

Examining the Effect of Online Switching Cost on Customers' Willingness to Pay More*

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Internet vendors are gradually realizing the importance of "locking-in" online customers in order to ensure profitability. Erection of switching barriers increases customers' lock-in and in turn may result in their willingness to pay price-premium for the same service. However, raising customer lock-in online is difficult because search costs are very low. Therefore, this study examines the effect of switching barriers (customer satisfaction, perceived value and relative advantage) on switching costs and the effect of switching costs on customer's willingness to pay more. Since switching costs and consequent relationships may depend upon the type of product therefore the research model in this study is examined for both search products and experience products. Data is collected through an online survey from two websites (one each for search product and experience product). The empirical results show the key role of switching costs in customers' willingness to pay more and the relationships among the four constructs. The theoretical and practical implications of this study are also discussed.

Keywords : IS Management, Switching Cost, Online Consumer Behavior, Willingness to Pay More, Satisfaction, Relative Attractiveness

* This work was supported by the National Research Foundation of Korea Grant funded by the Korean Government (327-2010-1-B00168). This work was also supported by Yonsei University under Grant 2011-1-0279.

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I . Introduction

According to SciVisum eCommerce Regional Rift Study undertaken across the UK in May 2006, nearly three quarters of UK shoppers are turning their backs on the high street to shop online, with an average spending of £89 per month. About one in ten UK consumers confess that they would splurge £5000 or more on a single purchase. The massive spending power online means online suppliers have to think long and hard about attracting and retaining customers.

Essential to the online vendors' customer acquisition strategy is that customers experience some form of "lock-in" or switching costs so that they do not switch to other vendors. Lock is also necessary for recovering initial investment in customer acquisition [Chen and Hitt, 2002; Monroe, 1990]. Switching cost functions like a barrier that prevents customer from changing vendors easily. Weiss and Anderson [1992] suggest that customers consider switching barriers when contemplating switching to other vendors which results in reduced customer switching [Ping, 1993; Morgan and Hunt, 1994]. Smith and Brynjolfsson [2001] find that brand is an important of customer's willingness to pay more in the online shopping context, suggesting that consumer use brand as a proxy for retailer credibility in non-contractible aspects of the product and service bundle. As such, the customers possess satisfaction and reliability of their favorable brands and therefore switching cost may be incurred when they purchase other brand or no-brand products. Therefore, there is a very strong motivation for online vendors to realize the importance of switching costs in order to 'lock-in' their customers, recover the initial customer acquisition cost and ensure a stream of

long-term profits.

Switching costs as a construct has been studied in various fields such as economics, marketing and management literature. It is associated with the likelihood of continuing an exchange relationship with a supplier [Weiss and Anderson, 1992; Morgan and Hunt, 1994; Ping, 1993] and customer repurchase intentions [Jones *et al.*, 2002]. Increased switching costs means increased customer retention, increased profits. However, contrary to the offline context, online customers actually face low search costs, easy comparison between different online vendors and low switching costs. It has been observed that over 50 percent of customers stop visiting a website completely before their third anniversary of using the website [Reichheld and Scheffer, 2000]. Therefore, if vendors are unable to 'lock-in' customers, long-term profitability may be difficult to achieve. Searching the products of each shop is available online than offline and price can be compared easily, which results in lower switching cost. As online, however, does not provide face to face contact with the customers, they do not put sufficient reliability and confidence to the shops and commodities sometimes. Accordingly the customers continue their transaction with the vendors whose products were verified to be reliable and it is connected with the "willing to pay more" in consideration of switching cost. In this regard, this paper intends to find what affects the switching cost along with the relation between the switching cost and willing to pay more for the vendors to raise the loyalty of their customers under online environments.

Bendapudi and Berry [1997] argue that customers can be locked-in either through dedication-based relationship building approach or through constraint-based relationship building approach or

both. They posit that customers maintain relationship with a vendor either because of constraints (i.e., "have to" stay in the relationship) or because of dedication (i.e., "want to" stay in the relationship). While customers in constraint-based relationships preserve relationship because of exit costs (i.e., switching costs), customers in dedication-based relationships preserve the relationship out of their desire for continuance. Constraint-based and dedication-based relationships act together to bring about customer's online shopping continuance with the company. Switching costs must be high for constraint-based relationship building [Bendapudi and Berry, 1997; Fullerton, 2003; Heide and Weiss, 1995; Ng and Kwahk, 2010]. For the dedication-based relationship building, customer satisfaction [Ng and Kwahk, 2010], perceived value [Bitner and Hubbert, 1994; Oliver, 1999; Ng and Kwahk, 2010; Bolton and Drew, 1991; Sirdeshmukh *et al.*, 2002], and relative attractiveness of the store [Bendapudi and Berry, 1997] must be high.

The objective of this study is to examine the main role and effect of switching costs on an individual customer's willingness to pay more in the context of online shopping. Although there can be other factors affecting the willingness to pay more in the online shopping context, this study focuses on the key effect of switching costs. This study further examines the antecedents of switching cost. Specially, there are two research questions: (1) how switching costs affect an individual's willingness to pay more and (2) what factors affect the development of switching costs. This study adopts the theoretical foundation from the two different types of customer relationships, dedication-based and constraint-based relationships [Bendapudi and Berry, 1997; Kim and Son, 2009]. Based on the dedication-based relationships and

