

Chapter 2

Phenomena of Adoption of Wireless Handheld Devices: A Case of Healthcare Setting

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EXECUTIVE SUMMARY

There has been little empirical research into the adoption of wireless technology in healthcare. Although there is a growing interest dedicated to the analysis of technical and operational aspects of wireless devices, there is little research into factors that would lead to the successful adoption of wireless technology in healthcare. Thorough literature reviews were conducted to synthesise adoption theories in the domain of information systems, and shortcomings in the existing literature were highlighted in the context of wireless technology in healthcare. Syntheses demonstrated that there is a need either to expand the existing body of knowledge, or develop new frameworks to accommodate adoption of wireless technology in healthcare. This study has combined the most prominent variables for adoption, identified in the literature, and data collected through healthcare professionals have, to suggest a new adoption model.

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ORGANIZATIONAL BACKGROUND

Due to the foreseeable utilization and advantages offered by wireless technology, the concept of adoption methodologies in healthcare settings has gathered momentum over the past decade. In spite of many adoption theories presently available, there is limited information available on the status of their applicability, in a healthcare setting. Recently, this domain has attracted considerable attention and persuaded researchers to explore the true adoption theories in a healthcare setting. Furthermore, evidence of rigor and suitable research theories can affect the quality of research, and the findings. This study is a review of the various adoption models in existence, in order to arrive at a preliminary conceptual model for the adoption of wireless technology in the healthcare environment. The purpose of this study is to conduct a thorough literature review to investigate the suitability of adoption theories in a healthcare setting. While reviewing the published literature, we concentrated on the areas of methodology, adoption models or theories relayed in the research investigation and areas of study. The purpose of choosing these four key criteria was to investigate if the literature agreed with the applicability of the existing adoption theories, in a healthcare setting. This is the basis for the search. Based on these criteria, an extensive range of literature was reviewed to underline the adoption phenomena in a healthcare environment. It is anticipated that this research also investigates the textbook information regarding adoption theories and their applicability to a healthcare setting.

ADOPTION AND HEALTHCARE

Adoption of any technology in healthcare is a complex process so it should not be considered in isolation due to the risk associated in the healthcare environment. In the literature adoption of wireless handheld technology in the healthcare environment is at exploratory stage (Hafeez-Baig and Gururajan, 2010; Wua et al., 2011; Gururajan and Hafeez-Baig, 2011). Most of the research in this domain is either a standalone study or ad-hoc study on an isolated department or unit in the healthcare domain. There is a need to have a detailed literature review to understand the applicability of the existing adoption theories to the wireless technology in the healthcare domain. This research paper explores the views of the healthcare professionals in the context of adoption of wireless handheld technology.

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