An Analysis of Literature on Consumer Adoption and Diffusion of Information System/Information Technology/Communication Technology

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ABSTRACT

This paper provides a comprehensive and systematic review of literature pertaining to consumer/household/residential adoption and diffusion issues in relation to ICT/IT/IS to ascertain the current “state of play” within the field along a number of dimensions. Eighty articles on the adoption, acceptance and diffusion of ICT/IT/IS, published in 54 peer reviewed journals between 1998 and 2008, were reviewed, from which information on a series of variables were extracted. The subsequent findings suggest that the positivist paradigm, empirical and quantitative research, the survey method and the TAM theory were predominantly used when investigating the topics of the adoption and diffusion of technology within the consumer/household/residential context.

Keywords: Adoption, Bibliometric Analysis, Consumer, Diffusion, E-Commerce, E-Government, E-Health

INTRODUCTION

The study of the adoption and diffusion of Information and Communication Technologies (ICTs) is one of the more mature research areas within the Information Systems (IS) discipline, however, much of the activity within this area tends to focus upon conducting investigations from the organizational and/or end-user/employee perspectives. As a result, researchers
have been far less frequent to approach the topic of technology diffusion and adoption from the residential/household perspectives of consumers and citizens. While the key role of ICTs within business and government is now well-recognized, it is equally important to acknowledge that in modern society, ICTs have become prevalent in the daily home lives of many individuals in forms such as e-commerce, e-government, e-learning, e-health, and e-working. Indeed, the UN recognizes the importance of the various participating parties—including the citizen as well as organizations—within the digital environment in promoting the development of the information society. This relatively recent emergence of the technology-contextualized home environment has, in turn, generated numerous issues worthy of investigation. This includes understanding the awareness, adoption and usage of emerging technologies and electronic services, and the social exclusion created due to the unequal adoption of technology by different segments of society. Such residential/household-related issues are clearly of interest to IS researchers, having been the focus of a variety of publications including Blackwell (2004), Brown and Venkatesh (2005), Brown et al. (2006), Dwivedi et al., (2006), Shannon (2006) and Venkatesh and Brown (2001). However, given the broad range of issues which offer potentially fruitful areas for investigation, and the varying approaches that may be employed to explore them, it is sometimes unclear where such research outputs have been published.

Reviewing and profiling the existing literature on IS/IT adoption and diffusion is likely to be of use to researchers in assisting them to identify currently under-explored research issues and select theories and methods appropriate to their investigation: all of which are critical issues for conducting productive, original and rigorous research. This will also help to identify the existing strengths and weaknesses of the pertinent research streams, promote discussion regarding critical issues in the area, and assist in the identification of alternative theoretical and methodological perspectives (Venkatesh et al., 2007).

There have been a number of reviews and meta-analytic articles published in the IS area to date. However, perhaps due to the customary inclination of the IS researcher to make use of the Technology Acceptance Model (TAM), almost all of the existing studies have focused primarily upon reviewing the literature relating to technology acceptance within the organizational context rather providing a comprehensive review in general on the area of adoption and diffusion within the consumer/household/residential context (a number of these studies are identified and briefly discussed). Thus, the general aim of this exploratory paper therefore is to provide a more comprehensive and systematic review of the literature pertaining to IS/IT adoption and diffusion research in order to ascertain the current “state of play” within the area along a number of dimensions. This overall aim is realised by means of the following objectives: 1) to identify the journals publishing most articles on IS/IT adoption, acceptance and diffusion within the consumer/household/residential context; 2) to present the general trends on adoption and diffusion research according to the year of publication; 3) to identify countries (and hence areas of greatest activity) with the largest number of publications on IS/IT adoption, acceptance and diffusion within the consumer/household/residential context; 4) to identify authors active in the area of IS/IT adoption, acceptance and diffusion consumer/household/residential context; 5) to classify the publications according to three keywords ‘Adoption’, ‘Acceptance’ and ‘Diffusion’; 6) to classify the publications according to three keywords ‘Consumer’, ‘Household’ and ‘Residential’; 7. to classify adoption and diffusion publications according to the research paradigm; 8) to classify adoption and diffusion publications on the basis of their use of primary research data (empirical and non empirical); 9) to classify adoption and diffusion publications on the basis of the nature of primary research data (quantitative and qualitative); 10) to
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