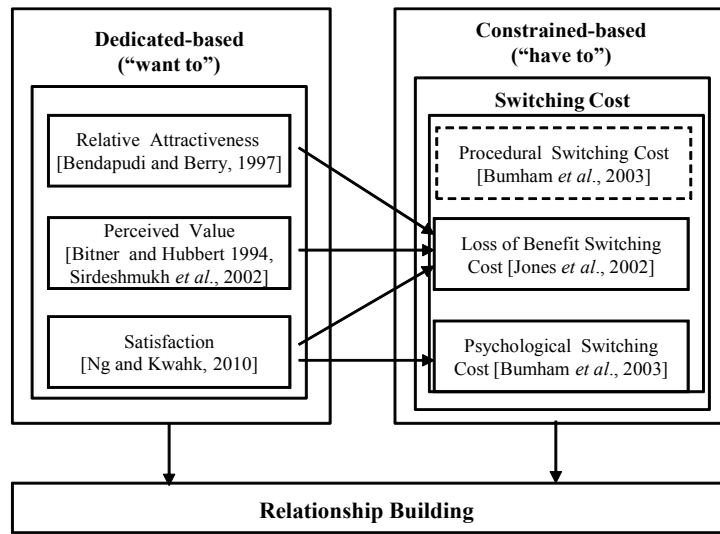
constraint-based relationships, this study identifies the factors related to the two types of customer relationships and examines the relationships among the factors related to the switching costs. This study thus suggests that switching cost (i.e., constraint based factor) mediates between dedication based factors and willingness to pay more based on the research objective, i.e., to examine the main role and effect of switching cost on an individual customer's willingness to pay more.

II. Conceptual Background

2.1 Dedication-based and Constraint-based Relationship Building

There are two approaches to relationship building with customers: dedication-based and constraint-based [Bendapudi and Berry, 1997]. Individuals in *dedication-based relationship* desire continuance [Bendapudi and Berry, 1997]. Dedication-based relationship development emphasizes the development of a relationship because the individual actively desires it. The literature in marketing suggests several factors such as satisfaction [Ng and Kwahk, 2010], perceived value [Bitner and Hubbert, 1994; Sirdeshmukh *et al.*, 2002], and relative attractiveness [Bendapudi and Berry, 1997] that enhance dedication-based relationships.

Constraint-based relationship development occurs when a party to the relationship believes that it cannot exit the relationship due to economic, social, or psychological costs involved in doing so [Bendapudi and Berry, 1997]. In marketing literature, increasing switching cost is mentioned as a means for building constraint-based relationships [Bansal *et al.*, 2004]. There are several types



<Figure 1> Conceptual Framework

of switching costs such as procedural switching costs [Burnham *et al.*, 2003], loss of benefit switching costs [Jones *et al.*, 2002], and psychological switching costs [Burnham *et al.*, 2003].

Kim and Son [2009] develop and test a model that explains post-adoption behaviours in the context of online services. They propose that dual mechanisms (dedication-based mechanism and constraint-based mechanism) are at work in influencing online service outcomes and that each mechanism tends to be independent in that dedication-based factors influence the dedication-based mediator but not the constraint-based mediator (switching cost).

2.2 Switching Cost

In the economics literature, switching costs are defined as relationship-specific investment between buyers and suppliers [Farrell and Shapiro, 1988]. In buyer-supplier relationships, switching costs are defined as an overall cost or difficulty of

switching [Weiss and Anderson, 1992], additional cost and effort in changing suppliers [Ping, 1993], an undefined component of termination [Morgan and Hunt, 1994] and investments that inhibit change [Nielson, 1996].

Burnham *et al.* [2003] define switching costs as one-time costs that customers associate with the process of switching from one provider to another. Jones *et al.* [2000] define switching costs as the perceived economic and psychological costs associated with changing from one alternative to another. Similar to the marketing literature, in the IS literature, Chen and Hitt [2002] define switching costs as any perceived disutility an individual would experience due to switching service providers. Common to these definitions is the perceived disutility one feels as a result of switching. Therefore, following previous research, the present study defines switching costs as *the perceived disutility a customer would incur in switching from one vendor to a new vendor.*

In the context of experience/service products

(such as flowers), customers seem to encounter higher switching costs and it is difficult to switch even when quality and performance perceptions may be less than ideal. This is because that clients of some professional service or "experience" product perceive considerable risk and uncertainty in switching to alternative provider. The present research conceptualizes switching costs as customers' perceived costs including perception time, effort, difficulty, and money associated with switching from one vendor to another.

Klemperer [1987] identifies three different types of switching costs, namely transaction costs, learning costs, and contractual costs. Transaction costs are costs that occur in starting a new relationship with a provider and sometimes also include costs incurred in terminating an existing relationship. Learning costs represent the effort required by the customer to reach the same level of comfort or knowledge acquired by using a product and which may not be transferable to other brands of the same product type. Contractual costs are directly induced by the firm to reward loyalty and thus prevent switching by customers. It includes examples such as repeat-purchase discounts or rewards and frequent flyer programs.

Besides these explicit costs, there are also implicit switching costs associated with decision biases and risk aversion [Caruana, 2004]. Therefore, switching costs also comprise psychological and emotional costs. A customer avoids the accompanying psychological and emotional stress and the risk and uncertainty which would ensue as a result of the termination of the current relationship [Caruana, 2004]. Guiltman [1989] identifies four types of switching costs: contractual, set-up, psychological commitment, and continuity costs. Burnham *et al.* [2003] provide a useful topology

by classifying switching costs into three categories that can be used for both tangible and services: procedural switching costs, financial switching costs, and relational switching costs. However, the present study conceptualizes switching costs as a single-dimensional construct because the research objective is to examine the relationships among the relationship building constructs rather than examining the dimensions of switching costs.

We select four relationship building factors, namely satisfaction, perceived value, and relative-attractiveness for dedication-based relationship building and switching costs for constraint-based relationship building. Relative attractiveness is an indication of the worth of the current store in comparison with other vendors. Perceived value and satisfaction represents cognitive and affective experiences with the current online vendor. The presence of switching costs makes other vendors less attractive. When a customer has relationship with the vendor he may be willing to pay extra rather than switching to another vendor. Therefore, we also examine willingness to pay more as a consequence of switching costs.

