

# What Are the Determinants of the Attitude of Civil Servants Toward Using e-Public Procurement? The Case of Belgium

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## ABSTRACT

Civil servants are the main users of e-public procurement applications. Their attitude toward using the new system is a crucial element for its successful implementation. However, few studies focused on this topic in public administration research. To address this question, the author examines the digitalization of public procurement in Belgium. He relied on a mixed quantitative-qualitative methodology. The findings showed that six factors were validated quantitatively and qualitatively as having significant influence on the attitude of civil servants, namely perceived usefulness, perceived ease of use, training, resources, position of the hierarchy, and clients' attitudes. The author concludes with theoretical and practical implications as well as an agenda for future research.

## KEYWORDS

Belgium, Civil Servants, Digital Change, E-Procurement, Technology Acceptance

## INTRODUCTION

The current organizational environment in all sectors, including the public sector, has become increasingly volatile, difficult to control and completely uncertain. Globalization, restructuring and new technology developments have brought tremendous challenges marked by the short life of products, exacerbated competition and clients who are becoming increasingly more demanding. Thus, today, due to the influence of these multiple changes at all levels, organizations need to adopt a continuous readaptation process to survive in this changing world (Choi & Ruona, 2011; Reginato *et al.*, 2016).

One of the major changes that took place in the public sector is digital transformation, such as technologies of e-procurement and online tax filing. In fact, currently, to communicate with a new generation of citizens who never knew a world without Wi-Fi and social media, public organizations have no choice but to incorporate new technologies into their operations and processes (Heinze *et al.*, 2018). Digital transformation is also dictated by budget cuts and calls for more efficiency in public services. However, digital transformation entails a range of immediate and extensive impacts on public-sector organizations. The transformation remodels organizational processes, work tasks, job design, organizational structure, knowledge and skills, values, attitudes and the behavior of employees (Gurtoo & Tripathy, 2000; Hon *et al.*, 2011). For these reasons, the success of digitalization projects is tremendously determined by their sincere and wholehearted adoption by an organization's members

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(Gurtoo & Tripathy, 2000). Hence, public organizations need to pay particular attention to their employees' support and acceptance of digital transformation (Choi & Ruona, 2011).

What are the determinants of the attitude of civil servants toward the adoption of digitalization projects? In this article, this research question is addressed with a case study on the digitalization of public procurement in Belgium.

Public procurement refers to “*the purchase by governments and state-owned enterprises of goods, services and works*” (OECD, 2017). Given that public procurement accounts for a substantial portion of taxpayers' money, governments need to carry it out efficiently and with high standards of conduct to ensure high quality service delivery and safeguard the public interest (OECD, 2017). The dematerialization of public procurement is one of the most innovative public management initiatives in Europe today (Alomar & De Visscher, 2019). It can be defined as “*the integration of digital technologies in the replacement or redesign of paper-based procedures throughout the procurement cycle*” (OECD, 2017). Given this definition, e-procurement represents a radical change for civil servants in charge of public procurement procedures (public buyers). Since governments want to accelerate the digital transformation of public procurement by minimizing public buyers' resistance to change, it is important to identify and analyze the determinants of buyers' attitudes toward accepting e-procurement.

The added value of this article is threefold. Theoretically speaking, on the one hand, the author contributes to the limited and scattered academic evidence about e-procurement adoption in the public sector. Although a rich body of literature exists regarding the organizational adoption decisions of e-procurement systems and their impact on organizational performance, little is known about the factors that affect the adoption of these systems by civil servants. Moreover, e-procurement digitalization is a type of digital transformation occurring in public organizations: by identifying the determinants of civil servants' attitudes toward adopting e-procurement, the author contributes to the subfield of public administration and public management research that examines digital transformation processes.

Practically speaking, the results of this article are useful for practitioners involved in the transformation of public procurement. There is a practical need to investigate and analyze the attitude of public buyers toward e-procurement in Belgium to promote the wholehearted use of the new system and thus to minimize sabotage and the unfaithful appropriation of technology, as well as the resulting costs associated with such behaviors. This is also crucial to ensure improved organizational effectiveness in this important field, which is increasingly seen as a strategic tool for achieving key policy objectives, from budget accountability to spending efficiency.

This article will follow the usual structure in which the conceptual and theoretical basis of this study—inspired by the literature on technology acceptance and innovation diffusion—will first be presented. In the next section, the study context and methods will be described; the test of the theoretical model is based on the triangulation (Creswell, 2006) of the data resulting from a quantitative survey and a focus group of Belgian public buyers involved in the digitalization of public procurement. From the analysis of the data, the author draws some conclusions and suggest an agenda for future research.

## CONCEPT AND THEORY

With the growth of technology needs in the 1970s and the increasing failures caused by users' resistance, predicting digital systems acceptance and adoption has drawn the attention of many researchers (Chuttur, 2009). Based on Reasoned Action Theory (RAT) and Planned Behavior Theory (PBT), Davis (1985) developed the Technology Acceptance Model (TAM).

According to Davis's (1989) Technology Acceptance Model (TAM), three main factors can explain the user's motivations to adopt a given system, namely, the user's attitude toward adopting the system, the perceived usefulness of the system, and the perceived ease of the system's use (Chuttur, 2009). While attitude is the main determinant of a user's adoption of a given system, it is influenced

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