Investigating the Relationships between e-Service Quality, Product Involvement and Flow on Behavioural Intentions of e-Services

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Abstract

Understanding the consequences of perceived e-service quality has been an area of research that has received increased attention within the services marketing literature. However, to-date little if any research has examined the impact of the service delivery via the internet and its ability to engage or help promote a state of flow in consumers using content driven websites. This study contributes to services marketing research by examining the relationships between e-service quality and consumer levels of product involvement, the development of flow experiences and behavioural intentions in the context of e-service delivery. Based on data collected from 518 Australian consumers, the results indicate that e-service quality together with product involvement have a positive influence in the development of flow experiences and that flow influences behavioural intentions.

Introduction

In recent years, providing superior e-service quality has emerged as an important concept in developing positive consumer behaviour outcomes in the Internet environment. Despite the debate surrounding conceptualising and measuring the e-service quality construct, the findings from previous studies suggest that the provision of a high quality e-service experience (delivered via various attributes) leads to consumer satisfaction and positive behavioural intentions (Collier and Bienstock 2006; Cristobal et al. 2007; Lee and Lin 2005). However, what has not received attention in the e-service quality literature is the role of e-service quality and consumer involvement in helping to engage and promote consumers’ experience of flow in a business-to-consumer (B2C) website. As such, we focus here on the impact of e-service quality and involvement in the entity (e.g. organisations, retailers, and sporting teams) and the extent that these variables impact flow, and its relationship with key behavioural outcomes. Limited research has simultaneously assessed these variables in conjunction with e-service quality which may be instrumental in providing additional insights into consumer’s e-service consumption experiences. To this end, we raise the contention here that, the delivery of high quality e-service combined with greater consumer involvement in the focal entity will lead consumers to experience states of flow in the associated website. We further contend that such a state of flow will cause consumers to revisit the website, purchase from the website and tell others about it.

Research from the information systems and consumer behaviour areas have increasingly focused on the role of product involvement (Balabanis and Reynolds 2001; Jee and Lee 2002) and flow theory (Huang 2006; Novak et al. 2000; Poole and O’Cass 2001) to better understand and explain buyer behaviour in the context of the Internet. Despite the growing interest of product involvement and flow, these variables are yet to be empirically tested together within e-service quality frameworks. This is important since the website interface provides an environment (i.e. the e-service encounter) to provide extrinsic cues which trigger emotional responses. This is in a similar fashion which occurs in the offline physical retail shopping environment (Bauer et al. 2006). Exploring these variables within the same e-service quality framework will enable managers a more ‘holistic perspective’ to formulate effective electronic customer relationship management programs to deliver superior e-services. Therefore, the purpose of this study is to enhance our understanding of e-service experiences.
of consumers by investigating the influence that both e-service quality and product involvement have on the development of flow experiences for consumers, and the influence flow has on behavioural intentions within the Australian B2C context.

Theoretical Development

**Relationship between e-Service Quality and Flow**

Similar to the traditional definition of service quality, service quality in the Internet environment is defined as the consumers’ overall evaluation and judgment of the excellence and quality of e-service offerings in the virtual (i.e. Internet) marketplace (Santos 2003). The nature of the e-service quality construct is described as being multidimensional in nature and includes all aspects of the service delivered via an organisation’s website, This is because consumers primarily make their evaluation and assessment of e-service quality based on specific attributes (e.g. information content, usability, responsiveness, visual appeal) of a website interface because of the limited human interaction with the service provider (Long and McMellon 2004). Previous studies have shown that high levels of e-service quality (via delivery of the various quality attributes) has a positive influence on affective consumer responses such as satisfaction and attitudes (e.g. Collier and Bienstock 2006; Carlson and O’Cass 2007; Chen et al. 2002; Wolfinbarger and Gilly 2003; Yoo and Donthu 2001). In a similar fashion, it can be argued that high levels of e-service quality can heighten consumer emotional experiences and consequently achieve a flow state on the Internet.

The concept of flow is described as a mental state of heightened, or optimal, experience, where an individual encounters total immersion in a challenging task such as performing surgery, playing sport and usage of information technology (Csikszentmihalyi 1997). Novak et al. (2000) describe consumers who achieve a flow state on the Internet as those individuals who focus exclusively on the interaction with the website and find browsing a website extremely gratifying. Such concentration by individuals in these circumstances will lead to processing the information contained in the website more thoroughly and carefully than individuals who have not experienced an intense flow state. Numerous studies have also shown that a direct outcome of a flow state during a website navigation session is exploratory behaviour (Novak et al. 2000; Koufaris 2002; Poole and O’Cass 2001). That is, when the user has achieved a state of flow (i.e. feel challenged in the navigation task that arouses a heightened affective state) 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). In addition, feelings are aroused during e-service encounters which are primarily driven by Internet characteristics such as the presence of multimedia, interactivity and a high level of control during the process of website navigation (Childers et al. 2001; Csikszentmihalyi 1988; Novak et al. 2000). Therefore, in order for consumers to achieve a flow state in the delivery of e-services, the provision of high e-service quality via the various attributes (such as relevant information content, quick response time and ease of navigation) must be delivered to enable the consumer to immerse and engage with a website to experience flow (i.e. heightened affective state). Thus,