Conceptual frameworks of this paper divided the switching cost recognized by the consumers into three categories such as Procedural Switching cost, Loss of benefit switching cost and Psychological switching cost. Procedural switching cost is related to the consumption of time and efforts like set up cost or learning cost while the Loss of benefit switching cost is to their own interests and financial consumption such as the benefit loss cost and monetary loss cost. Finally the psychological switching cost can be explained to be psychological discomforts. Using dedicated-based factors as antecedents of these switching costs may indicate that when having relative

attractiveness and perceived value, Loss of benefit switching cost is incurred and when getting satisfaction, Loss of benefit switching cost and Psychological switching cost is incurred in case of moving from specific vendors to other vendor by connecting relative attractiveness, perceived value and satisfaction which a consumer feels to switching costs.

2.3 Relative Attractiveness

Online customers are value-driven [Levy, 1999] and are assumed to have well-defined preferences for alternatives offered to them. Therefore, they select the alternative that offers them the highest utility [Dhar and Simonson, 1992]. Customers will thus choose the one with high relative attractiveness. Most of the previous research focus on alternative attractiveness instead of relative attractiveness [Jones *et al.*, 2000]. Relative attractiveness takes the current vendor as the reference point, while alternative attractiveness takes other vendors as the reference point. Alternative attractiveness is conceptualized as the client's estimate of the likely satisfaction available in an alternate relationship [Ping, 1993]. A lack of attractive alternative offerings has been suggested to be a favourable situation to defend clients [Ping, 1993]. The problem about alternative attractiveness is that customers often lack enough information about alternatives - a situation called knowledge uncertainty [Urbany *et al.*, 1997].

Customers with high knowledge uncertainty are more likely to quickly engage a heuristic choice that overrides any consideration of alternative evaluation [Urbany *et al.*, 1997]. Therefore, relative attractiveness of the current vendor will dominate customer's buying decision, especially when

customers do not have enough information about alternate vendors.

This study defines relative attractiveness as the customer's perception regarding the extent to which the Internet shopping at the current vendor is considered a better alternative as compared to shopping at alternate vendors. Customer's perceived qualities and benefits received will determine the relative attractiveness of purchasing with the current vendor.

2.4 Satisfaction

Two main conceptualizations of customer satisfaction are mentioned in the literature on satisfaction, namely transaction-specific and cumulative [Boulding *et al.*, 1993]. From a transaction-specific perspective, customer satisfaction can be viewed as a post-choice evaluative judgment of a specific purchase occasion [Oliver, 1993]. On the contrary, cumulative satisfaction is an overall evaluation based on the purchase and consumption experience with a product or service over a period of time [Fornell, 1992]. Transaction-specific satisfaction may provide specific diagnostic information about a particular product or service encounter, while cumulative satisfaction is a better indicator of a firm's overall customer service. Lin [2003] defines customer satisfaction as the result of a cognitive and affective evaluation, where some comparison standard is compared to the actual perceived performance. According to Fournier and Mick [1999], customer product satisfaction is an active, dynamic process; the satisfaction process often has a strong social dimension; meaning and emotion are integral components of satisfaction; the satisfaction process is context-dependent and contingent, encompassing multiple paradigms,

models, and modes; and product satisfaction is invariably intertwined with life satisfaction and the quality of life itself. Satisfaction has also been defined as an emotional response manifested in feelings, conceptually distinct from cognitive responses, brand affect and behavioural responses [Day, 1983] and as an emotional state resulting from a process of combining cognitive evaluations [Sirgy, 1984]. This study defines satisfaction as a customer's affect towards online shopping with the focal vendor. It is linked to purchase experience and derived from perception of product or service quality.

2.5 Perceived Value

Customer value creation is discussed in the practitioner literature. It is often included in the organization's mission statement and objectives. It has been considered as the key to the long-term success and one of the most powerful forces in today's marketplace. Albrecht [Albrecht, 1992] argues that the only thing that matters in the new world of quality is delivering customer value. Perceived value is frequently conceptualized as involving a consumer's assessment of the ratio of perceived benefits and perceived costs [Monroe, 1990; Liljander and Strandvik, 1992]. Previous research [Zeithaml, 1988] conceptualized value as a comparison of weighted "get" (e.g., quality) attributes to "give" (e.g., price) attributes. These two components have different and differential effects on perceived value for money.

Zeithaml [1988] argued that some consumers perceive value when there is a low price; others perceive value when there is a balance between quality and price. Thus, for different consumers, the components of perceived value might be

weighted differently. Moreover, perceptions of value are not limited to the functional aspects but may also include social, emotional and even epistemic components [Sheth *et al.*, 1991]. The present study defines perceived value as net benefit (perceived benefit relative to perceived cost) from a transaction with an Internet vendor [Gupta and Kim, 2010].

2.6 Willingness to Pay More

As a consequence of relationship building, the present study considers customer's willingness to pay more. Willingness to pay more is an important issue in Internet shopping as it deals with the profitability of online suppliers. A report by McKinsey and Company found that one-percent increase in price produces an average increase in profitability of 7.4 percent. Willingness to pay is defined as the maximum amount of money a customer is willing to spend for a product or service [Cameron and James, 1987; Krishna, 1991]. Willingness to pay is a measure of the value that a person assigns to a consumption or usage experience in monetary units. Economists refer to willingness to pay as the reservation price [Monroe, 1990]. Willingness to pay more has been defined as willingness to continue purchasing from the online vendor despite an increase in price [Fullerton, 2003] paying excess price, over and above the "fair" price that is justified by the "true value" of the product [Rao and Bergen, 1992] or willingness to pay price premium [Nault, 1995]. Price premium is viewed primarily from the vendor's point of view, while willingness to pay more is from customer's perspective. The present study defines willingness to pay more as customer's willingness to pay the price premium in order to stay with

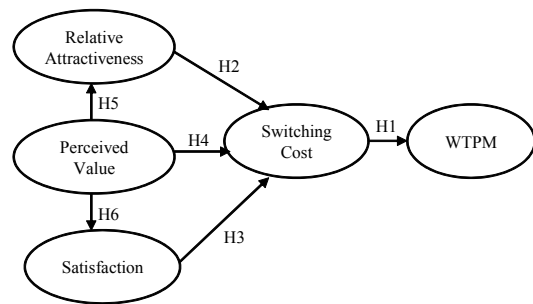
the current online vendor.

