

Creating Compelling e-Service Encounters: Examining e-Service Attributes and Flow

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Abstract

This study examines the impact of e-service quality attributes on the development of flow, and further investigates the impact flow has on consumers' Website loyalty and word-of-mouth behaviour. Based on data collected from 406 e-retail consumers of a single organization in the sport and leisure sector, the results indicate that favourable perceptions of e-service quality attributes has a major impact on the development of positive flow experiences. Further, the experience of flow appears to be a driver of Website loyalty and positive word-of-mouth.

Keywords: Flow, e-Service, e-Service Quality, e-Retailing

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Introduction

In recent years, providing compelling e-service encounters has emerged as an important issue in developing favourable consumer behaviour responses and outcomes in the Internet environment. Among the critical issues requiring further research is the design and delivery of technology-enabled service consumption experiences by firms' for consumers (Patrício, Fisk and Cunha 2008) that meet the description of compelling. In attending to this issue, we contend that when seeking to understand the provision of compelling e-service experiences, one cannot neglect the potential importance of flow. The concept of flow was first introduced by Csikszentmihalyi (1977) as an attempt to explain those times when individuals experience total immersion in a task. This state appears, on an initial examination to have an important role in services, especially given the extended nature of some service consumption situation. In this sense flow experiences have been studied in extended service encounters in leisure services such as kayaking and golf (Hopkinson and Pujari 1999; McGinnis, Gentry and Gao 2008). Recently McGinnis et al. (2008) note that the service provider in many ways helps produce consumer experiences such as flow through delivery of specific servicescape elements. Research has also studied flow in the Internet environment with Hoffman and Novak (1996) proposing that creating a commercially compelling Website depends on facilitating a state of flow and that an important objective for marketers should be to provide opportunities for its experience. In recent times, this has become possible for marketers with the advances in information communication technology (ICT) resulting in greater interactions with computers which provides mechanisms for improving flow opportunities and potentially better shopping experiences (Hausman and Siekpe 2009). Thus, the specific aspects of the e-service interface delivered by the firm are seen as critical in facilitating the state of flow in consumers.

While flow appears to be an important issue, to-date much of the e-service research has focused on e-service quality as the principle means of understanding and measuring e-services. In this domain the general consensus in the findings from different theoretical perspectives suggest that the provision of a superior e-service is delivered via various attributes which leads to positive affective states such as attitudes and consumer satisfaction, and positive behavioural intentions (e.g. Collier and Bienstock 2006; Parasuraman et al. 2005). However, what has not received attention in the e-services marketing literature is how the attributes of the e-service delivers an engaging and compelling flow experience to consumers.

We seek to add to the services marketing literature by investigating the impact of e-service (quality) attributes directly on the development of flow. In addition, the study explores the relationship between flow and behavioural outcomes such as Website loyalty and word-of-mouth (WoM). To our knowledge, little research has assessed these key constructs in a simultaneous model. These issues may be instrumental in providing additional insights into delivering compelling e-service consumption experiences to consumers.

Theoretical Development

Over the last 20 years a growing body of research has focused on consumption experiences and in this domain, flow theory has received some attention as a basis to facilitate the development of compelling experiences within certain consumption environments. Flow can be described as a psychological state of effortless action, loss of time and a sense that the experience stands out as being exceptional compared to activities in everyday life (Csikszentmihalyi 1997). While flow does refer to a specific state, it is a continuous variable in that different levels of flow can occur, ranging from none to an intense (or complete) state (Csikszentmihalyi and Csikszentmihalyi 1988). Importantly, Hoffman and Novak (1996) extend the universal applicability of flow to computer-mediated environments by arguing that online flow is a cognitive state experienced during navigation involving machine interactivity, enjoyment, loss of self-consciousness, and is self-reinforcing. In addition, they argue that an online shopping environment can bring about a state of flow, which in turn leads to more browsing and, ultimately, purchase. Consequently, the success for online marketers depends on their ability to create opportunities for consumers to experience flow (Hoffman and Novak 1996). To this end, one could conclude from recent arguments (c.f. Novak et al. 2000; Hoffman, Novak and Duhachek 2002) that creating compelling experiences for consumers in the Internet environment is dependent upon engineering specific deliverable attributes that assist the manifestation of a state of flow for consumers. This is because the computer-mediated environment incorporates various types of interactivity that has the potential to create a sense of immersion or 'telepresence' (Shih 1998). Consequently, it is this interactive environment which provides users with an opportunity to experience flow (Chen, Wigand and Nilan 1999). Therefore, in a commercial sense, the flow experience is a desirable consequence of the exchanges between the consumer and an organisation's Website which acts as the service platform for holding the consumer in the e-service environment.

