Chapter 70
Understanding Technology Acceptance of Government Information Systems From Employees' Perspective

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ABSTRACT

The purpose of this paper is to test the unified theory of acceptance and use of technology (UTAUT) in the government-to-government environment and determine the influence of different moderating factors of technology acceptance by government employees. By means of a thorough review of the literature in this area, the paper investigates the application of UTAUT through empirical research on the technology acceptance of the E-recovery system by government employees in different governmental organizations. The empirical data from 384 respondents revealed that performance expectancy and social influence determine employees' behavioral intention. Moreover, gender invariance was detected, but employees' age and experience difference was detected as a moderating factor of the model. The findings of the paper can help those involved in information system development, implementation, and use to take the right actions to achieve maximum adoption of the technology, especially if the use of the technology is mandatory for the users.

INTRODUCTION

Information and communication technology (ICT), as a driving factor of contemporary global progress, has had a huge impact on the development that occurred in the governments around the world in recent decades. Not only is the technology used for making government processes more transparent, efficient, and effective, but it is an element of strategies, policies, and organizational changes and as such a mechanism to constantly adapt how governments work. Zheng (2013) stresses that the key mechanisms that drive e-government adoption by public administration organizations have not been fully understood in extant literature.

Despite the various definitions, the benefits of e-government have been tested and proven through the research of the last decade. From the end-user point of view (government to citizen – G2C), improved quality and performance of services (easier, faster, better) is achievable (Gupta, Dasgupta, & Gupta, 2008; Wang & Liao, 2008). A similar impact can be seen in the e-government sub-area of government to government (G2G) (Realini, 2004) through improved quality and increased operational efficiency, reduced costs, and increased productivity (Gil-García & Pardo, 2005), showing the importance of G2G even on the levels of organizational and political changes. Fan et al. (2014) also stressed the potential to improve information quality, streamline business processes, increase administrative efficiency, and enhance decision- and policy-making capabilities. Tung and Rieck (2005) added greater access to services, greater accountability, transparency, improved decision making, enhanced knowledge sharing, and increased trust. These facts show a great promise of information technology adoption in G2G area, but recent research was mostly focused on G2C and G2B, missing a big opportunity for e-government. As stated by Wang and Lao (2008), in order to achieve the goals, a multidimensional and interdependent approach is needed.

Not only in the framework of e-government but throughout today's public administration information technology (IT) plays a fundamental and vital role through numerous information systems (IS) and other solutions that are used in these settings. Linked to processes, rules, and users, IT creates the successful framework for the modern work environment. Although the precondition for success is the appropriate technology, based on predefined rules and processes, the users are the ones who operate with it and are key players in this scenario (Fui-Hoon Nah, Lee-Shang Lau, & Kuang, 2001). So the objective of this paper is to study the factors and moderators that influence the acceptance of a specific inter-organizational IS by users, i.e. organizations' employees in different governmental organizations (G2G). In order to achieve this objective, we first reviewed the literature in the areas of IS in e-government research and the research on technology acceptance in governmental organizations. In order to assess the acceptance of the technology, we selected the Unified Theory of Acceptance and Use of Technology (UTAUT) as the most up-to-date theory in the field of technology acceptance and used it to set the model for the empirical research. The selected technology was the E-recovery information system used by many different public organizations and their employees.

While the empirical research of this paper was focused on one country, i.e. Slovenia, parallels can be drawn to other similar countries and their governments. Slovenia is a member of the European Union and the OECD, and participates in different benchmarking systems in the e-government area and therefore is similar to European and other developed countries around the world. In 2013, e-government services were used on average by 41% of the EU28 population, while Slovenia achieved a score of more than 50%, thus ranking in 8th place (European Commission, 2014). Slovenia was especially noticeable for its "increasing citizen participation through transparency", by means of a solution that joins a back-office information system for an IT-supported paperless procedure for drafting legislation, on the G2G side, and an e-democracy portal solution for citizens to monitor and participate in such, on the G2C side.

The paper is organized as follows: in the next section we present the theoretical background of the main areas included in this research, namely e-government, G2G and its information systems, the field of technology acceptance, and the Unified Theory of Acceptance and Use of Technology (UTAUT). Then, we propose a research model and the hypothesis of this study. Subsequently we present the methodology and the findings of the empirical research, which was conducted among 384 employees of different governmental organizations. Finally we present our results in the discussion and conclusion.

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