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Construal Levels and Online Shopping: Antecedents of Visits to and Purchases from Online Retailers' Websites[1]

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Abstract

Purpose – This study explores the role of construal levels in predicting online consumer behavior on a retail website. It builds on the conceptualization that simply browsing a website and making actual purchases can be an outcome of how abstractly or concretely one thinks about that experience. This study examines the differential effects of intermediary websites' attributes and seller's product offerings in predicting frequency of visits and actual purchases.

Research design, data, and methodology – Data were collected from 188 undergraduate students in a large university of Korea. Hierarchical regression model was utilized to test the proposed effect of website characteristics and seller attributes on visit and purchase.

Results – We propose and find that online shopping website visits and purchase frequency have different antecedents. The results reveal that website visit frequency and purchase have different predictors and this can be explained through construal level theory. Specifically, we find purchase frequency is predicted more by website image and financial benefits can be more predictive in actual purchases.

Conclusions – Consumer behavior on the internet can be delineated into website visits and actual purchases. First, uplifting the image of the website itself is much more important than just making offerings cheaper. Online shopping website should try to match its features to mental representations that customers go through from just visit (abstract) to purchase (concrete).

Keywords: Online Shopping, Construal Level Theory, Website Visit, Purchase.

JEL Classifications: M310, M370, M390.

1. Introduction

E-business model generally consists of two entities who act together to serve the customers: namely, an intermediary and the sellers. The intermediary refers to the website (e.g., wemakeprice.com) where various web vendors put up their items for sale. Extant studies on online customer's purchase intention and revisit has largely focused on website interactivity of some specific firm's website as antecedents (e.g., Hood et. al., 2015) but has yet to examine such behaviors on intermediary websites which act as virtual mall. This research tries to close this gap by first examining the intermediary websites attributes and seller's offerings and then their predictability in frequency of visits and actual purchases. We examine how simply browsing a website and making actual purchases might be an outcome of how abstractly or concretely one thinks about

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that experience. It might be noted that website visits and actual purchases show two different outcomes arguing different antecedents. Website visits might be for informational and or recreational purposes whereas the more important latter outcome might largely be predicted more by price and quality of product offered by the seller in the intermediary website. This study tries to delineate website-specific factors and seller-specific factors and address their potential impact on website visit and purchase frequency. In other words, we argue that website visits are viewed as more process-oriented and construed abstractly and the actual purchase is the result of concreteness and goal-directedness in consumer's mind. We try to show that these process-oriented and goal-directed behaviors have different set of antecedents.

2. Review of Literature

Previous studies on internet shopping have identified different types of customers based on their shopping motivation (Ganesh et. al., 2010; Rohm & Swaminathan, 2004). E-window shoppers are unique group of customers who are driven by stimulation and visit websites to simply surf the internet. These shoppers are more interested in seeing *what is out there* rather than making actual purchases (Ganesh et. al., 2010). Similarly, convenience and variety seekers are other types of customers who were distinctive in their web surfing patterns (Rohm & Swaminathan, 2004). Further, shopping enthusiast are more likely to be risk averse, they preferred offline presence of the product offered on the website (Rohm & Swaminathan, 2004). In sum, there are various types of customers who visit websites for different reasons and importantly, higher frequency of visits to intermediary website does not necessarily result in more purchases online. Online browsing may be only for viewing retail website's merchandise for information and/or recreational purposes without an immediate intent to buy. Indeed a recent research suggests that 81 percent of the consumers research online and visit at least three websites before buying a product (GE Capital, 2013). In this study we argue that in a ubiquitous presence of online retail websites, visiting a retail website will be associated more with the website own attributes while the purchases from the website will be associated more with the offerings and information provided by sellers on the website.