III. Research Model and Hypotheses

Based on the discussion above, the research model for this study is shown in <Figure 2>. As discussed earlier, four factors, namely satisfaction, relative attractiveness, perceived value, and switching costs that are related to relationship buildings in Internet shopping. We now discuss how the identified factors are related with switching costs and how switching costs influences willingness to pay more <Figure 2>. This study is to examine whether switching cost affects online customers' willingness to pay more and the factors affecting the switching cost. In this regard this research established following study model.

Switching costs encompass both monetary and non-monetary costs (for example, the time spent and psychological effort) [Dick and Basu, 1994]. Switching costs also involve cost and constraints of searching alternative vendors, such as time constraint, mobility constraint, and difficulty of store comparison [Urbany *et al.*, 1997]. All these costs will increase the "full price" of the products [Ehrlich and Fisher, 1982] : *Full price of a product = product price + search cost + disappointment cost*

Before switching, a customer has to spend time and effort in searching information about alternative vendors and process the collected information. Especially for the customers who regard time of great value, they tend to avoid "wasting" or "spending" time in searching a new vendor. Like money, time is also a resource. Constrained resources prevent people from getting and doing what they want [Okada and Hoch, 2004]. The search cost which is one type of switching costs



<Figure 2> Research Model

will translate into a higher "full price" of the product. Instead of spending time searching for an alternative vendor, customers are willing to pay the price premium if the price premium (i.e., higher price than the normal price) is lower than the search cost. Consumers generally pay price premium for convenience and incur temporal transaction costs in the process of information search and uncertainty reduction [Carlson and Gieseke, 1983; Marmorstein *et al.*, 1992]. Previous studies also argued that vendor may be able to earn higher price if switching costs are sufficiently high [Lieberman and Montgomery, 1988].

H1: Switching cost is positively related to willingness to pay more.

Customers desire to transact with a vendor that provides greater benefits and better quality as compared to other vendors. In fact the benefits received from the vendor determine the relative attractiveness of purchasing from the current vendor. When Internet transaction with a vendor is relatively more attractive than other vendors, customers may want to stay in the relationship with the current vendor [Sung and Choi, 2010]. But, Customers may decide to terminate the relationship with the current vendor and switch

to a new online vendor, if they perceive the new online vendor to be more attractive (such as due to availability of better products or services). On the contrary, if customers switch from the current vendor to alternative vendors, they would lose the benefits they have enjoyed in Internet transactions with the current vendor [Kim and Gupta, 2012].

H2: Relative Attractiveness is positively related to switching costs.

The present study concentrates on satisfaction in online transaction with the focal vendor. Satisfaction is a post-experience evaluation of internet transactions with the vendor. Satisfied customers feel comfortable in existing relationship as their perception of risk and uncertainty are reduced. If customers switch from the current satisfactory vendor to another, they will lose the satisfactory transaction relationship with the current vendor, which will lead to a loss of benefits related to switching. This is because of lack of direct experience with the alternative vendor. Customers will therefore feel uncomfortable in terminating the satisfactory transaction relationship with the current vendor, worrying about uncertainty in satisfactory experience with alternative vendors. Oliver [1981] and Oliver and Swan [1989] asserted in their study that satisfaction affected the consumer's intention of re-purchasing. Rust and Zagorsk [1993] said that the switching behavior was affected by dissatisfaction. Therefore, those customers who are satisfied with the transactions with the current vendor will perceive higher switching costs than those customers who are less satisfied.

H3: Satisfaction is positively related to switching costs.

From the customers' point-of-view, obtaining value is a fundamental goal in most transactions with a vendor and pivotal to all successful exchange transactions [Holbrook, 1994]. Customers will still choose to purchase from the current vendor if the transaction with the vendor provides more value to them.

Customers seek value from their purchases. If online vendors can provide high value, then this value acts like a barrier that locks the customers in. Also because of the value delivered by the supplier, customer will form a dependence on the partner to achieve rational outcomes (value), and then he or she will feel constrained to terminate the relationship. If the customer decides to switch from the present vendor, the customer may lose the value of the transactions with the vendor (i.e., loss of benefit). Perceived value in transactions with an online vendor will thus increase switching costs.

H4: Perceived value is positively related to switching cost.

Perceived value is frequently conceptualized as involving a consumer's assessment of the ratio of perceived benefits and perceived costs [Liljander and Strandvik, 1992; Monroe, 1990], while relative attractiveness is determined by the product or service quality, perceived performance and benefits offered by the vendor. In other words, relative attractiveness is highly dependent on customer's perceived value. The greater the value delivered by the vendor the greater will be customer's perception of current provider's being unique and more attractive. Therefore, transactions with the current vendor will become more attractive as compared to transactions with other vendors.

H5: Perceived value is positively related to Relative attractiveness.

Hartnett [Hartnett, 1998] noted that when retailers satisfy customers' need, they are delivering value, which puts them in a much stronger position in the long term. It has been long recognized that customer satisfaction is dependent on value [Eggert and Ulaga, 2002].

The self regulatory processes in psychology [Bagozzi *et al.*, 1992] explains that cognitive judgement (i.e., perceived value) leads to affective response (i.e., satisfaction). Perceived value is a customer's overall evaluation or appraisal of the attribute performance and that satisfaction reflects the impact of the total value delivered on customer's feeling state.

