

## Chapter 7.4

# Factors Influencing Satisfaction with Mobile Portals

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### ABSTRACT

*Smart phones are increasingly used in commercial sectors to facilitate mobile transactions. Herein the advancements of mobile technology and network engineering have been instrumental in the proliferation of pervasive computing using mobile devices. As a result portal technology has emerged to provide users in both Web and mobile contexts with a single point of access and personalization to Information Systems. The shortcomings of existing instruments in capturing the diversity in user opinions about satisfaction with mobile portals mean that the development of a new instrument for measuring user satisfaction in this context is invaluable. This chapter documents the first stage in this journey, namely the content validation process. Drawing upon related theoretical and empirical research, the authors identify an initial pool of factors that affect user satisfaction with mobile portals. Then, using multiple focus groups, the authors refine these factors in preparation for the next stage, which involves development of the items.*

### INTRODUCTION

The vision of taking computing off the desktop and interlacing it into daily life has become reality. This has been facilitated by the emergence of devices with integrated computing capability and much improved wireless and battery technology.

Here, for many people, smart phones have become a significant and integral part of daily life due to their compact size, affordable price, and internet capabilities and functionality like mobile portals. In fact, owing to their affordable price and functionality, mobile phone users outnumber fixed-line telephone users in many countries. According to the International Telecommunication Union the number of worldwide mobile phone subscribers

DOI: 10.4018/978-1-61350-101-6.ch704

increased exponentially from 1.16 billion in 2002 to 3.35 billion in 2007 (ITU, 2007). This figure is expected to hit 5.2 billion by 2011 (Malik, 2008). Given this growth in the utilization of these devices, it is surprising that there is a lack of research that shows how satisfied users are with aspects like mobile portal use.

The concept of satisfaction occupies a central position in business because of its positive impact on market value and accounting returns (Anderson et al., 1994, 2004; Ittner and Larcker, 1996). Here past research indicates that consumer/user satisfaction is a reliable predictor of post-purchase phenomena such as future purchase intention, reuse, brand loyalty and attitude to change. Further, it is a key driver when recommending products and usage to others (Patterson and Spreng, 1997; Wang et al., 2001; Eggert and Ulaga, 2002; Anderson et al., 2004; Howard, 1974; Churchill and Surprenant, 1982). Within the field of marketing consumer satisfaction has long been one of the most widely researched topics. SERVQUAL, an instrument developed in the mid eighties to measure the gap between customer expectations for and perceptions of service quality, is one example of a seminal measure of satisfaction (Parasuraman et al., 1985, 1988). As research into the use of Information Systems (IS) is concerned with, amongst other things, consideration of human behaviors, researchers investigating this discipline often borrow measures and theoretical perspectives from related disciplines like marketing and adapt them to this arena (e.g. DeLone and McLean, 1992; Pitt et al., 1995). For example, researchers have adapted and applied the SERVQUAL instrument to assess user's satisfaction with website service quality, which has resulted in new measures like WEBQUAL (Barnes and Vidgen, 2001).

With respect to user satisfaction with mobile portals, currently there is a dearth of literature that directly examines this. A common proxy measure for user satisfaction is system success (Wang and Liao, 2007). As the success of mobile portals is dependent upon their ability to satisfy user re-

quirements, it is unsurprising to find that smart phone developers and wireless network portal providers are keen to develop mobile portals in ways that increase the experience for users. From a practical standpoint this makes investigation into measuring user satisfaction with mobile portals critically important. From a theoretical standpoint, by exploring the theoretical underpinning of *user satisfaction* and providing a meaning of the construct in the context of mobile portals, we make a contribution here as well.

Although a number of widely accepted and employed scales for measuring user satisfaction in IS research already exist, for example Bailey and Pearson's (1983) measure of computer user satisfaction, Ives et al.'s (1983) refinement of this to measure user information satisfaction and Doll and Torkzadeh's (1988) refinement of Ives et al.'s instrument to measure end-user computer satisfaction, these scales are inappropriate for measuring user satisfaction with mobile portals for the following reasons. Firstly, the former two scales were built to gauge user satisfaction with overall IS in a traditional computing environment where users interact with developers and operational staff; whilst the third scale was developed to measure user satisfaction with specific IT applications in an end-user computing environment where users' interactions are governed through computer interfaces. Secondly, mobile portals are designed specifically for compact devices (like smart phones). Lastly, mobile portals have unique characteristics (such as ubiquity, convenience, localization, personalization, and device optimization) and device limitations (including small screen size and key pads, memory and disk capacity, and limited computational power) that make them different to non-compact devices. In particular, the screen size limitation of these devices greatly affects users' experience, which in turn impacts users' satisfaction (Jones et al., 2002; Findlater and McGrenere, 2008). All in all the experience of using smart phones is fairly unique compared to using other computing devices and

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