Title of PhD Project: Study to Investigate Factors Influencing Adoption of Mobile Devices in the Health Care Environment

PhD Student Vasundhara Rani Sood USQ Vasundhara.Rani@usq. edu.au

Principal Supervisor Prof. Raj Gururajan USQ Raj.Gururajan@usq.edu. au

Associate Supervisor Dr. Abdul Hafeez Baig USQ abdualhb@usq.edu.au

MOTIVATION AND RESEARCH QUESTIONS

Use of mobile devices in healthcare has enhanced the scope of health care services and in the near future will make health services more flexible. However, for adopting mobile devices healthcare professionals (HCPs) feel uncomfortable and adoption of mobile devices is slow (Milward et al. 2015; Rogers 2003; Slaper & Conkol 2014; Wu, Li & Fu 2011). This raised a question in researcher mind: What are the factors which make healthcare professional reluctant to use mobile devices in healthcare? Therefore, this research is an attempt to find out the factors influencing adoption of mobile devices from health care professional's perspective. The scope of the study is limited to healthcare professionals especially, doctors and nurses who use mobile devices in the healthcare context.

This research on adoption of mobile devices at the individual level in the healthcare domain is focused on the following research questions:

RQ1: What factors constitute a conceptual framework for adoption of mobile devices in healthcare environment?

RQ2: How self-efficacy influence individual readiness for adoption of mobile devices in healthcare?

RQ3: How relative advantages influence individual readiness for adoption of mobile devices in healthcare?

RQ4: What is the role of age, gender, and experience as mediating factors on the determinants of adoption of mobile devices in healthcare?

METHODOLOGY

This research will use mix methodology: both qualitative and quantitative approaches sequentially to achieve research objectives. In qualitative research design focus group technique will be used. Focus groups can provide valuable information to determine constructs and to develop hypothesises because in focus groups the responses come after a relaxed, comfortable and enjoyable discussion. On the other hand, quantitative research aims at testing of hypotheses which can be achieved if researcher is able to collect large number of responses. In quantitative research design online survey technique will be used collect data in this research. To increase the response rate of online survey respondents will be contacted through email and personally prior to being sent the survey questionnaire and follow up emails to request them to fill the survey questionnaire. Thus, in this research a qualitative approach will be used to determine constructs and hypotheses and formulate a conceptual framework and quantitative approach will be used to test hypothesises.

INITIAL RESULTS

This research hypothesizes individual readiness, complexity and social influences are mediated by age, gender and experience for individual intention to adopt mobile devices in healthcare. Furthermore, functional features of mobile devices and compatibility with healthcare processes will be mediated by age and gender.

PROPOSED CONTRIBUTION

The conceptual model developed in this research will be the first of its type for adoption of mobile devices in healthcare. This model will also serve as a pathway for the healthcare and information technology domain to design information communication tools for healthcare which can improve healthcare practices.