Performance not only refers to quality, but also to other service such as shorter waiting time, and quick delivery. All these add to customer's perceived value, and further increase customer satisfaction. Thus, customers' recent experience of transaction with the online vendor will have a positive influence on their overall assessment of how satisfied they are with the vendor. Therefore, we expect that the perceived quality of goods and services will also have a positive impact on customer satisfaction.

H6: Perceived value is positively related to Satisfaction.

IV. Research Methodology

The present study adopted an online survey approach in testing the hypotheses. An online questionnaire was developed based on the research model by adopting the existing validated

scales wherever possible. We began with a literature review that generated an inventory of items designed to measure each of the constructs. This inventory of items was further refined and adapted to reflect the definition of each construct. The questionnaire was administered using a seven-point Likert scale (1 = Strong agree (not at all likely), 7 = Strong agree (very likely)). The final list of items is presented in Appendix A.

In our first study, an Internet bookstore was chosen for data collection due to the "search" or "low touch" nature of its products (i.e., books). Customers are likely to become aware of the generalities of a book before purchase, such as its genre, author, plot, and size through research. Because the form or fonts of a books do not change and all consumers receive identical looking products, books belong to the type of search product. The market for online books is one of the largest and fastest-growing markets [Li and Gery, 2000]. Empirical data was collected using an online survey. Invitation emails with the URL of the online survey website were sent to the registered customers of this online bookstore. The final sample comprises 369 complete responses (see <Table 1>).

In our second study, an Internet flower shop was chosen for data collection due to the "experience" or "high touch" nature of its products (i.e., flowers). Shape is an important factor for flowers, but people's preference for flowers change with their scents, too. Since one is not able to smell a flower online and everyone has a different favorite flower scent. Their preferences rely heavily on past experiences. In addition, since the appearance of flowers shown online and the actual state of the flower upon consumer's receiving may differ. Flowers therefore belong to the type of

<Table 1> Descriptive Statistics of Respondents

Measure	Mean	S.D.	Item	Frequency		Percentage	
				Online Book store	Online Flower shop	Online Book store	Online Flower shop
Gender	-	-	Female	270	87	73.2	33.3
			Male	99	174	26.8	66.7
Age	30.1 ^(B) 32.7 ^(F)	18.0 ^(B) 5.9 ^(F)	< 20	53	0	14.4	0
			20~29	138	83	37.4	31.8
			30~39	143	151	38.8	57.9
			> 39	35	27	9.4	10.3
Profession	-	-	Housewife	79	5	21.4	1.9
			Student	138	12	37.4	4.6
			Employed	89	203	24.1	77.8
			Self-employed	13	21	3.5	8.0
			Others	50	20	13.6	7.7
Total				369	261	100	100

experience product. Empirical data was collected using an online survey. Invitation emails with the URL of the online survey website were sent to randomly select registered customers of this online flower shop. The final sample comprises 261 complete responses <Table 1>: Internet experience (mean = 7.1 years, s.d. = 2.0).

V. Data Analysis and Results

A two-stage data analysis methodology was carried out using LISREL [Anderson and Gerbing, 1988]. We first performed confirmatory factor analysis using LISREL. To validate the survey instrument, we assessed its convergent and discriminant validity. The standardized path loadings were all significant and greater than 0.7 (see <Table 2>). The composite reliability (CR) and the Cronbach's alpha for all constructs exceeded 0.7. The average variance extracted (AVE) for each

construct was greater than 0.5. Therefore, the convergent validity for the constructs was supported for the both online bookstore and online flower shop.

Next, we assessed the discriminant validity of the measurement model. As shown in <Table 3>, the squared root of AVE for each construct exceeded the correlations between the construct and other constructs. We additionally assessed discriminant validity with Constrained Confirmatory Factor analysis as suggested by Anderson and Gerbing [1988]. For each pair of factors, first we conducted ordinary CFA. After that, the correlation is set to unity (1.0), and the model was tested again. We use 2difference tests to compare the results between the constrained model and the original model. Discriminant validity is established if the ²difference is significant. Based on this approach, we conduct pairwise constrained tests on the two cases. The

<Table 2> Convergent Validity Testing Results

I6TEM	Std. Loading		T-value		AVE	CR	Alpha
VAL1	0.87 ^(B)	0.85 ^(F)	20.37 ^(B)	16.75 ^(F)	0.70 ^(B) 0.70 ^(F)	0.90 ^(B) 0.90 ^(F)	0.902 ^(B) 0.902 ^(F)
VAL2	0.82 ^(B)	0.74 ^(F)	18.56 ^(B)	14.43 ^(F)			
VAL3	0.79 ^(B)	0.85 ^(F)	17.58 ^(B)	16.59 ^(F)			
SAT1	0.90 ^(B)	0.94 ^(F)	22.01 ^(B)	20.23 ^(F)	0.85 ^(B) 0.87 ^(F)	0.96 ^(B) 0.96 ^(F)	0.958 ^(B) 0.964 ^(F)
SAT2	0.93 ^(B)	0.95 ^(F)	23.33 ^(B)	20.48 ^(F)			
SAT3	0.95 ^(B)	0.94 ^(F)	24.34 ^(B)	20.00 ^(F)			
SAT4	0.92 ^(B)	0.91 ^(F)	23.24 ^(B)	18.97 ^(F)			
REL1	0.82 ^(B)	0.95 ^(F)	18.91 ^(B)	20.55 ^(F)	0.76 ^(B) 0.89 ^(F)	0.93 ^(B) 0.97 ^(F)	0.925 ^(B) 0.968 ^(F)
REL2	0.88 ^(B)	0.96 ^(F)	21.02 ^(B)	21.13 ^(F)			
REL3	0.90 ^(B)	0.89 ^(F)	21.80 ^(B)	18.49 ^(F)			
REL4	0.88 ^(B)	0.96 ^(F)	21.08 ^(B)	21.11 ^(F)			
SWC1	0.84 ^(B)	0.90 ^(F)	19.34 ^(B)	18.45 ^(F)	0.68 ^(B) 0.78 ^(F)	0.92 ^(B) 0.95 ^(F)	0.914 ^(B) 0.945 ^(F)
SWC2	0.77 ^(B)	0.82 ^(F)	17.08 ^(B)	15.89 ^(F)			
SWC3	0.85 ^(B)	0.89 ^(F)	19.99 ^(B)	18.38 ^(F)			
SWC4	0.80 ^(B)	0.85 ^(F)	18.20 ^(B)	17.08 ^(F)			
WPM1	0.83 ^(B)	0.87 ^(F)	19.27 ^(B)	17.79 ^(F)	0.81 ^(B) 0.89 ^(F)	0.94 ^(B) 0.97 ^(F)	0.942 ^(B) 0.969 ^(F)
WPM2	0.91 ^(B)	0.95 ^(F)	22.51 ^(B)	20.77 ^(F)			
WPM3	0.92 ^(B)	0.98 ^(F)	22.81 ^(B)	21.79 ^(F)			
WPM4	0.93 ^(B)	0.96 ^(F)	23.57 ^(B)	21.01 ^(F)			