To explain this phenomenon from a theoretical point of view, we built our rationalization of the effect of website characteristics and purchase decision based on construal level theory. Construal level theory postulates that people make different mental representations of an event or experience based on how much that event or experience is viewed abstractly or concretely (Trope & Liberman, 2010). While the events or experiences those of higher level construal are viewed abstractly, low level construal are viewed more concretely. Following this conceptualization, we argue that, when the experience in question is about browsing through the website in search of products for purchase or information, individuals tend to think about visiting the website in a comparatively abstract terms and website specific factors, such as how famous the website is, how many different kinds of products are available etc. contributes to their frequency of visits. On the other hand, when the experience in question is the actual purchase, then it is viewed in more psychologically concrete terms and seller specific factors such as how much price they are going to save by purchasing through a specific seller, what kind of quality they will receive etc. become more important in making a purchase.

2.1. Construal Levels and Online Shopping

Theoretical reasons to expect that website specific factors are construed at higher levels (abstractly) and seller specific factors are construed at lower level (concretely) are grounded in the basics of Construal Level Theory. As unique and detailed features are omitted from an event, more abstract and schematic a representation becomes (Trope, Liberman, & Cheryl, 2007). For example, buying over the internet becomes abstractly construed as the details, for example, price, shipping information, delivery time etc. are removed. At this point the ability of the websites to generate likability and visits comes from its own features such as image, popularity, ease of use etc. For instance, it has been shown that broad website features such as how much control one has over the website and how easy the communication was between seller and buyer has affects how often one visits the website (Hood et. al., 2015). Intention to revisit a website is often viewed as an outcome of the attitude toward using the technology involved in the site (Koufaris, 2002). On the other hand, when an event is construed at a concrete level, individuals tend to focus more on detailed properties (Trope, Liberman, & Cheryl, 2007). As people get more involved in the process of online purchase the detailed characteristics such as product quality, price etc. become the deciding factor for making purchase. For example, individual level variable such as trust has been shown to be related more with purchase intention over the internet (Hong & Cho, 2011; Gefen, Karahanna, & Straub, 2003). A recent literature review by Chiu, Wang, Fang, and Huang (2014) provides additional support for our conceptualization as they find, website attributes such as

ease of use and design which significantly affect initial purchase while price, a more seller specific factor, to be predictive of repeated purchase. As such a visiting website to purchase or just for information can be predicted largely by the websites own features (example: image, product variety) and do not take into account the detailed characteristics. Once the website is visited, more concrete details are considered to make a purchase (Trope, Liberman, & Cheryl, 2007) such as price, quality, shipping etc.

To test our proposed model of different antecedents of purchase and visit, we identify following constructs borrowed from the literature as the antecedents that have been examined jointly for their impact on customer attitude and behavior. Apart from the cores benefits of online shopping such as convenience, discreet purchase etc., we take into account the following website features as antecedents to visit and purchase, we include constructs that are specifically related to website or sellers.

2.1.1. Antecedent of Frequency of Visit

Frequency of visit, i.e., how often an individual visits the online store is much dependent on the characteristics of the website itself. As it has already been stated, frequency of visit, following our conceptualization, is viewed in a more abstract context. We hypothesize that frequency of visits will be related more to the characteristics of the website itself rather than the sellers in the website. The specific website characteristics we explore in this study are, ease of use, product variety and website image.

Ease of use is the consumer's perception that shopping on the website will involve minimum effort. Being able to shop or search from anywhere anytime is one of the key advantages of internet shopping. Factors such as time-saving, cost-saving, lots of choices, discreet shopping have been reported to contribute to a more enjoyable shopping experience on the Internet (Wolhandler, 1999). Furthermore, online shopping also allows consumers to compare between various alternative available in various dimensions such as price, product specification, time to arrive etc. How easily these primary determinants of internet shopping can be utilized does impact the likability of a website. For example, if a consumer finds it too complicated to surf around a website and go through unnecessary hassles to make purchases, he/she might find the website too complex and refrain from visiting it. It has been shown that complexity has a negative impact on flow during the website visit (Guo & Poole, 2009).

