

# **Model of Integrated Management of Public Procurement Oriented to Public Value: a Proposal Research**

Isabel Maria de Freitas Soares Ferreira, Centro Algoritmi - University of Minho, Guimarães, and Polytechnic Institute of Cávado and Ave, Barcelos, Portugal, [iferreira@ipca.pt](mailto:iferreira@ipca.pt)  
Luis Alfredo Martins Amaral, Centro Algoritmi and Information Systems Department - University of Minho, Guimarães, Portugal, [amaral@dsi.uminho.pt](mailto:amaral@dsi.uminho.pt)

## **Abstract**

One challenge of public organizations is the creation of public value through the adoption of information technology and communication. Technology should emerge as an endogenous and not as exogenous factor of organizational and thus leveraging the processes of change in public organizations.

The public procurement is an instrument of public policy implementation that, within a legal context, intends to create value. Thus, this vision contrasts with the focus on economic efficiency of the new public management. The alignment between business strategies and public information systems underlying to the transversal management of the public contract process is relevant to: (i) improve the performance of organizations oriented to the preferences of citizens and (ii) support the technological investments associated to the solutions of e-procurement.

Defines the design of a model of integrated management of public procurement oriented to the public value as the result of investigation of the doctoral program in technology and information systems. This is the theme that motivates the research, which fits within the domain of design science.

Thus, this paper aims to present, based on a literature review, the topic and the research framework, perspective theoretical and research process. Therefore, these are the main results.

**Keywords:** Public e-procurement model, public value, research design, critical approach.

## **Introduction**

The challenge of public organizations is the creation of public value through the adoption of information and communication technologies (Hui and Hayllar, 2010; OCDE, 2009; Hood, 1991; O'Flynn, 2005, 2007; Moore, 1994, 1995; Stoker, 2006; Coats and Passmore, s.d.). The technology should emerge as an endogenous factor of organizational change and not as exogenous factor, leveraging, thus, the changing processes in public organizations (Hovy, 2008; Coleman, 2008; Koiiman, 2003; Hui and Hayllar, 2010; Scholl, 2008).

Public procurement is an instrument for the implementation of public policy within a legal context, aims to create value, contrasting with the focus on economic efficiency of the new public management. Integration between public business strategies and information systems underlying to the managing across on public procurement procedure is relevant to: (i) improve the performance of organizations oriented to the preferences of citizens and (ii) support the technological investments associated with e-procurement solutions, responding to the challenges brought by the Public Contract Code (Uyarra and Flanagan, 2010; Amaral et al, 2003; Panayiotou et al, 2004; Fraunhofer, 2005; O'Flynn, 2007; Bof and

Previtali, 2010; Quesada et al, 2010; Comissão Europeia, 2010; Kassim and Hussin, 2010; Schoenherr and Tummala, 2007; Ronchi et al, 2010; Hardy and William, 2006; Oliveira and Amorim, 2001).

We define the design of an integrated management model of public procurement oriented to public value as the result of research in Information Systems and Technologies, by entering, so, in the context of design science (Offermann et al, 2009; Hovy, 2008). The purpose of this summary is to present the topic and the research framework and at the same time trying to show the relevance of these projects in the scope of Doctoral Program in Information and Systems Technologies (Myers, 2009, 2011; March and Smith, 1995).

## Research Topic

Based on the synthesis of the literature review and professional experience the problematic of research is presented, contextualizing, thus, their research question (Myers, 2009, 2011).

In this context, we define the following problem, reflected by Figure 1: absence in the context of e-government, of an alignment between models of integrated and crossed management of public procurement oriented to public value and the technological solutions. Other problems arise from this: lack of a vision of integrated and crossed management of organizational competence "manage public procurement"; lack of technological solutions that support this point of view; lack of methods for assessing the impact of public e-procurement in organization and society.



Fig 1. Research problem

Alignment between models of integrated and crossed management of public procurement oriented to public value and technological solutions is defined as a subject of research, anchored in the following research questions (QI): QI1: In the context of e-government, what is the better conception of organizational competence "to manage public procurement" in order to assess its impact on the organization and society, creating public value? QI2: How can, in practice, governments use best way technology solutions for public procurement allowing to assess the impact of purchasing decisions in the organization and in public value? QI3: How to boost innovation and regional economic and social development of local communities through public e-procurement?

As result of the evidence found in the literature, we can defend the need to find innovative solutions for public procurement through the adoption of TIC, housed in a theoretical perspective.

## Theoretical Perspective

Alignment between models of integrated and crossed management of public procurement oriented to public value and technological solutions is relevant to: (i) improve the performance of public entities in procurement processes and public works, creating public value, and (ii) support the technological development as an endogenous factor, specifically associated with electronic platforms that support the conduct of procurement processes as required under Public Contract Code.

Thus, the main objectives (OP) of the research plan are: OP1: Propose a conceptual model of integrated management and cross-organizational competence "to manage public procurement", in order to improve the performance of organizations and public bodies, either internally or in its relationship to society in light of the paradigm of public value (answering QI1); OP2: Based on the model mentioned in the previous paragraph, propose a technological model for the development of solutions that support the conceptual model defined for OP1 - a conceptual technological model (answering QI2). OP3: Present a set of recommendations with the local authorities and *Comunidades Intermunicipais* in design services in order to harness the potential of technology solutions resulting from the implementation of OP2 in innovation and territorial economic and social development (answering QI3).

The achievement of these objectives is based on a set of theoretical research assumptions, supported by the paradigm of public value (Moore, 1994 and 1995), the systemic approach and the work system theory (Alter, 2011), which we consider at this time, to influence the research project: Assumption 1: Public management in governance context and of the paradigm of public value; Assumption 2: e-Government - create public value through TIC, but as an endogenous factor; Assumption 3: Information Systems as Socio-Technical Systems; Assumption 4: public e-Procurement as an instrument of policy innovation and territorial development, creating public value.

Framed by theoretical assumptions, the reasons for the viability and usefulness of the research topic and the research process itself are central factors in scientific research. Such concerns are buoyed by the philosophical assumption that best suits the way the investigator observes the regularities of the world, which, in turn, influences the process of creation and development of knowledge and science. In the case of this research project it is assumed the critical perspective as epistemological orientation.

Based on the research assumptions listed facing the research problem and related issues, it is expected with this PhD project to contribute to solving the problems through design science (Offermann et al, 2009), thus, contributing, to scientific and technological knowledge improvement.

## **Design Science – Process Research**

Guided by a critical perspective will combine methods of qualitative and quantitative research and will use triangulation to the collection of empirical methods, fundamental aspects to obtain viable results in design science, before the criteria of rigor and relevance (Offermann et al, 2009). On the other hand, application of this research process is fundamental in the sense of scientific rigor and practical relevance, to promote interaction between academics and professionals, thus contributing to the quality of the created artefact.

The aim of the research approach in design science is the improvement of information systems in this case in public organizations at the level of organizational competence "to manage public procurement."

In this context, this research plan is structured in three main phases: (i) identifying problems; (ii) design solutions; and (iii) evaluation. These phases interact to each other throughout the research process, structuring itself in different stages throughout this research process.

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