² differences are found to be all significant, which implies that the ² of the original CFA with its latent variables is significantly better than any possible union of any two latent variables. Hence, discriminant validity of the instrument was established for both cases.

We then tested the structural model. In case of online bookstore, the normed ² (² to degrees of freedom) is 2.35, which is below the desired maximum cut-off value of 3.0 [Gefen *et al.*, 2000]. Root mean square of approximation (RMSEA) is 0.063, indicating a good fit. RMSEA is below the minimum cut-off value of 0.07. Goodness-of-fit index (GFI) (0.91) and adjusted goodness-of-fit index (AGFI) (0.88) are above the minimum cut-off value of 0.9 and 0.8. The other fit indices

are all satisfactory: comparative fit index (CFI) = 0.98, and normed fit index (NFI) = 0.97. These results suggest that the structural model for the online bookstore case adequately fits the data.

In case of online flower shop, the normed ² is 2.36, which is below the desired maximum cut-off value of 3.0 [Gefen *et al.*, 2000]. RMSEA is 0.072, this one exceeds 0.07 a little bit but can be regarded to be acceptable fit. GFI is 0.88 and AGFI is 0.85. AGFI (0.85) is above the minimum cut-off value of 0.8, indicating a good fit. GFI's good fit is above 0.9. GFI, however, reaches less than 0.9 but can be acceptable fit. The other fit indices are all satisfactory: comparative fit index (CFI) = 0.99, and normed fit index (NFI) = 0.98. These results suggest that the

<Table 3> Descriptive Statistics and Correlations

Variable	Mean	S.D.	VAL	SAT	REL	SWC	WPM
VAL	5.70 ^(B)	0.88 ^(B)	0.84^(B)				
	5.30 ^(F)	0.91 ^(F)	0.84^(F)				
SAT	5.56 ^(B)	1.14 ^(B)	0.64 ^(B)	0.92^(B)			
	5.62 ^(F)	1.02 ^(F)	0.71 ^(F)	0.93^(F)			
REL	5.49 ^(B)	1.05 ^(B)	0.65 ^(B)	0.42 ^(B)	0.87^(B)		
	5.52 ^(F)	1.10 ^(F)	0.79 ^(F)	0.64 ^(F)	0.94^(F)		
SWC	4.28 ^(B)	1.46 ^(B)	0.31 ^(B)	0.12 ^(B)	0.40 ^(B)	0.83^(B)	
	4.60 ^(F)	1.35 ^(F)	0.58 ^(F)	0.50 ^(F)	0.52 ^(F)	0.88^(F)	
WPM	3.08 ^(B)	1.47 ^(B)	0.12 ^(B)	0.05 ^(B)	0.15 ^(B)	0.38 ^(B)	0.90^(B)
	4.30 ^(F)	1.51 ^(F)	0.27 ^(F)	0.23 ^(F)	0.25 ^(F)	0.47 ^(F)	0.94^(F)

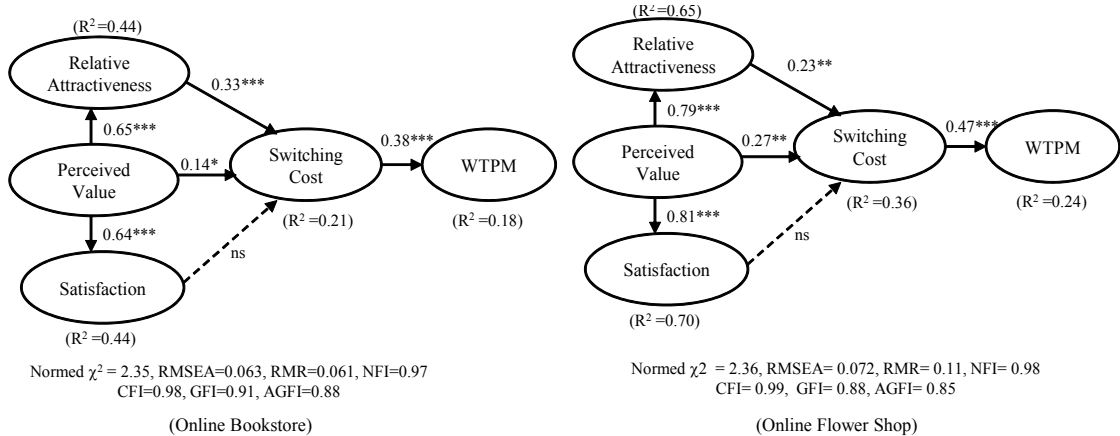
(B: Online Book Store, F: Online Flower shop).

structural model for the online flower shop case adequately fits the data.

