Yunjie, 2006]. The impact of satisfaction on IS continuance is also significant in Internet-based learning [Limayem and Cheung, 2008], Web portal sites [Lin *et al.*, 2005], and mobile Internet [Hong *et al.*, 2006; Thong *et al.*, 2006]. We, therefore, posit that:

H1: Satisfaction is positively related to continuance intention of Web sites.

Usefulness, or users' perceptions of the instrumentality or benefits of IT usage [Bhattacherjee, 2001b], is also a salient variable that predicts continued use of IS. Because people are motivated by extrinsic rewards, the effects of usefulness on continued use are confirmed during the post-use stage of Web sites [e.g., Lin *et al.*, 2005; Thong *et al.*, 2006]. This relationship is included in the extended IT continuance model [Bhattacherjee *et al.*, 2008], and we therefore posit that:

H2: Usefulness is positively related to continuance intention of Web sites.

2.2 The Moderating Role of Maximizing Tendency

The homo economicus view suggests that humans are rational, in that they possess all necessary information to evaluate all possible alternatives [e.g., Persky, 1995]. They behave as self-interested actors who have the ability to make judgments towards their subjectively defined ends and seek to attain very specific and predetermined goals to the greatest extent with the least possible cost. However, the "real world" does not always accommodate the acquisition of all relevant information [e.g., Thaler and Sunstein, 2009] and people vary in their tendencies to either maximize or satisfice [Schwartz *et al.*, 2002]. Because the acquisition of information needs time and/or money, satisficing behavior is the least expensive option [Simon, 1995; 1996].

Maximizing is the quest to find the best option and not settling for anything less. This implies a general tendency to pursue the identification of an optimal alternative. Satisficing employs decision-making strategies that strive for adequacy, instead of optimality. From the

decision-making perspective, maximizing tendency is a bipolar construct that differentiates maximizers and satisficers, and accounts for individual differences in counterfactual thinking, regret and negative feelings when comparing goods in purchase situations [Schwartz *et al.*, 2002]. Because maximizing tendencies are related to one's choice patterns, they can be applied to a variety of situations in daily life. For example, individuals with high maximizing tendencies try to find better jobs [Iyengar *et al.*, 2006], romantic partners [Yang and Chiou, 2010], and goods [Schwartz *et al.*, 2002] and tend to compare their possession with the ideal thing [Schwartz *et al.*, 2002], however, more research is needed to account for this type of individual difference in the business-to-consumer context. In particular, since users' continued use of Web sites is essential to the success of many contemporary firms, further investigation into the role of maximizing tendency in post-adoption usage is important.

Prior studies suggest that the effect of satisfaction on loyalty behavior may vary by industry [Jones and Sasser, 1995] and by individual characteristics [Mittal and Kamakura, 2001]. The ubiquitous nature of Web sites and search tools provides users with a low cost environment to search and switch, and maximizers are thus empowered when optimizing their Web site selections. Since the link between satisfaction and loyalty behavior to a product or service is not clear [e.g., Oliver, 1999], we posit that individual differences in maximizing tendency moderates continued use of Web sites. Satisficers have a limited propensity to seek better alternatives, and thus individuals with low maximizing tendencies are less prone to switch to other Web sites when they are currently satisfied with a particular Web site.

H3: A low maximizing tendency positively moderates the relationship between satisfaction and continuance intention of Web sites.

Although post-usage usefulness is a primary determinant of acceptance and continued use of Web sites, its influence on behavioral intention is moderated by users' characteristics such as experience [Castañeda *et al.*, 2007]. Because maximizing tendency is related to one's choice strategies, it can also moderate the perceived usefulness of Web sites, and therefore maximizers seek other Web sites even if they think a particular Web site is useful. Conversely, individuals with low maximizing tendencies are not inclined to invest time and energy to seek other alternatives. We therefore posit that:

H4: A low maximizing tendency positively moderates the relationship between usefulness and continuance intention of Web sites.

