Chapter 7
Australian Users' Interactions with E–Services in a Virtual Environment

Kamaljeet Sandhu
University of New England, Australia

ABSTRACT

Research into human interaction with computers requires a clear understanding about "user learning experience" on websites that shape user perceptions about virtual work. This chapter investigates issues that impact users' learning based on experience in using the e-services system. This research aims to address some of the important characteristics of user learning experience and how it can positively/ negatively impact user attitudes towards e-service tasks in virtual work. The adoption, use, and then continued use of an e-services system in terms of e-services system characteristics based on service-user interaction will be studied.

INTRODUCTION

E-Services are a focus of research within areas such as Marketing, Management, Information Technology and Information Systems (Parasuraman & Grewal, 2000; Abdelmessih, et al., 2000; Rust & Lemon, 2001; Chea & Lou, 2008; Scupola, 2008; Chellappan, 2008, Li & Liu, 2011). Information

Technology usage is a key dependent variable in MIS research (DeLone & McLean, 1992) and users interaction with e-services in a virtual environment. However, little is understood about the adoption process which explores the sequence of activities that lead to the initial adoption and to the continued usage of an IT at the consumer adoption level (Karahanna, et al., 1999). Other researchers argue for identification of what constitutes as successful adoption of a technology

(e.g. Brancheau & Wetherbe, 1990; Cooper & Zmud, 1990; Cale & Eriksen, 1994; Prescott & Conger, 1995). However, what is common in different adoption research is the importance of user characteristics that drive the use of a technology such as web-based user services.

This paper specifically investigates issues related to user learning experiences in web-based learning adoption and the process involving continued use of web-based learning services. With technology constantly changing it will subsequently have an effect on the user's learning experience and perception. Web-based user services are generally perceived as being successful, but there has been little evaluation of how well the web meets its user's' primary information requirements in virtual environment tasks (D'Ambra & Rice, 2001). The freedom and flexibility offered by the Internet allow users to connect to other websites of their interest and at the same time build upon their e-learning experience on the web. A number of researchers suggested that flow is a useful construct for describing interactions with websites in virtual tasks (Csikszentmihalyi, 1975; Johnson & Mathews, 1997; Zeithaml, et al., 1993; Zeithaml, et al., 2000; Chea & Lou, 2008). Flow has been described as "the process of optimal experience" (Csikszentmihalyi & LeFevre, 1990) achieved when sufficiently motivated user perceives a balance between their skills and challenges of the interaction, together with focused attention (Hoffman & Novak, 1996).

Earlier studies investigated the adoption of web-based systems in different contexts, but did not provide insight into their acceptance and continued use by users. Though a consumer may use a web-based system for the first time, its continued use relates to the success. The user's web-based learning experience may form an impression of the system in terms of how easy or how difficult it is to operate the system.

Zanna and Rempel (1988) and Karahanna et al. (1999) have distinguished between pre- and post-adoption attitudes, which may be formed based on three general classes of information: information concerning past behaviour, affective information, and cognitive information. Users past behavioural interaction with information forms the initial process that triggers the adoption process, which leads to a user analysing information relevant to the context—and recalling that information in similar situations. In the post-adoption process the user continuously tends to reflect on their past interactions and applies experience that would provide positive outcomes. Karahanna et al. (1999:188) argue that it is reasonable to assume that pre-adoption beliefs are primarily based on indirect experience (effect or cognition) with IT while post-adoption usage beliefs are based on past experience.

BACKGROUND

This study assumes that user's experience with information already exists in the traditional environment (i.e., offline). Understanding the traditional learning complexities of user experience with information and transforming it to the web-based environment is a challenge for both practitioners and researchers. The dimension and scale of such complexity in terms of technology and its alliance with information may provide an integration point where technology requirements may meet with the user's learning experience. Defining user learning experience with information is not an easy and straightforward process. Rather developing an approach to studying the learning experience process on the basis of web-based learning and user interaction is suggested.

User's engaged in web-based learning activities tend to focus on prior information experience and perception of task/s done, especially from the offline environment. The effect of information on user experience in web-based learning on first time user's compared to the frequent user's will vary, a user with no experience can form high (or low) perception, especially via word of mouth

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