

**An Acceptance Model for Citizen Adoption of Web-Based  
E-Government Services in Developing Countries:  
An investigation in the Saudi Arabia Context**

Mohammad Eid Alzahrani

School of Computer Science, Engineering and Mathematics  
Faculty of Science and Engineering

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## **Abstract**

The fiscal spending of governments to facilitate citizens' access to government services is very high, estimated to be in the billions. These services include e-government services available on websites. However, the consumption and use of e-government services by citizens is not commensurate with the massive government spending. In order to increase the rate of adoption of e-government services by citizens and to avoid failure of the program, this study uses both theoretical and empirical methods to increase and deepen understanding of the problem. In addition, this study responds to the need to add to the few empirical studies that have covered the issues related to technology adoption through e-government services from the citizen's perspective in developing countries.

Many researchers have studied e-government from different angles. E-government adoption research currently lacks a comprehensive conceptual framework for explaining citizen adoption of e-government services for the following reasons. First, it focuses either on government-to-government (G2G) or on government-to-business (G2B) and does not adequately consider government-to-citizen (G2C) adoption and implementation of e-government. Second, it focuses on business, organisational and work environments, and does not sufficiently develop theories to fit the social context of citizens to understand the relationship between IT implementation and individuals. This research contributes to theoretical development of a citizen based e-government adoption model in developing countries by building on and extending the unified theory of acceptance and use of technology (UTAUT) through integration of pertinent constructs to the e-government context including privacy, trust and national culture.

The extended model is tested using multiple research methods: a large-scale, questionnaire survey of 634 Saudi citizens and case study interviews with e-government officials. The structural equation modelling technique is utilised for data analysis. The findings show that both measurement and structural models exhibit good model fit to data. All constructs satisfy the criteria of construct reliability and convergent and discriminant validity. The path estimations show that, of the 10

designed relationships, eight path relationships were significant and two remained unsupported.

The empirical results indicate that performance expectancy, effort expectancy, social influence, privacy, trust and culture are the main determinants affecting the behavioural intention to adopt e-government services in this particular context. There is a direct and positive relationship between culture and privacy as well as between privacy and trust for citizens to adopt and use e-government services and applications. Unexpectedly, the results indicate that facilitating conditions, as one of the UTAUT constructs, does not affect behavioural intention to use e-government services. Moreover, the results show that gender, age, education and income as moderating factors are not supported for the research sample.

Finally, the research concludes by highlighting the theoretical and practical implications, limitations and future directions. On the theoretical level, the study makes an important contribution of a citizen based e-government adoption model in developing countries by extending the UTUAT with vital e-government factors of privacy, culture and trust. Additionally, on a practical level, the study has important implications for policy makers in understanding the critical factors influencing the adoption of e-government in Saudi Arabia by its citizens. Indeed, the study paves the way for future research on e-government adoption in developing countries particularly in Middle Eastern countries in developing meaningful e-govnerment strategies and interventions through considering the important role of the individual's context.

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