2.3 Conceptual Model

We adopt the extended model of IT continuance [Bhattacherjee *et al.*, 2008] which models the positive effect of satisfaction and post-usage usefulness on continuance intention. Bhattacherjee's [2001b] continuance intention model treats satisfaction the same as attitude, and suggests that satisfaction may mediate the association between post-usage usefulness beliefs and continuance intentions, just as attitude mediates the association between beliefs and intention in the Theory of Reasoned Action [Ajzen

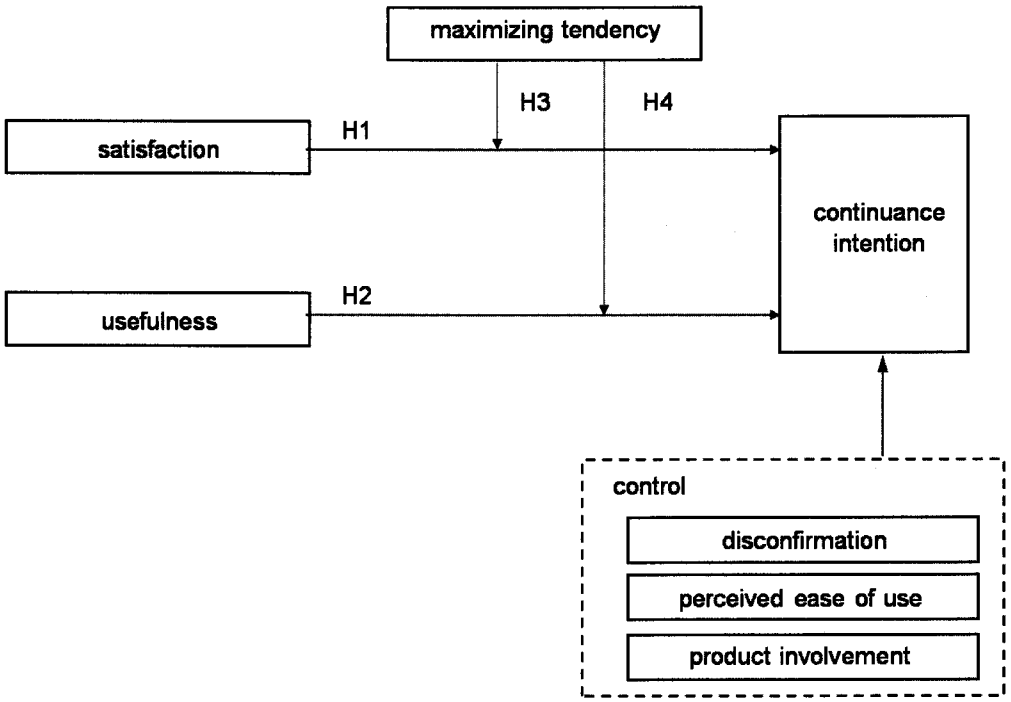
and Fishbein, 1980] and the Theory of Planned Behavior [Ajzen, 1991]. However, though satisfaction and attitude are two forms of affect, they are dissimilar in that satisfaction is a transaction-specific short-term affect based on the immediately preceding usage experience while attitude is a long-term, transaction-invariant affect, possibly aggregated from numerous prior transactional experiences. Furthermore, many IT acceptance studies [e.g. Venkatesh *et al.*, 2003] have noted that affect-based attitude explains very little about intention when user beliefs are included and have therefore tended to drop attitude from IT usage models. Recent research reports that there is no significant relationship between perceived usefulness and satisfaction in the use of Web portal sites [Lin *et al.*, 2005], and in light of the above arguments, we drop the direct association between post-usage perceived usefulness and satisfaction from the original IT continuance model, and instead use these constructs as having separable effects as modeled with the extended IT continuance intention model [Bhattacherjee *et al.*, 2008].