Product variety refers to a diversity of product offerings in the online store (e.g., food, entertainment, electronics, clothing, travel etc.). Product variety has been frequently studied in terms of in-store purchases. Yoo et. al. (1998) found that a variety of products available in a store makes consumers feel more pleasure towards the store. Produce variety has been reported to be the most important criterion in store selection (Chen & Seock, 2002). Hence, as product assortment has been an important determinant of pleasure and satisfaction, it is possible that consumers would evaluate an online store with a lot of product variety to be more appealing and informational.

Website image help an online store build a positive reputation and characterization for itself in the minds of consumers. In this context, the website represents a medium that is potentially far more comprehensive and effective than a television or newspaper communication (Budmans, 1998). Overall image of the website is based on attractiveness, enjoyment, comfort and appeal. It is the personality that the online store projects to consumers through features such as graphics, advertisements, logos, slogans or themes of the website.

Taken together, we argue that these characteristics of a website will make it easier to browse around and more importantly these are the determinants which will make individual think about browsing experience at an abstract level and hence increase frequency of visit.

2.1.2. Antecedents of Actual Purchases

As discussed earlier, higher frequency of visit does not always result in greater purchases. To identify the antecedents of actual purchases made on a retail website, we examine the seller specific attributes, which are more or less in control of seller, to be more related to online purchases than websites' own characteristics. More importantly, these seller specific attributes would help customer to compare between sellers at more concrete level which in turn predicts their actual buying behavior. Specifically, we identify, price benefits, quality assurance and recovery assurance as three important seller characteristics that enable online customers to make purchases.

Monetary saving has been a key determinant for online buyers, as the internet makes it easier to compare prices and therefore useful for buyers to get a product with a lower cost (Soscia et al., 2010). Furthermore, Arnold and Reynolds (2003) indicate that getting a bargain makes consumers feel like they have overcome a challenge. Wolfinbarger and Gilly (2001) indicate that the pleasure derived from the process of hunting for bargains is one of the reasons why individuals shop online. In case of online retail websites, where multiple sellers put up their products for sale, it can be considered the discretion of seller at what price he/she can sell the products.

The ability to judge *product/service quality* online is limited

by barriers to touching, feeling and trying the product or services, inaccurate product colors and insufficient information on quality attributes. However, perceptions about product quality can emerge from previous purchases or brands offered by the seller. Quality of goods offered by the seller can also stem from other information provided by the seller such as country of origin, original price (for discounted items), product information, other consumer ratings and reviews (positive) etc. These factors affect the expectations a consumer makes about the product quality or service quality they are purchasing. Specifically, if a consumer can ascertain the quality of product he/she is intending to buy based on the information provided by the seller, there would be little discrepancy on how a consumer perceives the product at the time of purchase and what will actually be delivered. This assurance on the consumer's side would likely motivate to make purchase from the website. And this assurance can only be made available by the sellers who sell on retail website.

Similarly, when customers face "non-routine encounters" during the online-shopping process which are related to service recovery like product returns, dealing with problems, the *recovery assurance* by the sellers become salient as it offers a cushion for consumers in case anything goes wrong during the transaction. The ability of sellers to convince customers that the quality of product will match its description on the site and in case of any irregularities, the customers will be compensated for the damage stems from the trust the consumer have with the vendors on the website. Previous study on seller trust and purchase intention has failed to establish any relationship between the two factors but demonstrate that trust transfers from intermediary website itself to seller (Hong & Cho, 2011). However in this study we try to explore a separate dimension of trust namely quality assurance and recovery assurance which are argued to be seller specific characteristics rather than core trust.

In sum, these characteristics which can be thought of as the factors online consumers will concretely observe are argued to be more predictive of actual purchases over the internet.

Having introduced the conceptualization of the separate antecedents we formally propose the following hypotheses,

<H1> Frequency of website visits will be more strongly related to website attributes than seller factors.

<H2> Online purchases will be more strongly related to seller factors than website attributes.