In the past decade, studies have shown that a variety of attributes contribute to the performance of e-services delivered to consumers with much of the literature stemming from the marketing and information systems domain. For example, a growing body of literature in marketing has investigated e-service quality. This literature focuses on specific e-service quality attributes in assessing the degree to which an electronic service is able to effectively and efficiently fulfil customer needs (Fassnacht and Koese 2006). In this area, researchers include attributes such as visual appeal, security, layout, ease-of-use, information, responsiveness, and order fulfilment/delivery (e.g. Bauer et al. 2006; Collier and Bienstock 2006; Fassnacht and Koese 2006; Parasuraman et al. 2005). Further, studies within the e-retail literature support the notion that flow-like experiences occurring during e-service encounters are primarily driven by Web-based characteristics (such as the presence of multimedia, Web atmospherics, interactivity, product-related information content) and when the consumer has a high degree of perceived control during the process of Website navigation (Childers et al. 2001; Eroglu et al. 2003; Mummalaneni 2005). Conversely, the inhibitors of flow include long download time, delays to download plug-ins features, failure of navigation links, long registration forms, non-intuitive Websites, slow navigation, and Internet connectivity issues (Richard and Chandra 2005). Further, Williams and Dargel (2004) highlight that 'stimulus' attributes (such as content and design) can influence flow to occur. However, there is no clear consensus on the attributes which characterise effective e-service delivery.

Despite the lack of agreement in the literature on the attributes of e-service quality/effectiveness, Fassnacht and Koese's (2006) model of e-service quality has emerged as a reliable tool to measure its attributes. Under their conceptualisation, e-service quality is

configured into a hierarchical framework which includes three dimensions as second order factors which are further represented by nine sub-dimensions as reflective first-order factors (i.e. Environment Quality comprised of graphic quality, clarity of layout; Delivery Quality comprised of Attractiveness of selection, information quality, ease-of-use, technical quality, and Outcome Quality comprised of reliability, functional benefit and emotional benefit). Consequently, a consumers' evaluation of these dimensions then contribute to their overall perception of e-service quality. In extending this work we argue that *positive* perceptions of these specific e-service quality attributes delivered to the customer will engage consumers' and enable them to immerse themselves in the Website, as opposed to an overall judgement of quality. Therefore, we argue that Fassnacht and Koese's e-service quality attributes of Environment Quality, Delivery Quality and Outcome Quality embodies these properties and are a direct cause (or impair) of a flow state in the e-service environment. As such, in order for consumers to achieve flow within this context, positive perceptions of these three attributes (i.e. cognitive judgements related to the e-service interface) must be delivered by the firm to *enable* the consumer to be immersed and engaged with a Website to achieve flow. Thus,

