

# **Users' adoption of ICT based mobile health services in Australia**

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# **Users' adoption of ICT based mobile health services in Australia**

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*DEDICATED TO MY BELOVED WIFE*

*உடன் பிறப்புகள் உதறித்தள்ளியபோது எனக்கு ஆறுதல் தந்த எனது  
அன்புத் தோழிக்கு இது சமர்ப்பணம்.*

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## PUBLICATIONS

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## **ABSTRACT**

Advances in technology and people's changing lifestyles are the factors driving organizations to implement innovations for their businesses. However, only a certain percentage of the innovations are being accepted by customers and the rest of them are not enjoying proper acceptance as expected.

In 2011 the Australian federal government allocated \$466 million to a personally controlled health record system where hospitals, medical professionals and patients shared their medical records. Through this innovation Australians can access a summary of their health record at any time or anywhere, Australians can receive coordinated and holistic care because the patients' medical records can be viewed by any medical professionals when it is needed. Less paper-based records and errors, access to health care by remote communities and less hospitalization will emerge due to integrated care and improved management of chronic diseases.

Innovation in the healthcare sector will improve the quality of health care services in Australia. This initiative does not guarantee that people will adopt it immediately. The success of this government initiative relies on the willingness of people to accept this facility. Therefore, this research investigates the factors influencing the behavioural intention of people to adopt M-health services in Australia.

The purpose of this research is to identify the determinants of adopting this innovation empirically and to develop a new theoretical framework which explain the decision of Australian to adopt mobile health services. This research study provides and validates an enhanced model of mobile health adoption by considering the strength and weakness of existing previous research models. The theoretical framework for this proposed research is based on the theory of reasoned action (TRA), Technology acceptance model (TAM), theory of planned behavior (TPB), decomposed theory of planned behavior (DTPB), Model of adoption of technology in the household (MATH) and Model of broadband adoption (MBA). These research models have their own limitations and some were developed to examine only a particular type of innovation. Therefore, the enhanced model of this research include many modifications which were not in these previous models.

The enhanced model of this research include numerous factors found in previous research models in innovation adoption and combines those factors which were suggested through previous research models. In addition, the enhanced model of this research include more variables from the studies which were considered as innovation acceptance-related studies to develop it as a comprehensible model of innovation adoption. Therefore, the prediction strength of this model may goes beyond the previous research models.

Quantitative research method has been used and the data has been collected through questionnaires. The empirical results indicate that the proposed research model of this thesis is supported and capable to identify the behavioural intention of the users in adopting M- health services.

The findings show that the Utilitarian outcome, Service quality, knowledge, ease of use, Federal government policy, social media influence, social network and peer influence are the main variables to explain the adoption of this innovation. Moreover, the result shows that the demographic factors such as age, gender, education and income has influenced innovation adoption. The theoretical framework has been developed in this research offers a complete theoretical base to improve the understanding of innovation adoption by users. This study provides contributions to knowledge and practice for the government body who is in charge to implement and monitor mobile health services in Australia.

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