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# The eGovQual Methodology: Information Systems Planning as Research Intervention

Gianluigi Viscusi University of Milano-Bicocca, Italy

## Abstract

In this paper we discuss eGovQual a methodology for planning eGovernment initiatives in public administrations with specific attention to the strategic planning and preliminary operational planning phases. The key elements of the methodology are the multidisciplinary approach, which considers social, economical, organizational, juridical and technological issues in the identification and ranking of eGovernment projects, and the quality-driven strategy which considers the assessment of actual and future target quality values for services, processes, organizational systems, and technologies. eGovQual aims to satisfy a real need of constituencies and stakeholders involved in eGovernment projects, confirmed in the context where the methodology has been developed and tested such as the eGovernment for Mediterranean Countries (eG4M) project and former preliminary experiences in the Italian Public Administrations by the interactions with local authorities during the on the field experimentations. A structured process is needed, that provides a clear perspective on the different facets that eGovernment initiatives usually have to challenge, and disciplines the complex set of decisions to be taken. The available approaches to eGovernment provide usually only one perspective to public managers and local authorities on the domain of intervention, either technological, or organizational, or juridical, or social. Our aim is to provide a methodology supporting in a structural fashion the choice of the optimal eGovernment plan, considering all the above mentioned perspectives. The quality driven construction of the eGovernment plan is initially influenced by the social, juridical and organizational perspective, while achieves subsequently its final shape when considering the economic and technological perspectives. The results of the interventions carried out are described at a glance.

**Keywords:** eGovernment, information systems planning, research intervention, system analysis and design, quality

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# **1 INTRODUCTION**

This paper proposes eGovQual a methodology for planning eGovernment initiatives in public administrations with specific attention to the strategic planning and preliminary operational planning phases. The key elements of the methodology are the multidisciplinary approach, which considers social, economical, organizational, juridical and technological issues in the identification and ranking of eGovernment projects, and the quality-driven strategy which considers the assessment of actual and future target quality values for services, processes, organizational systems, and technologies.

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As a consequence, the eGovQual approach to the planning activity required the orchestration by a team of sociologists, jurists, organizers, economists, ICT professionals. As such, the information systems approach is the leverage for the exploitation of contributions from public managers and eGovernment authorities. Another characteristic of eGovQual is the data centric approach to eGovernment. Data, information, knowledge are the typical strategic resources used by Public Administrations in eGovernment processes and services delivered. As a consequence, the methodology pays a specific attention to data architecture and of to the quality of data managed in administrative processes and services, whose inner quality is strictly related to the quality of data they use.

As mentioned above, the eGovQual methodology is based on experiences in strategic and operational planning in the context of the Italian Public Administration in the years 1994-2007 (Carlo Batini et al., 2009). A first draft version of the methodology was continuously enhanced during these years. On the basis of these experiences, we are currently involved in the further enhancement, application, and testing of the methodology in Mediterranean Countries interested in adopting ICT to promote government services. In particular, in the context of the eG4M project, we focused on the Maghreb area, where analyses performed in Morocco and Tunisia have shown that the majority of the Maghreb population still prefers face-to-face interactions, due to the lack of computer literacy, in particular in the rural areas.

In this context, enabling the access to government services for population is critical in particular to avoid forcing rural residents to travel to major cities for certification or other core administrative services (Arfaoui et al., 2006). In the cited countries, a second critical issue concerns provision of services for the urbanization phenomena, supporting citizens from rural areas to cities and suburbs of cities. Due to their complexity, these issues require planning activities which consider the social context both at the macro and micro level. This is necessary in order to promote a broad consensus among officials and citizens, and to provide a holistic perspective to senior government leadership, thus promoting their active involvement and commitment (Scholl, 2003). Furthermore, policies such as interoperability ask for analyses from social and juridical perspectives besides the technological ones. Taking these issues into account, we have chosen to apply the methodology to case studies in Morocco and Tunisia, exploiting context knowledge based on analyses on secondary data,

eGovernment initiatives documentation, and direct interactions with central autorities and eGovernment teams.

The development of the GovQual methodology follows a path similar to those making use of action research in connection with systems analysis (Baskerville et al., 1996; Checkland, 1981). Considering the Action Research process, at present we have defined a methodology and we have been actively engaged in the real-world situation with diagnosis and action planning. Indeed, the real-world experiences carried out in Morocco and Tunisia provide results that are presently tested in real eGovernment initiatives, while improving and enriching the methodology.

# **2** INTERVENTIONS AT A GLANCE

A first version of eGovQual methodology was designed and applied in Italy in the 90's, resulting in one of the first national projects on cooperative architectures (C. Batini et al., 2001). The application of eGovQual in Italy has demonstrated several advantages.

First, it enables the interplay of the ICT development plan and administrative/normative reforms, such as the simplification laws periodically enacted in Italy to reduce the amount of bureaucratic fulfilments. The application shows that normative reforms are necessary to carry out eGovernment initiatives. It offers in the short-term feasible and cost savings solutions, such as self-certification. In the long-term, it enables reforms through innovative technological solutions such as publish and subscribe layers cooperative architectures. These solutions improve service efficiency, which to the effectiveness of the final outcome for users (citizens/businesses).

Another positive facet of the methodology concerns the attention to social issues. The analysis of the social context (performed in 2002-2004) led to focus the attention to accessibility issues for disabled persons, resulting in the enactment of a law (Italian Government, 2004) and several technical norms, such as the WAI norms (W3C., 2007), that enforced accessibility of disabled to public administration websites.

Furthermore, the effectiveness of the cooperative perspective provided by the methodology has been tested in the reorganization of specific administrations such as the Ministry of Treasury (performed in 1996-1998). The administrative offices of the different functional areas, such as the Human Resources offices, have been reorganized through the identification and clustering of core services and related processes.

Finally, the methodology is a useful monitoring instrument. eGovQual quality assessment categories have been used in the past five years to monitor enhancement in the delivery of priority services established in the 2002 Italian eGovernment plan. Priority services are the best-ranked services in the impact on citizens/businesses, measured in terms of social effects, frequency, and cost. The percentage of priority services provided by PAs has grown from the 5% in 2002 to 61% in 2006 (CNIPA, 2007).

We are now committed to applying the methodology more extensively in Tunisia and Morocco. The experimentations will provide further indications to improve the methodology with a right balance between the articulation of the methodology and the need for a feasible approach, by extending the phases to fully take into account juridical, organizational, and economic perspectives.

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