<Figure 3> shows the standardized LISREL path coefficients and the overall fit indices. Switching costs (H1) were found to exert significant influence on willingness to pay more. Relative attractiveness (H2) and perceived value (H4) were also found to exert significant influence on switching costs. Perceived value has significant effects on relative attractiveness (H5) and satisfaction (H6). In addition,

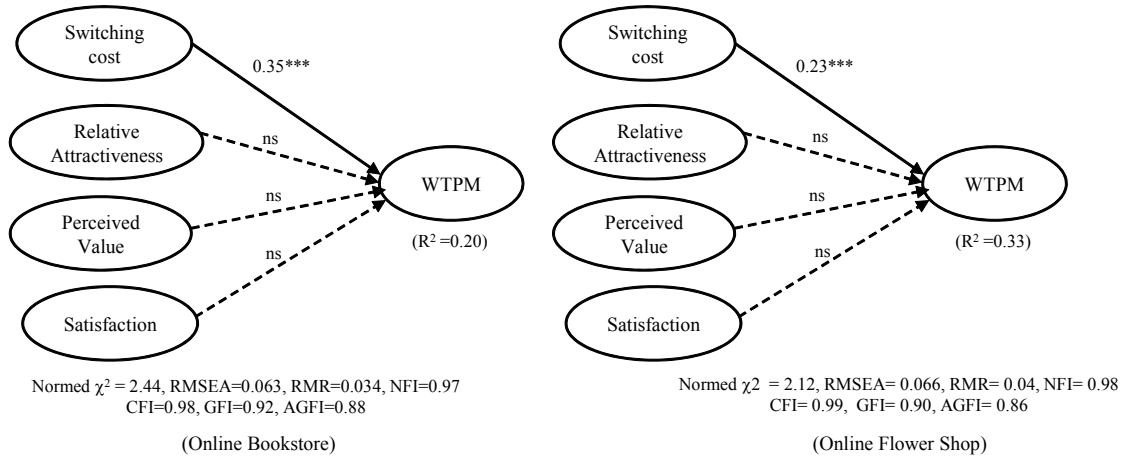
A post-hot analysis based on Sobel test found the effect of perceived value ($z = 4.24, p < 0.001$) on switching costs use is partially mediated by relative attractiveness in the both cases. However, we could not find significant effect of satisfaction on switching costs (H3). Hypothesis 3 is thus not supported while other hypotheses are all supported. These findings are consistent for online bookstore and online flower shop.

Although the main purpose of this study is to



<Figure 3> Testing Results

(ns: insignificant at the 0.05 level, ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$).



<Figure 4> Post-Hoc Analysis

(ns: insignificant at the 0.05 level, ***: $p < 0.001$, **: $p < 0.01$, *: $p < 0.05$).

examine (1) the effect of switching cost on the willingness to pay more and (2) the antecedents of switching cost in the online shopping context, we further checked the direct effects of the antecedents (perceived value, relative attractiveness, and satisfaction) of switching costs on the willingness to pay more. The post-hoc analysis (see <Figure 4>) shows no direct significance between the three factors derived from the dedication-based relationship and the willingness to pay more. In contrast, the post-hoc analysis highlights the key role of effect of switching cost on the willingness to pay more. The model fit comparison between the proposed model <Figure 3> and the alternative model <Figure 4> shows no big difference. The post-hoc analysis results, therefore, support the validity of the proposed main research model.

VI. Discussion

We found that switching cost is positively related to willingness to pay more in both the

contexts. Whenever customer switches, they incur some switching costs, monetary or non-monetary. If the price premium is lower than search cost or disappointing costs, customers will be willing to pay the price premium in order to lower the “full price” of the product. This finding confirms the previous research which proposes that vendors are able to charge price premium if the switching costs are high [Lieberman and Montgomery, 1988].

Relative attractiveness is also positively related to switching costs. Most customers are rational and choose the alternative that provides them the highest benefits. Thus when customers view the current vendor as more attractive than alternative vendors, they perceive higher barriers to switching. Therefore, relative attractiveness hinders customers from switching vendors.

We additionally found the key effects of perceived value. First, perceived value is positively related to switching costs. The ability to provide superior value to customers is a prerequisite when trying to establish and maintain long-term transac-

tion relationships. Customers perceive barriers to switching because they are locked-in by the value already created. Perceived value is a better predictor of outcome variable in the business marketing and it is the key to long term success.

In both the contexts, perceived value is positively related to satisfaction and relative attractiveness. This result confirms perceived value's importance in post-purchasing decision and customer's satisfaction with the vendor. Previous research also expected that customer satisfaction is highly associated with "value" and "price." It means that customer satisfaction depends greatly on perceived value which is defined as a customer's overall assessments of the utility of a product based on perceptions of what is received (value, product quality or other benefits) and what is given (product price, total cost associated with the transaction).

The findings also show that perceived value significantly affects relative attractiveness. Relative attractiveness is customer's perception regarding the extent to which the Internet shopping at the current vendor is considered as a better alternative as compared to Internet shopping at other online vendors; and it is determined by the perceived qualities and benefits which is part of the perceived value. Therefore, we can say that perceived value is an antecedence of relative attractiveness. Satisfaction, however, is found not to affect the switching cost positively. Satisfaction did not show any significant result in the switching cost at the two contexts of both online bookstore and flower shop. It may be construed to be an outcome according to the online environment. Psychological satisfaction can be met more greatly offline in the direct meeting between the sellers and customers and as the features and price of any

difficult products can be searched easily online, differentiated satisfaction with specific vendors or products falls at offline, which does not affect the switching cost.