Hypothesis 1a: *Environment Quality significantly contributes to flow*

Hypothesis 1b: *Delivery Quality significantly contributes to flow*

Hypothesis 1c: *Outcome Quality significantly contributes to flow*

Previous studies in offline environments have argued that people who experience flow tend to want to replicate or re-experience that state (Celsi et al. 1993). Therefore, a consumer who experiences flow will seek to reengage and revisit the activity which delivered the flow experience. Studies focusing on the Internet also indicate that when a state of flow occurs this will lead to specific behavioural consequences (Novak et al. 2000; Koufaris 2002). A direct outcome of flow during a Website navigation session has been found to be exploratory behaviour which in turn will increase the amount of time spent at the Website. That is, when the user has achieved a state of flow they are then more willing to explore and interact with the Website to further continue the experience, even if it is a goal-directed motivated navigation session (Hoffman and Novak 1996; Novak et al. 2000). Others have also found that that experiencing flow influences behavioural intentions such as an increase in the likelihood of purchasing from a Website, longer visitation at a Website (known as stickiness), revisiting the Website in the future, positive WoM behaviours to others (Novak et. al. 2000; Richard and Chandra 2005; Skadberg and Kimmel 2004), and visit the service provider in a physical (i.e. offline) service location (Skadberg and Kimmel 2004). Therefore, it is argued that flow directly influences Website loyalty, as we all as influence the consumer to say positive things about the site and recommend it to others. Thus,

Hypothesis 2a: *Flow will have a significant positive influence on Website loyalty*

Hypothesis 2b: *Flow will have a significant positive influence on word-of-mouth*

METHODOLOGY

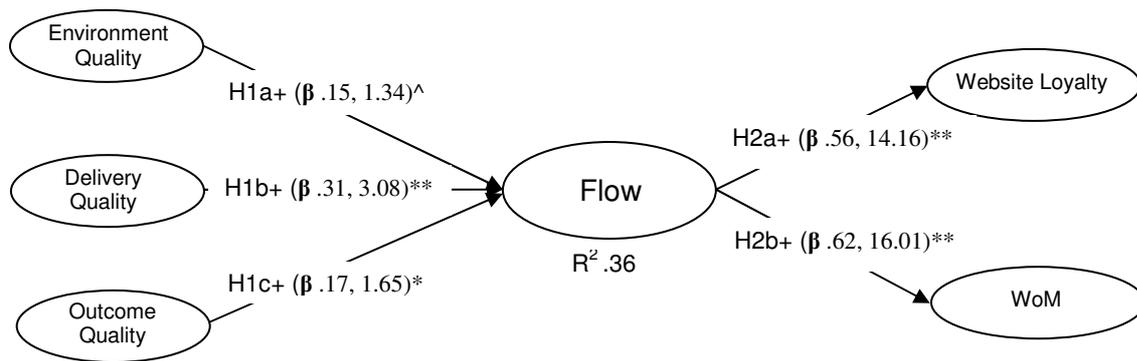
To test the hypotheses, data were collected via a convenience sample of actual consumers from a single e-retail organisation in the sport/leisure sector. Respondents were sent an email invitation to participate with an embedded link to the Website hosting the survey and were asked to base their assessment on their most recent e-service experience with the e-retailer. The choice of retrospective experience sampling is consistent with previous studies investigating e-service issues (Bauer et al. 2006; Yi and Gong 2008). The flow items were drawn from Csikszentmihalyi (1978), Chen et al. (1999) and Kowal and Fortier (2000) and

were adapted to the context. Items used to measure the attributes of e-service quality were drawn from Fassnacht and Koese (2006). Zeithaml et al's (1996) behavioural intention battery was adapted for use in the context of the Internet. However, as Rossiter (2007) notes, the behavioural intentions construct which comprise multiple items should be analysed separately since WoM and Web-specific intentions are different types of behaviours relating to different stages of the purchase process (e.g. WoM as a predictor of future sales growth). As such, taking this view as espoused by Rossiter (2007), we form two separate constructs to assess behavioural intentions. The first construct being Website loyalty included items such as switching behaviour, purchase intentions and site revisitation, and a second construct being WoM behaviours. All items were measured on seven-point likert scales with scale poles from strongly disagree (1) to strongly agree (7).

