EXAMINING THE EFFECTS OF PERCEIVED WEB INNOVATIVENESS IN E-RETAILING

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Abstract

Although innovation in e-services is an important area in marketing research and practice, the investigation into the direct effects of perceived website innovativeness in the context of e-retailing has largely been unexplored. To address this gap, this study theoretically develops, and empirically tests, a model investigating the impact of perceived website innovativeness on overall e-service quality, trust, website loyalty and word-of-mouth. Data were gathered via an online survey resulting in 406 responses from actual consumers to validate the research model. Conclusions and implications are discussed, with future research directions presented.

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Introduction

Chief among the many issues of the service-led economy is a focus on service innovation to enable the delivery of compelling service experiences to customers (Bitner and Brown 2008; Ostrom et al. 2010). The impetus to deliver new and innovative service experiences has also found its place in electronically delivered services, particularly in e-retailing. New information and communication technologies (e.g. Web 2.0 applications and platforms) delivered via the website interface have enabled the creation of new service brand experiences which are changing customer behaviour, and the e-retail shopping environment (Cho and Menor 2010; Davis et al. 2000). Within this service brand perspective, the brand meaning derived by the customer arising from the online consumption experience delivered by the e-retailer can form powerful brand image perceptions (Davis et al. 2000). Such brand image associations may include the e-retailer being perceived as providing an innovative e-service offering. In the offline setting, being perceived as *innovative* in the minds of consumers has been found to have a substantial positive impact on firm credibility, making the firm appear to be more expert, more attractive, and more trustworthy (Aaker 2007; Keller and Aaker 1995). Such outcomes are considered critical in the e-retail sector given the spatial and temporal separation between the firm and consumer causing issues of trust, as well as the intensity of online competition (Bart et al. 2005; Pavlou et al. 2007).

Despite the growing imperative for e-retailers to continually improve e-service delivery processes combined with the competitive requirement for brand differentiation, we remain largely uninformed on the effect of overall judgements of perceived innovativeness of the e-retailers website presence has on channel evaluation and consumer decision making. For example, what impact does an innovative website experience (as perceived by consumers) have on specific consumer response outcomes? Therefore, the objective of this paper is to better understand website innovativeness as perceived by consumers which arises from the consumption experience delivered online. To this end, this study develops, and empirically validates a research model that seeks to explain the effects of website innovativeness on outcomes, such as perceived e-service quality, trust, website loyalty and word-of-mouth behaviours in the Australian e-retail marketspace.

Theoretical Framework and Model

The brand's "meaning" refers to "the customer's dominant perceptions of the brand…the customer's snapshot impression of the brand and its associations" (Berry 2000, p. 129). In services, brand meaning is derived from the customer's service consumption experience (via core service, employees, servicescapes) which are the major determinants of (Grace and O'Cass 2005). This occurs because service interactions are the brand stimuli presented in the service encounter which provides the principle means in which the 'service brand image' can be created (Padgett and Allen 1997). Importantly, creating a favourable service brand image is a critical issue in e-retailing because of the absence of service personnel and tangible storefronts (Davis et al. 2000; Pavlou et al. 2007), with the website interface acting as the focal brand stimuli delivered to consumers. In this setting, the website service encounter plays

a key role in staging the service experience online by communicating the service attributes and symbolic meaning in this "moments of truth" (Cho and Menor 2010; Davis et al. 2000). Consequently, being perceived as delivering an innovative e-service consumption experience arising from the website service encounter provides the e-retailer an opportunity to distinctively position its e-service in a unique fashion (i.e. perceived as modern, exciting and pioneering), thereby, differentiating the e-retailer from its competitors resulting in a competitive edge. This being the case, we conceptualise website innovativeness in this study as a perceptual construct which refers to as a holistic assessment made by the consumer which is based on their interaction with the website interface (i.e. the e-service) as being modern, dynamic and unique, and thereby of use to them.

Consequences of Perceived Website Innovativeness

Analysis of the marketing and information systems literature identified several key consumer response outcomes perceived website innovativeness, namely, overall e-service quality, trust, website loyalty and word-of-mouth.

