Chapter 8
Service Quality and Knowledge as Determinants of Mobile Health Services: Empirical Investigation and Further Considerations

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ABSTRACT

Presently, mobile health (m-health) services is a dynamic example of the integration of information technology into healthcare service provisions. However, citizens are often concerned about the use of this medium. Their apprehensions mostly encircle the quality of such services and extent of their own healthcare knowledge. This chapter thus aims to investigate adoption drivers of m-health services in Bangladesh by employing the UTAUT model. Results reveal service qualities like reliability, privacy, responsiveness, empathy, and information quality along with facilitating conditions, effort expectancy, performance expectancy, and social influence as significant drivers in m-health service adoption. In addition, this chapter suggests a new research agenda wherein perceived risks can act as an additional construct. Several factors that are known to exacerbate perceived risk were identified from literature and thereafter shown as part of a proposed framework. Implications for practice and research are also discussed for better planning and implementation of m-health services.

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INTRODUCTION

Information and communication technology (ICT) offers great potential for improving the quality of services provided along with the efficiency and effectiveness in health care sectors. In recent times, electronic health (e-Health) services truly serves as a tool with a huge potential for health care organizations to deliver quality and cost-effective care to geographically dispersed populations through the Internet (Jung, 2008). However, a branch of e-Health services - mobile health (m-Health) has been constantly expanding over the last decade.

The m-Health services can be broadly defined as the use of mobile computing and communication technologies in health care and public health. This service application generally provides patient monitoring, sends text messages reminding patients to take needed medications and offers suggestions for maintaining health while pregnant, even in war-ravaged places (Idrish et al., 2017). Current evidence suggests that the use of mobile technology can improve diagnosis and compliance with treatment guidelines, as well as patient information and can increase administrative efficiency (Rashidee, 2013). In a broader sense, m-Health is not just improving health status rather it is the use of mobile technology to address health care challenges such as access, quality, affordability, behavioral norms, skill development in communication, supply management, information management and financial transactions through the exchange of information (Sultana, 2014). The m-Health services are a great initiative in health care sectors, since there are a number of patients who possess less knowledge and understanding of personal health problems but cannot afford time or money to visit doctors or medical centres on a regular basis (Nisha et al., 2015). However, the benefits of m-Health services are often outweighed by the fact that many users are still skeptical of the quality of services that can be provided through such mediums. As such, it becomes imperative to examine the role of service quality and knowledge among other factors that can influence the acceptance, use, future prospect and necessity of m-Health services from the perspective of a developing country.

In the context of developing countries, technology may be well-perceived but when the content is sensitive like healthcare provisions, acceptance of the technology often depends upon the quality of the services and individual knowledge related to the service, among other factors. Therefore, the unified theory of acceptance and use of technology (UTAUT) model has been used for this chapter. This study employed proposed constructs of system quality (system reliability, system efficiency, system privacy), information quality, interaction quality (responsiveness, assurance, empathy) and healthcare knowledge, to examine the factors that can influence users' intention to use m-Health services in Bangladesh. Moreover, this study has both theoretical and managerial implications. Theoretically, drawing upon relevant literature, this study aims to provide a model that is capable of understanding the determinants behind the future adoption of m-Health services among the people of Bangladesh. From a managerial perspective, the findings of this research should provide further insights into understanding and managing potential m-Health users, particularly hailing from the developing countries. This study can also assist various public and private hospitals and various telecommunication networks to consider the idea of providing m-Health services to the people of Bangladesh.