

# IS MORE INFORMATION CONTENT ALWAYS GOOD? INVESTIGATING THE IMPACT OF WEBSITE INTERFACE FEATURES ON E-RETAILER'S SALES PERFORMANCE

Abdul Ashraf, Brock University, Canada  
Narongsak (Tek) Thongpapanl, Brock University, Canada

## INTRODUCTION

The emergence of the World Wide Web initiated a new era of online consumerism. Though the Internet allows customers to order products conveniently and immediately, and to access information to make informed purchase decisions, it can also be an unknown realm for many. As the *Internet Retailer* (2009) reports in the United States, the 2007 total online retail sales and the total number of transactions for the top 500 websites rose by 21.8% and 8.8% respectively. Therefore, customers have readily adopted the Internet for various purposes, and properly used, it is a powerful tool for selling products and services. The most commonly used methods for conducting commerce on the Internet involves selling goods and services through a company's website. However, developing a website is not without risk and businesses today face numerous challenges in their efforts to develop a website that is both functional and productive for both consumer and firm. Since customers often view this form of shopping as risky, they often rely on the information available from a firm's website to determine the quality and performance of the product and thus if they are interested in purchasing from that website. Through such information gathering, firms are able to lower their customer's perceived risk and simultaneously encourage them to make the purchase.

Additionally, the information load each customer can process obviously varies, and firms need to find a comfortable balance in which the customer can easily access information and explore the website while ensuring the customer does not feel overwhelmed by mass amounts of information. Therefore, this paper focuses on the following issues: First, we aim to determine if the usability of a firm's website is sufficient to influence online sales or if different tools such as website personalization leverages or instigates customer satisfaction and purchase intention. Second, we address why customers perceive some business to consumer websites to be more effective, efficient and user friendly. Third, we hope to understand which website aspects can help reduce customer risk perception and how they contribute towards reducing online risk perception. Ultimately, the results and findings of this research help determine precisely the intricate relationships between key website features and performance outcomes, as well as website dimensions and performance outcomes, thus allowing online retailers to better manage their businesses by attracting more new customers and retaining their loyal customer bases.

## CONCEPTUAL MODEL AND HYPOTHESES

In addressing these aforementioned issues, we review and examine the role both risk perception theory and information search theory (Dowling, 1986; Dowling and Staelin, 1994) to investigate the effect of information content and website personalization tools on customer satisfaction and purchase intention as well as sales performance. According to the literature, prior researchers agree that information content is an important element of customer satisfaction (Montoya-Weiss, Voss, and Grewal, 2003; Palmer, 2002) and purchase intention (Lohse, Bellman, and Johnson, 2000; Shim, Eastlick, Lotz, and Warrington, 2001), and as information search is often the first step in a customer's purchase decision-making process, the more information a customer possesses, the better and more informed their decision will be (Kulviwat, Chiquan, and Engchanil, 2004). Information content can include a range of materials such as details related to the services offered, order status, corporate policies, and/or public relations. The availability of information on a website is of great importance and is critical for potential online customers (Agarwal and Venkatesh, 2002): When customers are supplied with a more extensive set of information before purchasing from a website, they have a clearer idea of what they will receive in terms of products and services. This decreases the level of perceived uncertainty and risk, and increases customers' comfort levels with their purchasing decisions.

However, as the availability of information increases beyond a certain threshold, more customer effort is required to process the information, and thus, customers feel less satisfied and less confident regarding their purchase decision (Keller and Staelin, 1987, Lee and Lee, 2004). It is essential that firms provide some kind of website personalization to streamline the complex task of assessing and processing large quantities of information. Basically, personalization reduces the perceived complexity caused by excessive information, thereby reducing customers' search efforts and transaction times and increasing user satisfaction (Liang, Lai, and Ku, 2007). Furthermore, for the standard website, personalization is inherently better since it takes individual needs into account and creates a trusting relationship between the website and customer by transforming e-commerce into relationship commerce (Jackson, 2007). According to Yang et al. (2007), when customers are exposed to

personalized content, they tend to seek less information and are likely to spend less time before making the purchase. Similarly, Chang et al. (2005) and Kim et al. (2008) posit that by providing guidance to individual customers during the purchasing process, website personalization makes the shopping experience easier and increases customers' feelings of trust and loyalty.