Note that since satisfaction reflects a short-term, transaction specific affect associated with preceding usage experience, post-usage usefulness reflects a long-term, transaction-invariant belief aggregated from prior usefulness perceptions. Given the transactional basis of the satisfaction construct, satisfaction may have a more dominant effect on continuance intention if intention is assessed immediately following the transactional (usage) experience. However, the satisfaction effect is likely to attenuate with increasing temporal separation between prior experience and intention measurements, while the more stable, longer-term post-usage usefulness perception will likely have an increasingly dominant effect over time, thus we use the extended model of IT continuance which does not assume a causal relationship between post-usefulness and satisfaction

Since past research suggests a variety of variables moderate the relationship between user satisfaction and loyalty behavior [e.g., Seiders *et al.*, 2005], we include three control variables that influence customer differences and continuance intentions: ease of use, disconfirmation [Thong *et al.*, 2006], and product involvement [Kim *et al.*, 2010; Kim and Park, 2005; Olsen, 2007]. People also exhibit different traits with regard to their maximizing and satisficing fendencies, and our model uses maximzing tendendency as a moderator of the independent variables, satisfaction and usefulness. The research model is shown in <Figure 1>.

Ⅲ. Methods

All measured items are adapted from past research and used in our survey of recent users' experiences with an online bookstore. A 13-item maximization scale [Schwartz *et al.*, 2002] was used to test for individual differences when in pursuit of the best alternatives. Although Diab *et al.* [2008] have a skeptical view of the construct validity and interpretation of Schwartz *et al.*'s [2002] constructs, the maximization scale has been successfully used in recent studies [e.g., Dar-Nimroda *et al.*, 2009; Parker *et al.*, 2007; Polman, 2010]. We adapted a semantic differential scale that is traditionally used in the satisfaction literature [e.g., Ajzen and Fishbein, 1980; Oliver, 1980; Oliver and



<Figure 1> Research Model

Swan, 1989] to measure satisfaction with Web sites. Satisfaction is measured with four adjective pairs: very dissatisfied/very satisfied, very displeased/very pleased, very frustrated/very contented, absolutely terrible/absolutely delighted [e.g., Bhattacherjee, 2001b; Bhattacherjee *et al.*, 2008; Hong *et al.*, 2006]. Continuance intention and disconfirmation, the linkage between expectation of Web site use and the actual performance, are adapted from Bhattacherjee [2001b]. We adapted usefulness and ease of use, the perception that using a particular system would be free of effort [Davis, 1989], from Gefen *et al.* [2003]. The product involvement construct, a person's perceived relevance of the object based on inherent needs, values, and interests [Zaichkowsky, 1986], was adapted from Mittal [1995]. With the exception of satisfaction, all items were measured with a Likert-type 7-point scale (1: strongly disagree-7: strongly agree). A listing of the items is shown in <Table 1>.

The survey respondents were graduate students that were recruited from a large university in South Korea. They were compensated with course credit for their participation. The sample (N = 201) consisted of 106 males (52.7 %) and 95 females (47.3%) with an average age of 33.0 years (SD = 5.8). Their weekly average Internet use was 20.4 hours (SD = 17.5). Respondents were asked to recall the online bookstore that they visited recently and to answer the survey questions based on their experience with the Web site. The online bookstores that were used are Yes24 (www.yes24.com, 78 users, 38.8%), Kyobo books (www.kyobobook.com,