**H1:** e-Service quality will have a significant positive influence on Flow

**The Relationship between Product Involvement and Flow**

Previous research in a variety of different contexts indicates that product involvement has a direct impact on consumption related behaviours (O’Cass 2000; Slarma and Tashchian 1985). These include increased motivation to engage in problem solving activities such as searching, information processing, decision-making, and purchase behaviour (Evrard and Aurier 1996;
Kapferer and Laurent 1986). This relationship between product involvement and various behavioural activities has also been argued to exist in the context of the Internet environment which could lead to the development of positive flow experiences. For example, prior studies have argued that highly involved consumers are expected to spend more time at a website and engage in consumption related activities. They gain more information about a product or service; possess a higher ‘intention to interact’ with a ‘product’ related website of interest, exhibit more extensive information search habits (e.g. Jee and Lee 2002; Richard and Chandra 2005) and are more likely to conduct online purchases (Balabanis and Reynolds 2001; Richard and Chandra 2005). On the basis that involvement with a product (i.e. automobiles, clothes, sport etc) influences intentions and consumption related activities, it can therefore be argued that highly involved consumers (e.g. with a favourite sports team or fashion clothing) who engage within a stimulus environment related to the object of interest (e.g. a favourite sports team website or retailing website), will be more likely to lead to a positive emotional experience such as flow.

Product involvement is considered a central component in the development of flow since it requires the complete interest of the actor with his/her activity (Mannell et al. 1988). Importantly, whereas product involvement refers to the perceived importance or personal relevance of an object or event (e.g. supporting a professional sporting team) (O’Cass 2002), flow refers to specific periods of time when an individual reaches a balance between challenge and skill, and is totally immersed in a task in a particular environment (e.g. browsing and interacting with a website) (Ghani et al. 1991; Privette and Bandler 1987). For example, highly involved fans of professional sporting teams are known for their ability to ‘lose’ themselves within their favourite team’s website. The unique properties of a website may enrich the overall sport experience through the provision of interactive content that enables the sports fan (i.e. the consumer) to immerse themselves in the team (i.e. the brand) (Carlson et al. 2003). Information content relating to the ‘product’ (i.e. the sports team) including in-depth team/player information, venue information and other interactive experiences has been used to attract and hold large, focused audiences (Turner 1999). On this basis, it can be argued that the service experience delivered via the website attributes (e.g. information content and usability) is designed to provide pleasurable experiences to its fans (i.e. the consumer), facilitating flow experiences. Drawing from the information systems and consumer behaviour literature investigating flow in the Internet environment, it can be argued that consumers who are highly involved with an organisation/brand (i.e. object of interest) will be more likely to experience flow (i.e. heightened affective state) when visiting the organisation’s website (stimulus which is related to the object of interest). Conversely, it can be argued that less involved consumers will be less likely to experience flow. Thus,

H2: Product involvement will have a significant positive influence on Flow

The Relationship between Flow and Behavioural Intentions
Previous studies indicate that certain individuals have the propensity to lose themselves when in a state of flow within the Internet environment resulting in behavioural consequences. For example, Csikszentmihalyi (1997) indicates that flow occurs when an individual experiences total immersion in a challenging task that demands a perceived level of skill that results in activity or some form of a behavioural response, such as performing surgery, playing sport and usage of information technology. Numerous studies in the Internet environment have similarly shown that flow influences behavioural responses (Novak et al. 2000; Koufaris 2002; Poole and O’Cass 2001). For example, a direct outcome of a flow state during a website navigation session is the exploratory behaviour. That is, when the user has achieved a state of flow (i.e. feel challenged in the navigation task that arouses a heightened affective state) 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). In this context, previous empirical studies have found that that experiencing flow influences behavioural intentions in the context of the Internet. These include an increase in the likelihood of purchasing from a website, revisit the website in the future, and positive word-of-mouth recommendation behaviours (Novak et. al. 2000; Koufaris 2002). Although most studies relating to the flow construct in the Internet environment have concentrated on the characteristics of the experience itself (e.g. Chen et al. 1999; Novak et al. 2000; Rettie 2001), it is argued here that, within the consumers’ preferred Internet environment (i.e. using there preferred website), flow will positively influence behavioural intentions. Therefore it is argued that flow directly influences behavioural intentions, because when consumers achieve a state of flow (i.e. feel challenged in a particular task and find the experience gratifying), they are then motivated to continue the experience and engage with the website. Thus, 

H3: Flow will have a significant positive influence on behavioural intentions

Methodology

Since the population of relevance to the current study is all consumers who are able to use the Internet to browse an organisation’s website, the specific context of sports consumers in the Australian B2C Internet environment was chosen. Sports coverage on the Internet is among the fastest growing paid content categories (Gray 2005). In addition, websites offering sports content traditionally have been rated among the most sophisticated and popular destinations, with the ability to offer rich content which spans time zones and countries, attracting mass audiences, leading to an expansion of e-commerce opportunities (Carlson et al. 2003). Thus, the sport sector on the Internet is of relevance to examine as the context for this study and to this end a convenience sampling method was selected to collect data for the study. The sample consisted of sports consumers who browse (and were regular visitors of) their preferred sporting team website. Thus, respondents were able to base there prior Web-based experiences on their preferred sporting team, regardless of sporting code (i.e. any service provider [sporting team] within the professional sport sector). Respondents were approached to participate and sent an email invitation to participate with an embedded link to the website hosting the survey.