In short, in addition to providing information, online retailers must make customer information searches efficient and effortless by providing tools such as website personalization which, by modifying website information to fit individual needs, enhance online customer satisfaction (Liang, Lai, and Ku, 2007), purchase intention (Yang, Lester, and James, 2007), and loyalty (Jackson, 2007). Accordingly, we propose the following set of hypotheses (summarized in Figure 1):

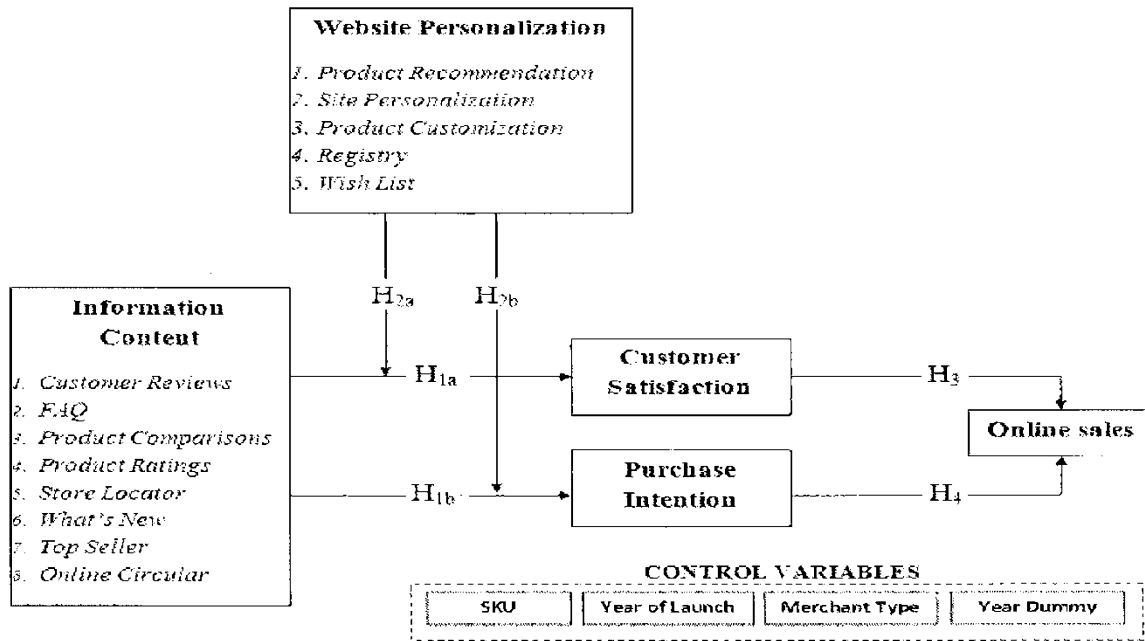


Figure 1: Antecedents and Consequences of Customer Satisfaction and Purchase Intention

## RESEARCH METHODOLOGY

In order to test these hypotheses, data was obtained from the *Internet Retailer's Top 500 Guide (2009)*, which ranks America's 500 largest online retailers, based on their annual sales, for the years 2006, 2007, and 2008. The data set also provides the retailer's background information, sales performance, and other web-related details. We also referred to practitioner orientated guides of retail website design and usability in order to categorize the website features into information content and website personalization lists. As a result, eight website features in our data set were found to be related to information content (i.e., customer reviews, FAQ, product comparison, product ratings, store locator, what's new, top seller, and online circular) and five other website features were categorized under website personalization (product recommendation, site personalization, product customization, registry, and wish list). Additionally, we used *Intra-rater*, *Inter-rater reliability* and *test retest reliability tests* through which the same thirteen website features were reviewed again by the same five reviewers who participated the first time (Warner, 2007). The reviewers were once again asked to categorize the website features and the same results were found. We also used the *Cohen's Kappa (K)* index in order to authenticate the rater's categorization of the website features as well as controlling for the following four variables in our hypothesized model: e-retailer's size, e-retailer's age, e-retailer type, and e-retailer's year of operation. The model was then tested using SEM by which the data were analyzed using a covariance matrix as input and maximum likelihood estimation using the AMOS statistical program (Schumacker and Marcoulides, 2008). Multiple fit tests were also utilized such as chi-square, GFI, CFI, Tucker-Lewis index and root mean square error of approximation. Overall, the model fit indices [ $\chi^2(18)=39.01$ , GFI=0.966, CFI=0.973, TLI=0.932, RMSEA=0.07] show that the hypothesized model fits the data quite well. Furthermore, the model adequately explains the relationships among the variables considered for our sample of 207 e-retailing firms, with 22% of the variance explained for e-retailer's sales performance.