<Table 1> Measured Items

Constructs/items	References
Maximization (1: strongly disagree-7: strongly agree) MX1: When I watch TV, I channel surf, often scanning through the available options even while attempting to watch one program. MX2: When I am in the car listening to the radio, I often check other stations to see if something better is playing, even if I'm relatively satisfied with what I'm listening to. MX3: I treat relationships like clothing: I expect to try a lot on before I get the perfect fit. MX4: No matter how satisfied I am with my job, it's only right for me to be on the lookout for better opportunities. MX5: I often fantasize about living in ways that are quite different from my actual life. MX6: I'm a big fan of lists that attempt to rank things (the best movies, the best singers, the best athletes, the best novels, etc.). MX7: I often find it difficult to shop for a gift for a friend. MX8: When shopping, I have a hard time finding clothing that I really love. MX9: Renting videos is really difficult. I'm always struggling to pick the best one. MX10: I find that writing is very difficult, even if it's just writing a letter to a friend, because it's so hard to word things just right. I often do several drafts of even simple things. MX11: No matter what I do, I have the highest standards for myself. MX12: I never settle for second best. MX13: Whenever I'm faced with a choice, I try to imagine what all the other possibilities are, even ones that aren't present at the moment.	Schwartz *et al.* [2002]
Satisfaction (-3: strongly disagree, +3: strongly agree, coded as 1 to 7) How do you feel about your overall experience of <the Web site>: SA1: Very dissatisfied/very satisfied. SA2: Very displeased/very pleased. SA3: Very frustrated/very contented. SA4: Absolutely terrible/absolutely delighted.	Bhattacherjee, [2001b]
Usefulness (1: strongly disagree-7: strongly agree) PU1: <The Web site> is useful for searching and buying books. PU2: <The Web site> enables me to search and buy book faster. PU3: <The Web site> improves my performance in book searching and buying. PU4: <The Web site> enhances my effectiveness in book searching and buying.	Gefen *et al.* [2003]
Ease of use (1: strongly disagree-7: strongly agree) EOU1: <The Web site> is easy to use. EOU2: Learning to use <the Web site> is easy. EOU3: Interaction with <the Web site> does not require a lot of mental effort. EOU4: It is easy to become skillful at using <the Web site>.	Gefen *et al.* [2003]
Disconfirmation (1: strongly disagree-7: strongly agree) DC1: My experience with using <the Web site> was better than what I expected. DC2: The service level provided by <the Web site> was better than what I expected. DC3: Overall, most of my expectations from using <the Web site> were confirmed.	Bhattacherjee [2001b]
Product involvement (1: strongly disagree-7: strongly agree) PI1: Books are very important to me. PI2: For me, books do not matter (r). PI3: I have a strong interest in books.	Mittal [1995]
Continuance intention (1: strongly disagree-7: strongly agree) CU1: I intend to continue using <the Web site> rather than discontinue its use. CU2: My intentions are to continue using <the Web site> than use any alternative means. CU3: If I could, I would like to discontinue my use of <the Web site> (r).	Bhattacherjee [2001b]

58 users, 28.9%), and others (65 users, 32.3%). Differences in the measured variables between the users of the sites are not significant: the. weekly Internet use ($F(2,198) = 1.60$), the weekly Internet use ($F(2,198) = 0.36$), age ($F(2,198) = 0.79$), maximizing tendency ($F(2,198) = 2.14$), satisfaction ($F(2,198) = 2.08$), post-usefulness usefulness ($F(2,198) = 0.68$), disconfirmation ($F(2,198) = 1.07$), ease of use ($F(2,198) = 0.77$), product involvement ($F(2,198) = 0.65$), and continuance intention ($F(2,198) = 1.70$).

Ⅳ. Results

Descriptive statistics and correlations among the constructs are listed in <Table 2>. All of the constructs have a reasonable reliability, with a Cronbach's alpha that exceeds 0.7. The mean score of maximizing tendency is 4.45 (SD = 0.79, Cronbach's alpha = 0.81). The gender difference across maximizing tendency is not significant ($t = 0.65$). Using the maximizing scale, we divided the sample into two groups by median-split (median = 4.46, n of satisficers = 101, maximizers = 100). There were no significant differences in age ($t = -0.55$) and weekly Internet use ($t = -1.76$) between the satisficers and maximizers. Also, no significant differences in satisfaction ($t = -0.48$), usefulness ($t = 0.06$), disconfirmation ($t = -0.49$), ease of use ($t = -0.72$), product involvement ($t = 0.82$), and continuance intention ($t = -1.13$) were found (see <Table 3>).