The variables of interest in the study were measured using established scales from the services and consumer behaviour literature. Measurement of e-service quality was sourced from Loiacono et al. (2002) WebQUAL scale. The scale consists of 36 items and has been previously used to measure quality perceptions across four types of retailing websites. The scale has been used in previous studies assessing apparel websites achieving acceptable reliability levels (Kim and Stoel 2004a; Kim and Stoel 2004b). Items used to measure product involvement were sourced from O’Cass (2001). Flow was measured by adapting scales from Poole and O’Cass (2001) which used a seven item scale to assess flow in the context of preferred (online vs mall) shopping environments. The scale was originally developed by Csikszentmihalyi (1978) and Chen et al. (1999). The behavioural intention from Zeithaml et al’s (1996) behavioural intention battery was used to assess consumer behavioural intentions (revisit, word of mouth). All items were measured on seven-point Likert-type scales, with scale poles from strongly disagree (1) to strongly agree (7).

Results

In total, 518 responses were gathered. To test the hypotheses, Partial Least Squares (PLS) analysis via PLSgraph was used as it is a comprehensive statistical approach for testing
hypotheses about relations among observed and latent variables (Hoyle 1995). Typically the outer and the inner models of PLS are evaluated and Johnson et al. (2006) suggest that the outer model is evaluated on the reliability and discriminant validity of the constructs and the inner model is evaluated on the size and significance of the path coefficients and the models ability to predict, in this case, flow and behavioural intentions. This was undertaken and all tests indicated the measures performed well, exceeding all identified benchmarks. For example, the composite reliability (CR) for e-service quality was 0.98, Average Variance Explained (AVE) was 0.53, for Flow CR was 0.95 and AVE was 0.72, for involvement CR was 0.83 and AVE 0.44, and for purchase intention CR was 0.90 with an AVE of 0.64. As shown below in Table 1, all paths exceeded the recommended criterion and are significant and exhibit positive relationships. For example, the results indicate that the AVA for the endogenous variables was 0.58 and the individual r-squares are all greater than the recommended 0.10 cut-off (Falk and Miller 1992) for the predicted variables of Flow and behavioural intentions. With all r-squared estimates being larger than the recommended level, it is appropriate, then, to examine the significance of the individual paths associated with these variables (Falk and Miller 1992), with 0.015 (1.5%) of the variance being the recommended cut-off point (O’Cass 2002).

Table 1 PLS results for the hypotheses tests

<table>
<thead>
<tr>
<th>Predicted variable</th>
<th>Predictor Variables</th>
<th>Hypothesis</th>
<th>Path</th>
<th>Variance due to path</th>
<th>R²</th>
<th>Critical Ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow</td>
<td>e-Service Quality</td>
<td>H1</td>
<td>0.576</td>
<td>0.35</td>
<td>0.35</td>
<td>12.60</td>
</tr>
<tr>
<td></td>
<td>Product Involvement</td>
<td>H2</td>
<td>0.136</td>
<td>0.38</td>
<td>0.39</td>
<td>2.25</td>
</tr>
<tr>
<td>Behavioural intentions</td>
<td>Flow</td>
<td>H3</td>
<td>0.600</td>
<td>0.36</td>
<td>0.36</td>
<td>14.92</td>
</tr>
<tr>
<td><strong>AVA</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0.58</td>
<td></td>
</tr>
</tbody>
</table>

* Average Variance Accounted

**Conclusions, Discussions and Implications**

The study provides several implications for marketing theory and practice. Whilst the growing services marketing literature has studied the antecedents and consequences of e-service quality, this study explored the impact that e-service quality and product involvement have on the flow construct. This is a new finding since previous studies have not examined these relationships. Therefore, this research sheds new light on the current e-service quality research by simultaneously modelling e-service quality and product involvement to flow to better understand e-service experiences of sports consumers. The results also indicate that flow positively influences behavioural intentions. This finding is consistent with previous studies which have shown that flow has a positive influence on behavioural intentions in computer mediated environments such as the Internet. The findings of this study in the specific context of sport have important implications for e-services marketing theory development in that they add a new perspective to our understanding of how consumers perceive and evaluate e-services in other service contexts other than the pure e-retailing domain which dominates the services marketing literature. This indicates that these relationships need to be empirically tested in other service contexts in the B2C Internet environment such as travel/hospitality, finance and e-retail shopping websites. In addition, since the study was conducted within the Australian consumer context, future studies should explore the framework with consumers across cultures to further understand the internationalisation of e-service delivery. Finally, the study also highlights important considerations for practitioners to engineer and facilitate quality e-service experiences for consumers that contribute to positive consumer behaviour outcomes.
References