## RESULTS AND DISCUSSION

Our results (shown in Table 1) indicate that information content has no significant relationship with customer satisfaction and purchase intention, thus not supporting either H1a or H1b. The results also showed that website personalization acts as a moderator between information content, customer satisfaction and purchase intention therefore supporting H2a and H2b. A significant positive relationship also existed between customer and satisfaction and sales performance, supporting H3. However, no significant relationship between purchase intention and retailer's sales performance was found, not supporting H4. Other findings included: the number of SKU'S offered on a firm's website was positively related to the retailer sales performance, a retailers year of launch was positively related to the customer's level of satisfaction, and customers were less motivated and satisfied to purchase a product from a Web-Only operation.

**Table 2: Results for Path Analysis for the Hypothesized Model**

Paths from	To	Hypothesis	Estimate	S.E.	C.R.	P-Value
<b>Antecedents of Customer Satisfaction &amp; Purchase intention</b>						
<i>Direct Paths</i>						
Information Content	Customer Satisfaction	H1a (Not Supported)	-1.978	2.342	-0.844	0.398
Information Content	Purchase Intention	H1b (Not Supported)	-5.175	3.243	-1.596	0.111
Website Personalization	Customer Satisfaction		2.646	1.862	1.421	0.155
Website Personalization	Purchase Intention		2.247	2.379	0.971	0.334
<i>Moderating Paths</i>						
Information Content & Website Personalization	Customer Satisfaction	H2a (Supported)	6.329	2.334	2.711	0.007
Information Content & Website Personalization	Purchase Intention	H2b (Supported)	12.265	3.232	3.793	<0.001
<b>Consequences Of Customer Satisfaction &amp; Purchase Intention</b>						
Customer Satisfaction	Sales Performance	H3 (Supported)	0.066	0.027	2.463	0.014
Purchase Intention	Sales Performance	H4 (Not Supported)	0.019	0.019	0.974	0.330
<i>Control Paths</i>						
SKU	Customer Satisfaction		-0.132	0.112	-1.174	0.240
Year of Launch	Customer Satisfaction		0.143	0.079	1.807	0.072
Merchant Type	Customer Satisfaction		-0.933	0.576	-1.621	0.105
Year Dummy	Customer Satisfaction		-1.285	0.479	-2.685	0.007
SKU	Purchase Intention		-0.029	0.155	-0.186	0.852
Year of Launch	Purchase Intention		-0.015	0.110	-0.149	0.882
Merchant Type	Purchase Intention		-4.64	0.797	-5.820	<0.001
Year Dummy	Purchase Intention		-1.05	0.663	-1.585	0.113
SKU	Sales Performance		0.116	0.029	4.040	<0.001
Year of Launch	Sales Performance		0.021	0.021	1.052	0.293
Merchant Type	Sales Performance		-0.171	0.167	-1.026	0.305
Year Dummy	Sales Performance		0.239	0.087	2.969	0.003

Fundamentally, our findings showed that information alone is not sufficient or has little influence on customer satisfaction and purchase intention, especially for companies looking to motivate customers to purchase online. Also, the study confirmed that providing customers with general information leaves them feeling less satisfied and less motivated to buy from that website. However, when website personalization is used as a filtering tool, no matter how extensive the information is, the customers felt satisfied and motivated to buy from the website. Website personalization therefore, makes the online shopping experience both comfortable and satisfying for a consumer as they are able to quickly locate information that is relevant to them without having to process a large amount of information without being over capacitated.

Moreover, our findings show that improved customer satisfaction leads to improved sales performance and that purchase intention alone does not affect online sales performance. By tailoring the online shopping experience, customers are able to alter their interaction to suit personal preferences, thus building an emotion connection with the firm. Ultimately, customers need to feel valued and the more personalized and anxiety-free their online shopping experience is, the more likely they are to return in the future and build loyalty with that firm. Overall, our study determined that the precise relationship between information content and website personalization shows that these two variables are complementary and together they offer customers an accessible and convenient way to search and acquire information. In the long term, online managers attempting to increase sales should pay attention to include information on their websites that are relevant to their customers. Online retailers should also invest in technologies that can convert large amounts of information into relevant, easily accessible and appropriate information for customers, no matter the cost as it will improve customer satisfaction and thus increase sales. Primarily, those online firms that employ such techniques will have positioned themselves for success in the online world while their competitors' sales deteriorate.

References Available Upon Request