

# Adoption and Usage of Healthcare Portals: Examining the Factors Influencing Consumers' Decisions

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## ABSTRACT

*Healthcare portals provide abundant information to consumers. This study examines the factors influencing consumers' decisions to adopt and continue using healthcare portals. A research model is developed using constructs from past Information Systems (IS) literature. Research hypotheses derived from this model were empirically validated using a field survey. Data collected from the survey (N=269) was tested for adoption (N=181, individuals who have not used healthcare portals) and continuance (N=88, individuals who have used healthcare portals) separately. According to the results, more than usefulness and ease of use of healthcare portals, trust and satisfaction emerged as the main factors determining adoption and continuance respectively. Further, this data was grouped on gender and analyzed to see the effect of gender on consumers' decisions. In light of these findings, theoretical and practical implications for understanding the consumers' decisions in using healthcare portals are discussed.*

*Keywords:* Adoption, Ease of Use, Healthcare Portals, Information Systems, Satisfaction, Trust, Usage, Usefulness

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## INTRODUCTION

The Internet has revolutionized the way people take care of their own health and approach doctors. Years ago, the main source of information on health-related matters was to approach doctors. Now, with the Internet at fingertips, people are much more likely to be informed about their health even before going to the doctors. The

public's growing involvement in managing their own health has become a strategic issue in the field of healthcare (Lemire et al., 2008). In a recent survey of a doctors-only discussion board on WebMD's (a healthcare portal) network, 91% of the doctors said that the Internet health information was at least somewhat helpful for their patients (Smith, 2008). This is because the "10-minute office visit" is the reality of today's patient care; the Internet could not have come at a better time. By researching for symptoms,

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exploring the possible treatments and learning what can be done to keep healthy, people can make the most of the limited time they have with the doctors. Healthcare portals are websites providing healthcare information to consumers. Along with the speed and access for information, people find it as a cost-effective means of getting access to health information which otherwise is very expensive through hospitals and physicians. High cost of healthcare and insurance premium is one of the major reasons for people in developed countries to go online for healthcare. Healthcare portals may not substitute for personal care, but they can help fill the void in the present healthcare system, where the time spent in clinical consultation is diminishing.

According to Pew Internet & American life project survey conducted in 2010, around 80% of American Internet users searched online for information on at least one major health topic and the percentage of consumers searching health information has risen over the years. There is a tremendous increase in the number of healthcare portals in recent years. Consumers' expectations of the service level they receive from the healthcare portals have also risen as they educate themselves on new medical treatments that could improve their quality of life (Bliemel & Hassanein, 2006). Even though healthcare portals are gaining importance and millions of dollars are being spent on setting up healthcare portals, the major question arises on whether this phenomenon is a passing fad, and if not, would people be willing to adopt and continue using the healthcare portals, and what are the factors determining their intention to adopt and continued usage. Motivated by such concerns, the goal of this study is to explore the factors influencing consumers' intention to adopt and continue using healthcare portals. Though some studies have focused on consumers' perceptions in using the healthcare portals (e.g., Bliemel & Hassanein, 2006), empirical research is still necessary in order to find the factors influencing consumers' intention to adopt and continue using healthcare portals. Both acceptance and continued use are important in

determining healthcare portals' success. From a pragmatic point of view, understanding the determinants of Information Systems (IS) adoption and continuance is a necessity for ensuring effective usage of resources, especially when huge efforts and resources have been invested in setting up these portals to meet the needs of the Internet-savvy population.

Applying a model developed using IS theories will be useful in explaining adoption and continuance of healthcare portals. In the context of user acceptance of Information Technology (IT), the technology acceptance model (TAM) (Davis, 1989) has received considerable attention. TAM proposes that IT usage is determined by behavioural intention which in turn is affected by attitude towards usage, as well as beliefs - perceived usefulness (PU) and perceived ease of use (PEOU). As these two (PU and PEOU) are important factors in determining IS adoption and continuance, we consider these two factors for our study. Many studies have integrated different user perceptions like emotion (Venkatesh, 2000), enjoyment (Chesney, 2006), trust (Gefen et al., 2003; Pavlou, 2003) and satisfaction (Devaraj et al., 2002; Wixom & Todd, 2005) along with TAM to study the users' usage behaviours in different contexts. Integrating such usage behaviours with TAM can provide a more comprehensive understanding of the way in which system features ultimately influence IT usage. We feel, in the e-Health context, user perceptions like satisfaction and trust plays a major role. This is because satisfaction is a critical factor for establishing long-term client relationship. Past studies (e.g., Bhattacharjee, 2001; Hsu & Chiu, 2004a) have confirmed that consumers' continuance intention is determined by their satisfaction with IS use. Trust has been regarded as a catalyst for buyer-seller transactions and can provide consumers with high expectations of satisfying exchange relationship (Pavlou, 2003). The importance of trust is elevated in healthcare portals because it is one of the most important issues among online health information (Smith & Manna, 2004; Tung et al., 2008). Accordingly, satisfaction and trust along with PU and PEOU

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