3. Methodology

Data were collected through questionnaires from convenience sample from a large university in Gwangju. The respondents were 188 undergraduate students. 40 percent were male and their average age was 23 years old. The measures used in this study were anchored as seven point Likert scales which were adopted form previous studies. Perceived ease of use was adapted from Childers et. al (2001) with 6-items, product variety was 4-items scale adapted from Bakos (1998), website image was 4-items adapted from Srinivasan et al. (2002). Quality assurance was measure through 5-items scale adapted from McKnight and Chervany (2001), price benefit was adapted from Rintamaki et al. (2006) and recovery assurance was adapted from Zeithaml (2005). Our major dependent major frequency of visit was measured through two items on a seven point (1=very infrequently, 7=very frequently) scale asking "how often do you visit this website for informational purpose" and "how often do you visit this website with the intention to buy". The measures were highly correlated *(r=.725, p<.05).* These two measures were combined and average which served as a frequency of visit index. Our other dependent variable of interest was the actual purchases. The respondents indicated the average amount of purchases they had made in past six months. As the amount was in ten thousand Won, log of the amount was calculated which served our other dependent variable.

Control Variables: Three control variables were additionally measured. Importance of internet shopping for self and knowledge about internet shopping with privacy concerns were measured as additional control variables. Privacy refers to the degree to which the customer believes the site is safe from intrusion and personal information is protected. Garbarino and Strahilevitz (2004) found that consumers rated loss of privacy as the risk most likely to occur, whereas financial risk from the unauthorized use of credit card data was viewed as having the most serious consequences. As there are few studies suggest that privacy does affect consumer behavior on the internet, we included it as a control variable.

4. Results

First, an exploratory factory analysis was run to ascertain the dimension of the variables. All factor loadings were greater than .7 and loaded onto their respective constructs. Subsequent confirmatory factor analysis revealed that six factor model provided an acceptable fit to data:χ^2 (237) = 463.01, $p< .01$, CFI = .928, IFI=.926, TLI = .907, RMSEA = .07. The mean, standard deviation, measures of internal consistency and validity has been shown in <Table 1>. <Table 2> shows the inter-construct correlations.

<Table 1> Descriptive, Internal Consistency and Validity

	Mean	Std. Dev.	CR	AVE	Cronbach's Alpha
Recovery Assurance	4.54	1.32	0.843	0.646	.829
Quality Assurance	4.53	1.09	0.934	0.740	.934
Ease of Use	5.61	.90	0.901	0.605	.898
Price Benefit	5.24	1.17	0.930	0.815	.930
Product Variety	5.22	1.04	0.837	0.636	.820
Website Image	4.41	1.06	0.829	0.550	.824
Frequency of Visit	4.25	1.51	n/a		
Actual Purchase (log of amount spent in past 6 months)	5.14	.53			

<Table 2> Inter-construct Correlations

	1	2	3	4	5	6	7	8
1. Quality Assurance	1							
2. Ease of Use	.303**	1						
3. Price Benefit	.252**	.432**	1					
4. Product Variety	.372**	.427**	.341**	1				
5. Website Image	.440**	.274**	.355**	.267**	1			
6. Recovery Assurance	.413**	.302**	.262**	.326**	.385**	1		
7. Frequency of Visit	.033	.136	.154*	.029	.268**	.142*	1	
8. Actual Purchases	.045	.041	.231**	-.035	.087	.00	.306**	1

**p< 0.05, **p< 0.01*

To test our first hypothesis that frequency of visits will be predicted more by what the website itself has to offer and its overall impression than the seller specific characteristics, hierarchical regression analysis was utilized. As shown in <Table 3> control variables were entered in the first step. In the second step seller specific characteristics, price benefit, quality assurance and recovery assurance were entered. Finally, in the third step website characteristics, website image, product variety and ease of use, were entered. As proposed by <Hypothesis 1>, website specific characteristics explained all of additional 5.1 percent of the variance in frequency of visit once the control variables and seller characteristics were accounted for. None of the variance in frequency of visit was explained by seller factors in step two *(all β n.s.*). However, only website image significantly predicted frequency of visit (*β = .255, p<.01)*. A second hierarchical regression was run in which steps 2 and 3 were reversed. Results indicated that none of the seller specific factors explained any of the additional variance (ΔR^2 = *.015, all β n.s.*). Therefore, <Hypothesis 1> is supported.

