

## Chapter 4

# Adopting E-Mailing Systems Technology: Challenges Confronting Government Institutions in Jordan

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### ABSTRACT

*Insight into the reasons why people adopt or reject technology is one of the most challenging issues in information technology research. This chapter draws on the Electronic Commerce Technology Acceptance (ECTA) framework, which is in turn based on Technology Acceptance Model (TAM) and examines Jordanian government's employees' attitudes towards adoption and use of Electronic Mailing systems within their job. The chapter is aimed at providing an overview of the current state of use, adoption and implementation of electronic mailing innovation within organisations, specifically governmental institutions in developing countries like Jordan. More precisely, the author first quantify constructs relating to the current state of governmental institutions' beliefs and attitudes toward E-Mailing systems technology in Jordan, and then develop and validate the relationships between the various factors that drive the adoption and acceptance of such innovation. A quantitative survey is used to establish and illustrates employee's behavioural intention and decision to e-mailing systems. The main influencing issues discussed in this chapter that affect these employees imply perceived usefulness, perceived ease of use, employees' attitudes towards new technologies, and behavioural intentions to use. Whereas, these various issues are suggested in the Technology Acceptance Model (TAM), the enhanced Technology Acceptance Model extends them to include the external social factors proposed in this chapter such as trust, cultural beliefs, and sociology of technology. Eventually, the significant insight emanated from the findings identifies ways of assisting and spurring employees to make use of technology more effectively.*

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## INTRODUCTION

The acceptance and adoption of e-mailing systems has been widely investigated in the case of developed countries. The Technology Acceptance Model (TAM) by Davis (1989) has been the basis for a vast amount of research into technology diffusion. Moreover, the most of examined studies were conducted in the USA and other developed countries, because of this exclusive nature of the use of TAM. It seems that there is a sort of significance to undertake a research into the adoption of new technology, for instance E-Mailing systems technology, in the circumstances of lagging behind countries, such as Jordan.

There is no exaggeration to assert that there is no empirical evidence that information technology acceptance models, established in developed countries, can be applied equally to developing countries without bearing in mind some amendments to account for the variation in context. Nonetheless, it is not unreasonable to presume that the need for some modifications possibly the case. A globally applicable model must hold relevance across the broad field of information technology implementations and should also encompass a high probability of success in relocate of various technologies across economic and cultural boundaries.

The proposed chapter investigates the appropriateness of the TAM model for the study of electronic mailing technology in the Middle East countries with a specific focus on Jordan context. This is to be done by examine literature, which proposes that model of information technology adoption and use in advanced counties perhaps not be thoroughly applicable to developing countries. Besides, literature survey and research upshots will thereafter be analysed to recommend amendments to the technology acceptance model in order to make it more relevant for research on technological acceptance and adoption in the circumstance of developing countries such Jordan.

Noticeably, TAM is considered to be beneficial and then used as a theoretical foundation in developing a comprehensive research framework for this study. The framework of Electronic Commerce Technology Acceptance (ECTA) is developed to provide an extensive picture of individuals' behaviours towards the acceptance and use of electronic commerce technology in Jordan. The theoretical foundation for this research framework originated from Theory of Reasoned Action as the basis of TAM.

This chapter uses the Electronic Commerce Technology Acceptance framework to evaluate the effectiveness and efficiency of e-mailing systems technology adoption within governmental institutions in Jordan.

## THEORETICAL BACKGROUND

The framework embarked in this study is based on the Electronic Commerce Technology Acceptance (ECTA) framework (Al-Haraizah & Choudhury, 2009), which is in turn built on Technology Acceptance Model (TAM) (Davis, 1989; Davis et al., 1989). The Technology Acceptance Model (TAM) was initially suggested as an instrument to predict the likelihood of new technology being adopted within a group or an organization. Fundamentally, it was originated from the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975). In addition, it proposes that technology acceptance and its use can be explained in context of individual's internal beliefs, attitudes and intentions. The original TAM measured the impact of four internal variables upon the actual use of the technology. These being: perceived ease of use (PEU), perceived usefulness (PU), attitude toward use (A), and behavioral intention to use (BI). Theory of Reasoned Action (TRA) (Fishbein & Ajzen, 1975) focuses on two dependent factors for determining behavioral intention: the attitude towards behaviour and the attitude towards subjective norm. These determinants correspond

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