

## Chapter 58

# Trust and Public Services in E-Government Based on Customer Orientation

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### **ABSTRACT**

*This chapter aims to identify the role of risk perception and trust in civil servants' intention to deliver e-services in e-government. The research method is based on theories on perceived behaviors and technology acceptance. The research uses questionnaires to examine civil servants' intention to adopt digitalized services in e-government and seeks to measure perceived usefulness of e-services, subjective norm, self-efficacy, technology facilitating conditions, trust towards Information Systems, and perceived risk from the perspective of service marketing (e.g., SSTs, self-service technologies). Structural equation modeling is used to further analyze the data and to design a theoretical model predicting the individual's intention to trust e-services in e-government. The research results indicate that perceived usefulness cannot directly influence behavioral intention without an attitude of acceptance towards digitalized administration. Further, civil servants do not have high risk perception in using online public services.*

### **INTRODUCTION**

The purpose of e-government is the utilization of information technology (IT) to provide efficient, timely and accessible means of linking citizens to the public sectors. The proliferation of e-government can be attributed to the delivery capability of government information, resources

and services through 24/7 Web access (Holden, Norris, & Fletcher, 2002). Maintaining online access to e-government to provide services is part of government, especially for those officials who are charged with implementing public services. Therefore, it is important to explore the intention of administrators to adopt online service delivery. Their values and perceptions influence their attitudes and behavior, and determine whether they

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can successfully execute public service delivery. Whether, civil servants trust the new technology, management, and services will impact the benefits and risks of e-government.

In this study, the Theory of Planned Behavior (TPB) and the Technology Acceptance Model (TAM) are used to examine administrator acceptance of online service delivery, which can result in a larger base of administrator share (Brown, Chervany, & Reinicke, 2007; Wu & Chen, 2005). TPB can be used to explore the influence of an individual's attitudes and personality on personal behavior while considering individual perceptions in social systems (Ajzen, 1991). TAM has been applied to understand and predict user attitude, adoption, and use of IT (Davis, 1989). Based on these two research models, the study used questionnaires to examine the intentions of officials to adopt online service delivery in e-government, by measuring perceived usefulness and perceived ease of use of e-services, subjective norm, self-efficacy, technology facilitating conditions, trust towards information systems, and perceived risk. The two crucial objectives of this research are (1) to illustrate the relationships between key factors and behavioral intentions, and (2) to clarify variables in online services delivery which could provide a framework for policies cultivating information trust and perceived risks of e-government. Questionnaires to be analyzed by the Structural Equation Model were designed based on TPB and TAM, and sent to those who have worked in the Tainan City government. This was done to explore official perceptions of online services delivery and to help us understand their intention to maintain online services in Taiwan. Structural Equation modeling was used to further analyze the data and to design a theoretical model predicting individual intention to maintain e-services in e-government. The research results are expected to illuminate the nature of cyber trust and the relationships among the influential factors that inform e-services.

This research is a quantitative study, and proceeds as follows: Section two reviews the theoretical arguments and some existing findings related to trust, perceived risk, TAM and TPB. Section three illustrates the research design, including research model and hypotheses, research methods (i.e. sampling and measurement). Section four presents the data analyses and hypotheses. Section five discusses research findings. Finally, section six draws conclusions and provides suggestions aimed at strengthening administrator's intention to maintain online service delivery in Taiwan.

## **BACKGROUND**

User attitudes towards accepting and trusting information technology have been an important issue in discussing security and perceptions of trust towards information technology. Since Davis (1989) provided the Technology Acceptance Model (TAM) and showed the theoretical basis for actual use depends on behavioral intention, the attitude construct in TAM represents attitude toward the behavior of using technology (Wixom & Todd, 2005). Davis (1989) provided two important concepts in TAM: (1) perceived usefulness refers to user feelings of improved performance when using technology; (2) perceived ease of use is concerned with user perceptions of degree of exertion needed to use technology. Using TAM, Igarria, Guimaraes, & Davis (1995) examined the role of organizational factors on personal computing acceptance and found that these factors indirectly influenced usage through ease of use and perceived usefulness. Therefore, in this study ease of use and perceived usefulness are selected as two main factors to test user's intention of IT acceptance, following the TAM model. Gefen, Karahanna, and Straub (2003) have noted that consumer trust is as important to online commerce, thus showing an agreement with the widely accepted TAM concepts of perceived usefulness and perceived ease of use.

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