Before analyzing our regression models, we conducted an exploratory factor analyses for each group by using principal component analysis with Varimax rotation (see <Table 4> and <Table 5>). The results of the exploratory factor analysis show that the measured items are highly loaded on the theoretical constructs. The factor loadings of each item are over 0.61 and the cross-loadings are under 0.40. Since significant factor loadings for a sample size of 100 is 0.55 [Hair *et al.*, 1998], the results of factor analysis indicate satisfactory levels of validity of the proposed constructs.

Next, we conducted three hierarchical regressions in order to assess the effect of satisfaction and usefulness on continuance intention, including the control variables. In the first step, the control variables, disconfirmation, perceived ease of use, and product involvement, entered

<Table 2> Descriptive Statistics and Correlations Among Variables

	mean	S.D.	1	2	3	4	5	6	7
1. maximizing tendency	4.45	0.79	**0.81***						
2. satisfaction	5.41	0.83	0.03	**0.87**					
3. usefulness	5.68	0.91	-0.03	0.43*	**0.92**				
4. disconfirmation	4.95	1.00	0.06	0.48*	0.49*	**0.86**			
5. ease of use	5.58	0.84	-0.01	0.43*	0.63*	0.40*	**0.90**		
6. product involvement	5.49	1.10	-0.07	0.11	0.22*	0.22*	0.18	**0.83**	
7. continuance intention	5.66	0.92	0.04	0.41*	0.57*	0.54*	0.44*	0.35*	**0.77**

Note) [a] Diagonal element is Cronbach's alpha.
* $p < 0.01$.

<Table 3> Results of t-tests Between Satisficers and Maximizers

	group	mean (SD)	mean difference	t-value
satisfaction	satisficers	5.38 (0.88)	-0.06	-0.48
	maximizers	5.44 (0.77)		
usefulness	satisficers	5.68 (0.99)	0.01	0.06
	maximizers	5.67 (0.82)		
disconfirmation	satisficers	4.92 (1.02)	-0.07	-0.49
	maximizers	4.99 (0.98)		
ease of use	satisficers	5.53 (0.89)	-0.09	-0.72
	maximizers	5.62 (0.78)		
product involvement	satisficers	5.56 (1.22)	0.13	0.82
	maximizers	5.43 (0.95)		
continuance intention	satisficers	5.58 (0.94)	-0.15	-1.13
	maximizers	5.73 (0.89)		
weekly Internet use	satisficers	18.25 (18.25)	-4.34	-1.76[a]
	maximizers	22.59 (22.59)		
age	satisficers	32.76 (5.97)	-0.45	-0.55
	maximizers	33.21 (5.65)		

Note) [a] $p < 0.1$, two-side.

<Table 4> Exploratory Factor Analysis for the Aatisficers Group

	1	2	3	4	5
PU3	***0.84***	0.26	0.20	0.20	0.10
PU2	***0.84***	0.33	0.12	0.21	0.13
PU4	***0.83***	0.17	0.19	0.25	0.09
PU1	***0.71***	0.39	0.19	0.29	0.02
EOU2	0.16	***0.88***	0.17	0.12	0.06
EOU3	0.14	***0.87***	0.03	0.22	0.03
EOU4	0.35	***0.79***	0.14	0.07	0.07
EOU1	0.40	***0.73***	0.18	0.06	0.12
SA3	0.11	0.20	***0.87***	0.15	-0.07
SA4	0.31	0.02	***0.85***	0.14	0.00
SA2	0.03	0.24	***0.81***	0.17	0.02
SA1	0.28	-0.01	***0.66***	0.42	0.15
DC1	0.17	0.19	0.20	***0.83***	0.13
DC2	0.24	0.10	0.26	***0.83***	0.05
DC3	0.35	0.19	0.20	***0.76***	0.13
PI2	0.14	0.09	-0.01	0.09	***0.91***
PI1	0.03	0.13	-0.03	0.16	***0.89***
PI3	0.07	-0.01	0.06	0.02	***0.87***
eigenvalues	3.35	3.26	2.93	2.52	2.51
% of variances	18.59	18.12	16.25	14.00	13.95

Note) PU: usefulness, EOU: ease of use, SA: satisfaction, DC: disconfirmation, PI: product involvement. Method: Principal component analysis with Varimax rotation.