Overall e-Service Quality

Previous branding research has showed that brand associations arising from the consumers' consumption experience impacts evaluations of service quality (Brodie et al. 2008). Understanding service quality is not only a critical performance outcome, but also for its role as a primary predictor of customer satisfaction and loyalty and thus, a key determinant of firm performance (Cronin et al. 2000). According to Parasuraman et al. (1988), service quality refers to a global judgment relating to the superiority of the service, where consumers make an assessment of characteristics or attributes. In the context of this study, we argue that once a customer makes an assessment that the website experience is perceived to be highly innovative in nature, they will then be more likely to evaluate the website to have delivered a high quality of service. Thus,

H1: Website Innovativeness is positively related to e-Service Quality

Trust

The importance of trust can be seen in its identification as a key ingredient for building relationships with customers (Morgan and Hunt 1994). Notably, one of the most salient sources of trust in a retail setting is the salesperson, where trust is dependent on the salesperson's expertise, likeability etc. (Anderson and Narus 1990). On this basis, electronic exchanges are believed to present heightened risks for customers because of the lack of direct contact with the service personnel and the physical store (Pavlou et al. 2007). As Berry (2000) notes, strong brands (and associations) are the surrogates when the company offers no tangible to touch, a point particularly relevant to e-services. Moreover, possessing an innovative brand image has been argued to have a positive impact on firm credibility, the firm appearing to be more expert, more attractive to do business with and trustworthy (Aaker 2007; Keller and Aaker 1995). Therefore, in the e-retail environment, consumers must trust the e-retailer not to convey inaccurate information, unfair pricing, violations of privacy and unauthorized use of credit card/purchase information (Gefen et al. 2003). This being the case, consumers develop perceptions of trust based on their website consumption experience, such as the ability for the website to deliver innovative content, security features, efficient facilitation of purchases and the like (Bart et al. 2005; Chen and Dibbs 2010), as well as the

website delivering affective reactions (enjoyment and fun) that engender online trust (Hwang and Kim 2007). As such, we argue that a consumer who evaluates a website experience to be innovative in nature will then be more likely to form favourable online trust perceptions. Thus,

H2: Website Innovativeness is positively related to online Trust

Website Loyalty

Prior studies in the marketing and information systems literature have found that website performances perceived as positive are a key determinant of positive online specific behavioural intentions (Bauer et al. 2006; Ha and Stoel 2009; Loiacono et al. 2007). Drawing upon this existing body of literatures, we argue that favourable perceptions of website innovativeness will have influence website loyalty outcomes such as revisitation and intention to purchase will result. Thus,

H3: Website Innovativeness is positively related to website loyalty

Word-of-mouth Behaviour

Generating positive word-of-mouth (WoM) referrals is one of the most important marketing instruments and has been suggested that this form of communication has a greater influence on consumers' choice than do other forms of communication (Day 1971; Bansal and Voyer 2000). In services settings, WoM is believed to play an even more important role than in the exchange process of goods due to the specific characteristics of services such as intangibility and non-standardization, customer integration, all of which add to higher risk perception of consumers prior to using the service (Zeithaml et al. 1996). In such ambiguous situations, information from other customers gains in importance since service consumers strongly rely on the opinions of other consumers when forming an expectation about the service, as well as when evaluating the service obtained (Haywood 1989). Although research in WoM in e-retailing has received growing interest (c.f. Davis and Khazanchi 2008), there has been very little empirical research into the consumption factors that 'spark' WoM behaviour. Thus;

H4: Website Innovativeness is positively related to Word-of-mouth

Methodology

Data were collected from a convenience sample of 406 actual consumers of a single e-retailer in the sport/leisure category. Respondents were sent an email invitation to participate with an embedded link to the website hosting the survey and were asked to base their assessment of their most recent website experience. The choice of retrospective experience sampling is consistent with previous studies investigating e-service issues (Bauer et al. 2006; Yi and Gong 2008). The variables of interest in the study were measured using established scales from the information systems, marketing and consumer behavior literature and adapted to the context of the present study. Measurement of perceived website innovativeness was adapted from Loiacono et al. (2007) which included three items. Overall e-service quality was measured by adapting Dabholkar et al. (2000) which included three items. Measurement of online trust was adapted from Bart et al. (2005). Website loyalty and WoM were measured as separate constructs with two items each and was adapted from Zeithaml et al.'s (1996) behavioural intention battery, which has become a common measure to assess consumer behavioural loyalty intentions in the services marketing context. All items were measured on seven-point Likert-type scales (strongly disagree (1) to strongly agree (7)).

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Results

Partial Least Squares (PLS), specifically PLS-GRAPH version 3.0 with the bootstrapping resampling procedure (Chin 2000) was used to assess the adequacy of measurement model of the five constructs and the predictive relevance of the conceptual model. PLS is appropriate in this study since the focal construct of the study, perceived website innovativeness, is newly developed. Further, as the main objective of this study was to predict the contribution of various antecedents on perceived website innovativeness, as well as its effects on various consumer responses, it is predominately concerned with maximizing the prediction of respective constructs. As such, the focus here is on the inner results as they relate directly to H1 – H4. An examination of model fit was undertaken via average variance accounted for (AVA), average variance extracted (AVE)[1], regression weights and bootstrap critical ratios (t-values) and path variance. Figure 1 shows the results of the PLS analysis.