RESULTS

A total of 406 usable responses were obtained. Male respondents represented 60% of the overall sample, while females represented the remainder 40%. Partial Least Squares (PLS), specifically PLS-GRAPH was used to assess the adequacy of measurement models of the five constructs and the predictive relevance of the conceptual model simultaneously, and thereby test the five hypothesized relationships. The selection of PLS has advantages given the main objective of this study is concerned with maximizing the prediction of respective constructs and enabled examination of measures and theory simultaneously (e.g. Fornell and Bookstein 1982). In this study, we assessed the adequacy and significance of outer-measurement models through an examination of specific indices including component loadings ($>.35$), composite reliability ($>.70$), average variance explained ($>.50$), bootstrap (critical ratios) t-statistic (>1.96), with all the results exceeding the recommended benchmarks. In addition, consistent with Fassnacht and Koese's (2006) model, attributes of e-service quality (i.e. Environment Quality, Delivery Quality and Outcome Quality) were conceptualized as a Type I second-order factor model being represented by reflective indicators as outlined by Jarvis et al. (2003). Consequently, the results for the 1st order dimensions also indicated that all values exceeded recommended benchmarks.

To test the inner model, an examination of regression weights, path variances (effect size), bootstrap critical ratios and average variance accounted for (AVA) was undertaken. As shown in Figure 1, the significance of individual paths for each variable showed that all were greater than the .015 (1.5%) recommended cut-off (O'Cass 2002), as well as all bootstrap critical ratios greater than 1.96 ($p <.01$), with the exception of H1a. The predictive relevance of the structural model was then assessed via the average variance accounted for (AVA) with the value showing acceptable magnitudes for the inner-structural model at .51 which is greater than the recommended cut-off of .10 (Falk and Miller 1992). Overall, the results indicate that all hypotheses were supported, except H1a.

Figure 1 – Model and Results of the Study

** $p < 0.01$; * $p < 0.05$; [^] non-significant; values in parentheses are t-values

Path Variance: H1: 0.09; H2: 0.18; H3: 0.10

Average Variance Accounted for (AVA) = .51

Discussion, Implications and Future Research

In sum, the findings provide insights concerning the relationships among e-service quality, flow, Website loyalty and WoM. The central theme of our research consists of two key components: (1) attributes of e-service quality directly influences consumers to achieve a flow experience; (2) the outcomes of the flow experience leads to favourable consumer behaviour outcomes as expressed in greater loyalty intentions and positive WoM. Our results show that attributes of e-services have a significant positive influence on flow, with the exception of Environment Quality. Whilst the relationship was not significant, it was found to be positive nonetheless. Since little to no empirical work has been undertaken investigating the direct effect of e-service quality attributes on the formation of flow, the findings enhance our understanding of how Web-based attributes drive a flow state in the e-service environment. Importantly, the findings empirically support a theoretical proposition in the literature that e-service attributes are one of the main contributors to the creation of flow for customers (e.g. Bauer et al. 2006). The findings also show some empirical support to previous conceptual work by Williams and Dargel (2004) that elements on a firm's Website influence the creation of flow experiences. The findings also indicate that flow makes a significant positive contribution to Website loyalty and WoM supporting hypothesis 2a and 2b. That is, when consumers achieve a flow state, they are then more likely to exhibit purchase intentions, revisit the Website as well as reduce the likelihood of switching to a competitor e-service offering. The findings also clearly indicate that flow is a key facilitator of consumers telling others about the Website.

On the basis of these collective findings, it appears that flow plays an important role in influencing favourable consumer behaviour outcomes when an effective e-service encounter (via the three e-service attributes) is delivered to consumers. As such, resources and marketing capabilities must be devoted to ensure that the construction and configuration of attributes delivered via the Website interface are conducive to creating and facilitating flow. These findings work towards reinforcing the point made by Hoffman and Novak (1996) that creating a commercially compelling Website depends on facilitating a state of flow for consumers and that an important objective for marketers should be to provide these opportunities for consumers to experience such a state.

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