<Table 5> Exploratory Factor Analysis for the Maximizers Group

	1	2	3	4	5
PU1	***0.85***	0.03	0.25	0.17	0.14
PU3	***0.84***	0.22	0.33	0.09	0.04
PU2	***0.84***	0.09	0.17	0.11	0.05
PU4	***0.75***	0.14	0.31	0.14	0.10
SA4	0.21	***0.86***	0.17	0.01	0.04
SA3	0.02	***0.86***	0.26	0.11	0.07
SA2	0.04	***0.71***	0.11	0.30	-0.01
SA1	0.22	***0.68***	0.16	0.35	0.15
EOU3	0.23	0.09	***0.87***	0.12	0.03
EOU4	0.30	0.20	***0.78***	0.10	0.11
EOU1	0.31	0.27	***0.70***	0.21	0.12
EOU2	0.36	0.34	***0.69***	0.10	-0.07
DC2	0.14	0.12	0.17	***0.91***	0.13
DC1	0.05	0.21	0.04	***0.82***	0.06
DC3	0.29	0.20	0.20	***0.75***	0.02
PI2	0.05	-0.04	0.04	0.06	***0.92***
PI1	0.07	-0.03	0.04	0.21	***0.89***
PI3	0.11	0.23	0.05	-0.06	***0.61***
eigenvalues	3.28	2.91	2.84	2.50	2.12
% of variances	18.25	16.14	15.78	13.89	11.79

Note) PU: usefulness, EOU: ease of use, SA: satisfaction, DC: disconfirmation, PI: product involvement. Method: Principal component analysis with Varimax rotation.

the regression models for both the satisficers and maximizers. Satisfaction and usefulness were added in the second step. In order to explore the possible moderating effects of maximizing tendency on continued use, we included the maximizing scale in the full model. The maximum Variance Inflation Factor (VIF) index for the three regression models is 2.15, indicating that multicollinearity between the independent variables is not significant [see <Table 6>, Hair *et al.*, 1998]. The regression models explained 46% of continuance intention for the total sample, 61% for satisficers, and 35% for maximizers. With the control variables, the effect sizes of the hierarchical regression [f^2, Cohen, 1988] are 0.13 for total sample, 0.29 for satisficers, and 0.02 for maximizers.

In the full model, the effects of maximizing tendency (β = 0.04, t = 0.79), ease of use (β = 0.05, t = 0.74), and satisfaction (β = 0.10, t = 1.51, $p < 0.14$, two-side) are not significant on continuance intention. Disconfirmatoin (β = 0.26, t = 3.96, $p < 0.01$), product involvement (β = 0.21, t = 3.76, $p < 0.01$), and usefulness (β = 0.33, t = 4.48, $p < 0.01$) have a positive and significant effect on continuance intention. In the satisficers model, disconfirmatoin (β = 0.31, t = 3.65, $p < 0.01$), product involvement (β = 0.19, t = 2.88, $p < 0.01$), and usefulness (β = 0.43, t = 4.58, $p < 0.01$) are also significant. Satisfaction has a marginal significance with continuance intention (β = 0.14, t = 1.78, $p <$

