

**SYMPOSIUM ON E-PROCUREMENT IN PUBLIC SECTOR:  
PART I**

Editor: Alessandro Ancarani\*

## SYMPOSIUM INTRODUCTION

Alessandro Ancarani\*

The increasing availability of modern information technologies makes it possible to use electronic means to exchange goods and services. Consequently, all organisations - private and public – are challenged to integrate the new technologies and to understand how these changes necessitate shift in relationships and culture (Neef, 2001).

The public sector spends between 10 to 20 percent of its earnings on procurement activities. In the United States government procurement costs each year for materials and services purchased from private firms are estimated to be almost \$ 650 billion. The combined European Union government spending was more than 720 billion euros. Such a statistic confirms that in the public sector e-procurement has enormous effects which will increase in the near future.

Predictions a few years back indicated that e-procurement technologies would have grown exponentially over the first half of the decade. However, these expectations have not been met. Current e-procurement technologies are in their developmental infancy and a dominant design methodology is still unavailable. The results of several surveys indicate that the final equilibrium may include several technologies, each one serving a different segment of the market.

This special issue of the *Journal of Public Procurement* reacts to the increasing interest in “E-procurement in the public sector” shown by academics and managers. It contains a selection of papers on this topic presented at the 13th Annual IPSERA Conference hosted by the Section

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\* *Alessandro Ancarani, Ph.D., is an Associate Professor of Business Economics and Organisation at the Faculty of Engineering of the University of Catania, Italy. His research interests are in public service procurement, facilities management, quality in public services.*



of Economic, Management, and Valuation Engineering of the Department of Civil and Environmental Engineering, University of Catania (Italy), on 4–7 April 2004.

#### **SYNTHESIS OF THE PAPERS INCLUDED IN THE SPECIAL ISSUE**

Initially ten papers were selected for potential inclusion in this Special Issue, on the basis of the referees' assessment of the initial paper proposal, sessions chair' comments at the IPSERA Conference and the editor' judgement. Of these, six papers have finally been selected for publication.

This selection of papers provides an interesting overlook of the debate on-going in e-public procurement process implementation in the public sector. Indeed, the papers provide interesting findings covering the approach to e-procurement system implementation in the different typology of public organisations, namely universities, national government departments, government agencies, regional government, local authorities, semi-government organisations, and hospitals.

Paolo Barbieri and Andrea Zanoni in “The e-Procurement Experience in Italian Universities” analyse the main problems of the design and implementation of e-procurement in Italian universities. Main features of e-procurement in a university environment have been identified. The most important aspects of e-procurement adoption, and the consequences for process management and organization itself are highlighted. An operative purchasing model is proposed and the steps by which this model could be implemented are suggested. Initial results suggest the interesting potentiality of the system in terms of cost savings and higher process efficiency.

A vast amount of literature has highlighted that accessibility is becoming crucial in evaluating e-procurement web site effectiveness. The paper “Analysis of Public E-Procurement Web Site Accessibility” by Giuseppe Bruno, Emilio Esposito, Michele Mastroianni, and Daniela Vellutino maintains that the introduction of a quantitative methodology to evaluate the accessibility of e-procurement web sites appears crucial and represents a fundamental aspect in the process of evaluation of the e-procurement service's effectiveness. Thus, web site attributes and characteristics that can be measured using quantitative indicators have been identified. A quantitative model based on a three-level hierarchical

system has been introduced and tested with reference to three Italian public e-procurement web sites.

The paper “Key Issues in E-Procurement: Procurement Implementation and Operation in the Public Sector,” presents the key lessons learned from e-procurement implementation across a range of UK public sector organisations. In this paper, the need for experience-based research into the operational issues of e-procurement is addressed by examining not only the implementation process, but the experiences from public sector e-procurement operation in both local authorities and national civil government departments. The authors, Simon Croom and Alistair Brandon-Jones, reviewed the literature relating to e-procurement implementation and operation, identifying five main themes addressed by the current literature. The research explored the perceptions and reflections of both ‘early’ and ‘late’ adopters of e-procurement.

The paper “Factors Influencing Electronic Procurement Usage” by Ken Dooley and Sharon Purchase indicates that e-procurement is being implemented slowly in many organizations, especially government organizations. The paper investigates positive factors influencing e-procurement intentions within semi-government organizations. Findings indicate that suppliers’ participation, internal managerial support and the perceived benefits gained through implementation, all influence e-procurement intentions. In particular, adequate resources in training, staffing levels and systems support will be necessary if the intentions to further use the Internet for transactions are to be increased. Managers that wish their purchasing departments to use this technology for efficiency and cost benefits must also approach their major suppliers and determine their intentions, preferring those suppliers who plan to implement e-procurement.

Gianluca Esposito and Lelio Raffa in “The Implementation of an E-Reverse Auction System in an Italian Health Care Organization” investigate e-procurement implementation process in the Italian-public-health-care system, defined as the way new technologies are absorbed by organizations and become part of their routines. The paper focuses on the interaction between the technological and the organizational dimension that makes it possible to implement a new e-procurement system. To implement a new EP solution in state-run firms could imply dealing with antiquate legacy systems, calling for the adoption of a flexible architecture. Moreover, implementing major interventions at the macro-

organizational level is limited by a rigid legal framework and a static/bureaucratic organizational setting. The effective implementation of EP tools makes it necessary to involve end-users.

A number of public sector agencies worldwide have identified e-procurement as a priority e-government agenda and have implemented or are in the process of implementing buy-side e-procurement systems. However, the scholarly evaluation of e-procurement initiatives, especially in relation to the use of critical success factors is very limited. Kishor Vaidya, A. S. M. Sajeev, and Guy Callender in “Critical Factors That Influence E-Procurement Implementation Success in the Public Sector” surveyed a number of specialized reports on e-Procurement initiatives in the UK, USA and Australian public sectors. The authors developed a conceptual model and identified a number of unique factors regarded as instrumental to the success of public sector e-procurement implementation. In particular, the human factors play a more important role than technological factors in the successful implementation of e-procurement initiatives.

I am aware of the efforts of all the authors in matching both deadline and suggestions aimed at gaining a high level of publication. I am grateful to all of them. So, on behalf of the authors, the Journal, its Editor, Professor Khi Thai, and University of Catania dedicated team, I wish you pleasant and interesting reading.