

# Chapter 16

## Case Study Findings from Human Interaction with Web E–Services: Qualitative Data Analysis

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### ABSTRACT

*Case study findings may provide a deeper insight into human interaction with web e-services. The qualitative data that was captured in this study suggests that human interaction with web e-services may make the user task difficult, and that the user expectation about the system not meeting user requirements may downgrade the system's use. Introducing an e-services system without integrating the user-friendly characteristics may have the effect of introducing complexity. Initial staff impressions of the system were formed on the basis of their expectations. When task outcomes did not meet their expectations, staff tried and then avoided its use.*

### INTRODUCTION

The implications of using e-services are significant for business (Xue, et al., 2004). Customer participation in and acceptance of e-services provides them with a broader choice of services that meet

their requirements. In some organisations this has led to the overhaul of the service delivery system (Xue, et al., 2004; Al-Ajeeli & Al-Bastaki, 2011). It is therefore important to understand the user roles in e-services system development. User-e-services interaction behaviour on websites is unique in the sense that the interface takes place in

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cyberspace within a short time. It is important for business to understand what influences the use of an e-services system within that short time frame (Grönroos, et al., 2000). End-user requirements is one of the core themes driving the success/failure of e-services systems.

Organisations engaged in e-business are providing e-services such as banking, airline ticket booking, car rental, management consulting, and the selling of music and software. Educational institutions are increasingly opting for interactive, e-services system delivery to meet user demand (Forrest & Mizerski, 1996). E-services system offer advantages such as instant and 24 X 7 access, immediate feedback and receipting, effective and immediate ordering etc, to business and government organisations delivering online services. For example, Hewlett Packard is rapidly transforming their after-sales service to e-services system business units (McCarthy, 1999; Ruyter, et al., 2001). Organisations have realised it would be easier for both businesses and their customers to put information up on the web than to answer repeated requests from users (Berners-Lee, 1999, p. 65).

With the development of information technology allowing user participation in service delivery on websites, customers' roles in the e-services process have become more important. Therefore, it can be argued that researchers need to pay more attention to customers' and users' evaluations of technology-based services (Parasuraman & Grewal, 2000; Chea & Lou, 2008; Chellappan, 2008).

In general, existing research suggests that e-services system translate into fast delivery of services on websites and portals without the users investing much time or effort. The flexibility in service delivery offered by e-services system provides users with quick selection of the best services available, choice from a wider range of service providers, the availability of interaction in their own time and space, easier access to several related services, access to unlimited content, and excellent retrieval facilities (van Riel, et al., 2001).

Organisations and governments worldwide have established e-services system on websites, including services as diverse as bill paying, taxation, online delivery of education, medical information, legal consultancy, business consultancy, cultural awareness, real estate buying and selling, and transport information on timetables and registration (for example [www.firstgov.com](http://www.firstgov.com) in the USA; [www.europa.eu.int](http://www.europa.eu.int) in Europe; [www.ukonline.gov.uk](http://www.ukonline.gov.uk) in the UK; [www.fed.gov.au](http://www.fed.gov.au) in Australia; [www.gov.sg](http://www.gov.sg) in Singapore; and [www.gov.hk](http://www.gov.hk) in Hong Kong).

## LITERATURE REVIEW

The Technology Acceptance Model (TAM) represents an important theoretical contribution toward understanding Information Systems (IS) usage and IS acceptance behaviour (Davis, et al., 1989; Robey & Sahay, 1996). Similarly Venkatesh (2000) argues that perceived usefulness and useability of IT are major determinants of IT usage. Previous research demonstrates that this model is valid across a wide variety of IS studies (e.g. Adams, et al., 1992; Chin & Gopal, 1993; Hendrickson, et al., 1993; Chin & Todd, 1995; Davis, 1993; Davis & Venkatesh, 1996; Gefen & Straub, 1997; Iqbaria, et al., 1997; Mathieson, 1991; Segars & Grover, 1993; Subramanian, 1994; Szajna, 1994, 1996; Taylor & Todd, 1995; Venkatesh & Davis, 1996; Venkatesh, 1999; Venkatesh & Morris, 2000; Legris, et al., 2003). Applying TAM is a useful means of investigating user requirements with regard to usefulness and user friendliness in this study as they apply to e-Services (Pedersen & Methlie, 2001). Davis (1989) argues that the role of perceived usefulness and perceived ease of use determines user acceptance of a technology. Perceived ease of use is the extent to which a user believes that using a technology will be free of effort; whereas usefulness is linked to a user's assessment of the effort involved in using the system (Davis, 1989; Venkatesh, 2000). In the

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