Table 1 PLS results for the hypotheses tests

Predicted variable	Predictor Variables	Hypo-thesis	Path	Variance due to path	R^2	Critical Ratio
Overall e-Service Quality	Website Innovativeness	H1	0.79	0.62	0.63	30.58*
Trust	Website Innovativeness	H2	0.54	0.29	0.29	2.25*
Website Loyalty	Website Innovativeness	H3	0.52	0.27	0.27	15.74*
Word-of-Mouth	Website Innovativeness	H4	0.76	0.58	0.58	34.41*
AVA[a]					0.44	

[a] Average Variance Accounted
* paths exceeded minimum acceptable levels of 0.015 and t-values of >1.96

As paths are estimates of the standardized regression weights, this produces an index of the variance in an endogenous variable explained by that particular path, and 1.5% (.015) of the variance is recommended as the cut off point (O'Cass 2002). In addition, the critical values greater than 1.64 and 1.96 are statistically significant at 90% and 95% (White et al. 2003). As such, the bootstrap critical ratios were also found to be of magnitudes above the acceptable benchmarks for all the paths. The average variance accounted for (AVA), which is a statistic used to assess the predictive power of the model (Fornell and Bookstein 1982) shows the AVA was .0.44. Overall, the various results indicate that all hypotheses are supported.

Discussion and Implications

Overall, the empirical findings provide valuable insights concerning the effects of the perceived website innovativeness construct in the e-retail context. The findings indicate that perceived website innovativeness has a strong, positive impact on perceptions of overall e-service quality explaining almost 79% of the variance, supporting H1. The implications of this finding highlights the importance of ensuring that e-retailers *design* and *deliver* a unique and dynamic website consumption experience to consumers because of the influence this has on quality perceptions of the e-service. The findings also suggest that website innovativeness facilitates the development of trust in the website, thus supporting H2. That is, when consumers perceive the website experience to be innovative, the consumer will consequently

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[1] Preliminary analysis was undertaken via PLS and indicated the psychometric properties of the scale exceeded all key benchmarks. All factor loading, reliabilities and critical ratios for items within scale were acceptable.

form a positive perception of online trust. This finding seems to be consistent with the assertion made by Aaker (2007) that possessing an innovative brand image has a positive impact on firm credibility and trustworthiness. Given that perceived website innovativeness is a newly developed construct, this is a new finding and sheds new light on the role brand associations formed online have on online trust development. The findings further indicate that consumers who perceived website innovativeness tended to show stronger levels of website loyalty intentions, supporting H3.

The results suggest that consumers were found to be more likely to revisit the site and exhibit favourable purchase intentions towards the e-retailer. Since limited research is available in measuring the influence website loyalty as a consequence of perceived website innovativeness of e-retail consumers, the findings shed additional light on identifying drivers of customer loyalty behaviour in e-retailing. The findings also indicate that perceived website innovativeness makes a significant contribution to WoM, supporting H4. That is, when consumers perceive the website to be highly innovative, they are more likely to tell others about it and exhibit recommendation behaviours. Notably, perceived website innovativeness exerts a stronger positive influence on WoM (**β** 0.58 p, 0.01), than on website loyalty (**β** 0.27 p, 0.01). Given the call in the literature to harness WoM activity, the present research provides further insight on how practitioners can 'spark' favourable WoM behaviours in e-retailing. Prior research on WoM has largely focused on interpersonal (or face-to-face) service contexts and has largely neglected e-retail environments. Thus, the study contributes to this gap in the literature and enhances our understanding of WoM in this domain.

The primary limitation of this study is one e-retail category (i.e. sport/leisure goods) was chosen for examination. We purposely selected the sport/leisure e-retail category in order to test the focal construct of website innovativeness. As such, our findings should not be generalized to other e-retail categories. Therefore, future research should explore and compare the key constructs in this study with consumer evaluations across a variety of contexts (such as corporate branded websites, banking and finance, tourism, etc.). Future studies should investigate the website interface drivers of perceived website innovativeness such as usability, information content, visual appeal and online communities. Finally, the empirical relationships reported in this study are tentative in the sense that they are based on cross-sectional data. This is an important consideration given the time-dependency of Internet-based research resulting from the rapid pace of technological change, consumer expectations and experience levels, and new business models in the ongoing evolution of e-retailing (Hausman and Siekpe 2009). Thus, longitudinal research should be considered to define the exact causal nature of the interrelationships between constructs. This paper adopts a *service-oriented, customer centric view* that provides e-service researchers with additional insights to better understand the role of perceived website innovativeness and its effects in the context of e-retailing. These issues are of strategic importance given an underlying feature of most successful service businesses is an *unrelenting focus on the customer* where all strategies around innovation, quality and service improvement take into consideration the customer's perspective (Ostrom et al. 2010; Zeithaml et al. 2006). Thus, this research contributes to the growing understanding of e-retail consumption experiences which can be used as a basis to implement better e-service design and brand-building strategies.

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