<Table 6> Coefficients of regression models

		full model			satisficers model			maximizers model		
step		beta	t	VIF	beta	t	VIF	beta	t	VIF
1	constant		2.40			2.77			1.93	
	MT	0.03	0.57	1.01						
	EOU	0.24	3.96**	1.21	0.14	1.73*	1.22	0.35	3.82**	1.19
	DC	0.39	6.25**	1.24	0.55	6.84**	1.25	0.21	2.35**	1.20
	PI	0.23	3.92**	1.07	0.20	2.68**	1.07	0.26	3.01**	1.05
	R^2	0.39			0.49			0.34		
2	constant		1.09			1.31			1.56	
	MT	0.04	0.79	1.01						
	EOU	0.05	0.74	1.74	-0.08	-0.95	1.64	0.27	2.29**	2.03
	DC	0.26	3.96**	1.55	0.31	3.65**	1.80	0.20	2.09**	1.34
	PI	0.21	3.76**	1.08	0.19	2.88**	1.08	0.24	2.84**	1.07
	SA	0.10	1.51	1.44	0.14	1.78*	1.48	-0.03	-0.26	1.50
	PU	0.33	4.48**	1.90	0.43	4.58**	2.15	0.15	1.35	1.78
	F	27.61**			29.38**			10.24**		
	R^2	0.46			0.61			0.35		
	ΔR^2	0.07			0.12			0.01		
	f^2	0.13			0.29			0.02		

Note) * $p < 0.1$, ** $p < 0.05$, two-side.
MT: maximizing tendency, EOU: ease of use, DC: disconfirmation,
PI: product involvement, SA: satisfaction, PU: usefulness.

0.08), and ease of use does not affect continued intention (β = -0.08, t = -0.95). In the maximizers model, satisfaction and usefulness explained only small variances of continuance intention [Cohen, 1988] and their impacts are not significant (β of satisfaction = -0.03, t = -0.26, β of usefulness = 0.15, t = 1.35). However, all the control variables have positive impacts on continuance intention. The effects of ease of use (β = 0.27, t = 2.29, $p < 0.03$), disconfirmation (β = 0.20, t = 2.09, $p < 0.04$), and product involvement (β = 0.24, t = 2.84, $p < 0.01$) on continuance intention are significant.

V. Discussion

This study explores the role of usefulness and satisfaction in continuance intention of Web sites as moderated by users' maximizing tendency. The results indicate that the effect of satisfaction on continuance intention is not significant. It is marginally associated with continuance intention for satisficers (H3 is not supported), and its effect is not significant for maximizers and the full sample (H1 is not supported). However, the effect of usefulness on continuance intention is significant for the

full sample (H2 is supported). It is also significant with continuance intention for satisficers (H4 is supported), and is not significant for maximizers.

Our results are congruent with past studies in the psychology and marketing literatures. Although the functions and perceptions of IS are important for explaining affective and conative attitudes, the relationships among perception (usefulness), affective attitude (satisfaction), and conative attitude [continuance intention, see Ajzen and Fishbein, 1980 for a review of attitude component) vary by individuals' characteristics and environmental conditions [e.g., Castañeda *et al.*, 2007]. Individuals' decision-making on continuance intention also can be influenced by users' maximizing traits and the characteristics of the Web. Our results indicate that maximizers who are satisfied with a particular Web site may still switch to other Web sites.

Although the effects of satisfaction and usefulness on continuance intention are not significant for maximizers, the effects of all the control variables are significant. An interesting finding for the maximizers group is the positive relationship between ease of use and continuance intention. Significant associations between ease of use and behavioral intention varies by the characteristics of users and tasks [King and He, 2006], and a positive association between ease of use and continuance intention has been found for mobile Internet users [Venkatesh *et al.*, 2003]. However, the effect of perceived ease of use on behavioral intention to use online recommendation services is not significant for college students who are familiar with Web technologies [e.g., Lee and Lee, 2009]. In our sample, maximizers use the Internet more than satisficers, and because they tend to invest time and effort when making their decisions, their instrumental perspective on ease of use can be an important factor when searching for and buying books. Our results differ from previous studies of IT continuance in that perceived ease of use plays an important role in explaining continuance intention of Web sites.