<Table 3> Regression Summary for Frequency of Visit

	R^2	ΔR^2	β	SE of β	Std. β
Step 1: Control	.133				
Importance of internet shopping			.275	.097	.261**
Internet shopping knowledge			.118	.091	.119
Privacy			.112	.097	.080
Step: 2	.143	.010			
Price Benefit			.072	.107	.053
Quality Assurance			-.161	.122	-.113
Recovery			.067	.109	.054
Step: 3	.184*	.041*			
Website Image			.445	.165	.255**
Product Variety			-.192	.159	-.106
Ease of use			.076	.165	.039

Note: When step 2 and 3 reversed ΔR^2 = *.015*, n.s.
**p<.05, **p<.01*

Similarly, to test our second hypothesis that actual purchases will be predicted more by what seller has to offer more than the websites image, we ran a hierarchical regression analysis. As shown in <Table 4> control variables were entered in the first step. In the second step, website attributes were entered and in the third step seller-specific offerings and information were entered. As predicted, sellers' discretionary offerings explained all of the additional 7.6 percent of the variance once the control variables and website characteristics were accounted for. None of the variances in actual purchases were explained by website characteristics in second step (*all β n.s.*). However, only price benefits significantly predicted actual purchases (*β=.11, p<.01)*. A second hierarchical regression was run in which

step 2 and 3 were reversed. None of the website characteristics explained any additional variances (ΔR^2 = *.015, all β n.s.*).

<Table 4> Regression Summary for Total Purchases

	R^2	ΔR^2	β	SE of β	Std. β
Step 1: Control	.053				
Importance of internet shopping			.088	.037	.231*
Internet shopping knowledge			-.086	.034	-.246*
Privacy			-.055	.037	-.109
Step: 2	.076	.023			
Product Variety			-.049	.057	-.078
Ease of Use			.055	.061	.081
Website Image			.093	.053	.152
Step: 3	.129*	.053*			
Price Benefit			.132	.043	.278**
Quality Assurance			.055	.049	.110
Recovery Assurance			-.020	.042	-.045
Note: When step 2 and 3 were reversed, ΔR^2 = .015, n.s. **p<.05, **p<.01*					

5. Conclusion

This study extends the understanding of construal-level theory to the online domain. Specifically, we proposed and found that browsing website is construed at a higher level and abstract such that individuals were driven more by overall website image towards visiting the website and the amount of purchases were driven more by concrete terms such as price benefits. And that the website environment contributed to website visits and sellers' discretionary characteristics closed the sale. This might not be a new advancement it knowledge as one might think it is self-evident that people choose to buy the cheapest among the competing product. It has been already documented that it is the joint collaboration of e-vendors and website that help built trust among customers and ensure repurchases (Gefen, Karahanna, & Straub, 2003). But however, the differential antecedents of visit and purchase do inform managers that first uplifting the image of the website itself is more important than just making offerings cheaper. The finding is useful for the designers and managers of retail websites, such that not just designing good websites and marketing its website is important, but it should also focus on attracting better sellers on their website which could in turn again enhance the image of the website itself and can better serve its customers. If the vendors' characteristics can be aligned with image of the website, customer retention and profitability can be increased. With the growing use of SNS, strategies such social media marketing can enhance awareness and image of website.

This study focused on only a handful of website features and vendor characteristic in explaining their relationship with visits and purchases. Moreover we only find significant effect of website image as website feature and price benefit as seller attribute. Though the failure to significantly predict visit and purchases by other constructs raises questions about the validity of our model, we do find that specific high level construal and low level construal do differentially affect website visit and actual purchase. Also this study did not measure or manipulate the concreteness or abstractness of the event or action but only speculated that browsing would be higher construal and purchase a lower construal level decision. Future studies would be required to more precisely predict these two phenomena which would take other abstract and concrete dimensions in online environment. Future studies could also explore the specific dimensions of psychological distance such as time (urgency of purchase due to factors such as limited stock of limited time offer) and examine their impact on website image, visits and actual purchases.

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