We acknowledge the limitations of this study. The sample in the study is limited to the customers of one country. Cross-culture testing may be needed in future. National culture is important because of the manner in which high context, collectivist societies establish and maintain relationships [Patterson and Smith 2003]. The reported highly collectivist nature of Eastern countries is characterized as "relationship rich", and we expect they will be more loyal to the relationship. On the other hand, in the individualistic cultures, people do not get locked-in easily. Culture and history will affect their way of thinking and working. Therefore, it is better to test the switching cost model in at least two different cultures. Moreover, the present study studies switching cost as a single-dimensional construct which has various dimensions that can be studied separately. By adopting the multi-dimensional construct of switching costs, we can test and find different antecedents and consequences among the types of switching costs. Especially, future research can study multiple- dimensions of switching costs and test the different effects of these multiple dimensions on willingness to pay more.

VII. Conclusion and Implications

Given the situation of high price competition and low search cost in electronic markets, finding the drivers of price premium (i.e., an individual customer's willingness to pay more) is critical to the sustainability and profitability of online businesses. In this study, we have found the key role

of switching costs in generating price premium. Switching costs are associated with higher profits and inelastic response to prices. By creating switching barriers and managing customer's perceived switching costs, vendors are able to charge price premium, recover the initial online customer acquisition cost and thus ensure long term profitability.

For the development of switching costs in the online shopping context, this study has highlighted the importance of two other factors, perceived value and relative attractiveness. Perceived value is positively related to switching cost. Perceived value is also positively related to relative attractiveness, satisfaction and significantly affects switching costs. Albrecht [1992] said that the only thing that matters in the new world of quality is delivering customer value. Customers are value-driven and they seek value when shopping online. The usual approach of value-addition strategies is that the supplier adds technical product features or supporting services to the core solution so that the total value of the offering is increased and customer perceive a high value of products or services received from the supplier. Establishing what value the customer is thus actually seeking from online provider's offering is a starting point for being able to deliver the correct value. Managers need to understand what values are expected by customers and where they should focus their attention in order to gain the market place advantage. Only when suppliers are creating visible value, they can 'lock-in' customers.

Online vendors can thus increase customer's perceived switching barrier by delivering value. Price-sensitive customers perceive high value because of low cost. In this case, the price as well as the total cost will have an effect on customer's

perceived value of the offerings. On the other hand other customers perceive saving time as more important than saving costs. Therefore, in order to deliver the right value to the right customers, online vendors should focus more on individual customer, what they really value, what special service or products do they want. Online vendors should not only consider what they can give to customers, rather they must also concentrate on the sacrifice the customer needs to make.

Relative attractiveness is also positively related to switching costs. In order to increase the relative attractiveness of the shop, online vendors can provide more benefits and more value to customers as compared to alternative vendors. For example, the coupons, points accumulated through shopping, the click-through rewards, all these increase customer's perceived benefits from the vendor. Relative attractiveness can be increased by using Information Systems [Robert and Henry, 1999]. Online vendors can use the capabilities of Information system for providing valuable information (such as 3D display, eBooks, product reviews and recommendations) with the products and thus increase switching costs [Christy and Matthew, 2009]. Customers tend to purchase from those sites which provide them valuable information about the products. For example, Amazon.com provides recommendations and reviews which is helpful for customers in purchasing products. This gives amazon.com an edge over other online vendors.

The ability of vendors to build switching cost through an increase in perceived value or relative attractiveness would result in reluctance for online customers to switch. Because of this switching cost and information asymmetry, it is possible for vendors to charge a price premium. As such, the

identification of factors that affect switching barriers would allow online business to develop

profit generating strategies and ensure 'locking-in' of these customers.

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〈Appendix〉 Measurement Items

Variable	Item	Wording	Reference
Perceived Value	VAL1	Consider the money I pay, Internet shopping at garden flower is a ... (very bad deal / very good deal)	Sirdeshmukh <i>et al.</i> [2002]
	VAL2	Considering the time and effort I spend, Internet shopping at garden flower is ... (not at all worthwhile / very worthwhile)	
	VAL3	Overall Internet shopping at garden flower provides me ... (extremely poor value / extremely good value)	
Satisfaction	SAT1	Unsatisfied / Satisfied	Holbrook <i>et al.</i> [1984] Spreng <i>et al.</i> [1996]
	SAT2	Frustrated / Contented	
	SAT3	Annoyed / Pleased	
	SAT4	Disappointed / Delighted	
Relative Attractiveness	REL1	Compared to shopping at other online flower shops, Internet shopping at garden flower would be more appealing to me	Ping [1993] Sharma and Patterson [2000]
	REL2	Compared to shopping at other online flower shops, Internet shopping at garden flower would be more satisfactory to me	
	REL3	Compared to shopping at other online flower shops, Internet shopping at garden flower would be more advantageous to me	
	REL4	Overall, it would be better for me to shop from garden flower than other online flower shops	
Switching Cost	SWC1	It would take a lot of time and effort to switch my shopping activities here to another online flower shop	Jones <i>et al.</i> [2000] Burnham <i>et al.</i> [2003]
	SWC2	All things considered, I would lose a lot if I were to switch my shopping activities here to another online flower shop	
	SWC3	The costs in time, money and effort to switch my shopping activities here to another online flower shop are high	
	SWC4	It would be a hassle for me to switch my shopping activities here to another online flower shop	
Willingness to Pay More	WPM1	Would you pay the current prices at this store if other online flower shops lower their prices to a level slightly below those at garden flower for same products?	Fullerton [2003] Srinivasan <i>et al.</i> [2002]
	WPM2	Would you pay the prices at this store if they are increased slightly?	
	WPM3	Would you pay the price at this store if it is slightly higher than that for the same bouquet purchase at other online flower shops?	
	WPM4	Would you pay the prices at this store if it raises its prices slightly above those at other online flower shops for same products?	

Note: The terms (book and flower) in Italics are used differently depending on the survey context.

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Submitted : March 07, 2012
1st revision : June 25, 2012

Accepted : October 16, 2012