Ⅵ. Conclusions

6.1 Implications

Our results extend prior research on IT acceptance and IT continuance. The primary contribution of this study is that individual differences in consumers' maximizing tendency moderate the effects of satisfaction and usefulness on continued use of Web sites. For practitioners, our findings can be applied as follows. First, IS practitioners should focus on the effects of maximizing tendency on the use of Web sites and design their customer relationship management strategies to increase switching costs. Because satisfaction is short-term and a transaction specific affect, practitioners should provide sustainable benefits and reasons for consumers to continue to use their Web sites. For example, positive consumers' reviews, recommendation services, and royalty programs can create good will and increase switching costs. Second, practitioners should devote their efforts to identify maximizing tendencies and the extent of product involvement in their target segments. Although these kind of individual differences are not easily acquired in the initial stages of customer relationships, methods such

as consumer surveys and focus group interviews may provide useful insights about the firm's customers. User responses can serve as input for informed decisions about how to reach out to maximizing or satisficing-oriented users and successfully launch new services. Finally, practitioners should focus on the utility of their Web sites and make them convenient and easy to use. Although many users are familiar with Web technologies, maximizers' perception of ease of use may influence their continuance intentions.

For researchers, our findings can be applied as follows. This research explores the gap between satisfaction and behavioral intention from the perspective of individual differences in maximizing tendencies. Previous studies suggest that the determinants of IS usage continuance during initial use and post-adoption are different [e.g., Bhattacherjee, 2001b; Bhattacherjee and Sanford, 2009] and although IS satisfaction has been investigated in both contexts, its impact on continuance intentions, specifically with commercial Web sites, needs further clarifications. Because an individuals' maximizing tendency affects their decision-making in various usage situations, the results of this research can be used to help develop and target specific segments of the customer population. Finally, our research adds to the growing body of understanding IT continuance, and our results suggest that the effect of ease of use on continuance intention is moderated by users' maximizing tendency.

6.2 Limitations and Future Research

Past studies show that individuals' habits not only influence their decision-making during consumption [Ji and Wood, 2007], but also moderate the relationship between usage and IS continuance intention [Limayem *et al.*, 2007]. We are therefore interested in improving our understanding of what the key determinants are of habitual use and users' inertia in Web site continuance. Because this study was conducted in the online bookstore context, we suggest that research can expand on our finding by further distinguishing consumers' behaviors that affect continuance intentions in a variety of domains. For example, maximizing tendency may influence the perception of information overload [e.g., Chen *et al.*, 2009] and online consumer reviews [e.g., Lee *et al.*, 2008].

There are more variables and antecedents that can be evaluated, and a recent study on continuance use of online services [Kim and Son, 2009] suggests two more divergent antecedents: dedication and constraint. Research on the relationships between maximizing tendency, dedication-based outcomes (such as usage intention and word of mouth), and constraint-based outcomes (such as willingness to pay and inattentiveness to alternatives) may provide useful insights to further our understanding of continuance use of IS.

The results of this research can be further applied in the innovation diffusion perspective [Rodgers, 2003]. Parthasarathy and Bhattacherjee [1998] report on the differences between potential discontinuers and continuing users in the context of online services. Their study indicates that potential discontinuers can be discriminated from adopters who continue their usage based on their sources of influence (external and interpersonal), perceived service at-

tributes (usefulness and compatibility), service utilization, and network externality (complementary product usage), during their time of initial adoption. Therefore, further research on the effects of maximizing tendency on consumers' decision-making during their post adoption usage experiences will further our understanding about their switching decisions.

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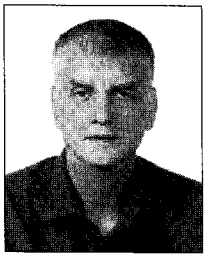

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