

## Chapter 9

# Electronic Government Implementation Projects with Multiple Agencies: Analysis of the Electronic Invoice Project Under PMBOK Framework

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### ABSTRACT

*Contemporary public administrations have been suffering several ways of pressure to promote modernization in their structures and services. One of governments' options to meet that demand lies in the potential use of information and communication technology for the benefit of better service to citizens and greater state apparatus efficiency. This contemporary movement particularly connected with personal computing and the Internet arrival has been called Electronic Government (e-Gov). One of its actions relates to building government electronic services that integrate several government agencies in a collaborative format. However, e-Gov projects demanding integration to this degree have an implementation complexity that is greater than traditional projects, which reflects on low success rates worldwide. This paper investigates the good practices identification in multi-agency e-Gov project management. Using the PMBOK framework, this paper presents an in-depth study of Nota Fiscal Eletrônica - NF-e (Electronic Invoice) project implementation. This project was based on a nationwide integration of multiple agencies (26 State Tax Administrations, the Brazilian Federal Revenue Service and nineteen large companies) and faced major technical and management complexity. The results found suggest that the project was implemented in an informal way, however with impressive results. There were identified two complementary management models. The first model was nationwide, focused in Scope and Communication Management. The second model was local to each institution, focused in Cost, HR and Procurement Management.*

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## INTRODUCTION

Information and Communication Technologies (ICT) have been used as an instrument to make structure changes viable in public management (Osborne and Gaebler, 1992; Bresser Pereira, 2005). In the last few years, as the internet use evolved in all sectors of economy, including the public field, the concept of Electronic Government (e-Gov) has consolidated itself (Reinhard e Dias, 2005). E-Gov is currently considered an alternative to improve services delivery (e-Services), increase Public Administration's internal efficiency (e-Administration), as well as support citizens' greater participation in the political process (e-Democracy) (Medeiros, 2004).

While it's one of e-Gov's most visible aspects, the e-service concept faces some implementation difficulties, among which the following: a lack of digital access in the majority of the population, specially in developing countries; a resistance by government itself in overcoming cultural barriers to paradigm change; finally, a lack of integration among government agencies, reflected on information systems, yet originated in the very structure of government. This last aspect of e-service, i.e. government agencies' internal integration, is very important to prevent external citizen integration from frustrating expectations (Ho, 2002).

In the public sector, collaboration among organizations via ICT is associated with Joined-Up Government and Government in Network concepts, which commend a government that is integrated among its departments and agencies, from the conception of public policies to their implementation and maintenance. In order for that integrated government to become reality, especially in providing electronic service, there must be an e-Gov project implementation that promotes integration among those multiple government agencies.

However, ICT project execution in the public sector still shows spectacular failures, even in developed countries (Hazlett and Hill, 2003).

Considering developing countries, Heeks (2004), from the analysis of 40 reports on real cases in a research with eGovernment for Development Information Exchange<sup>1</sup> 2members, there is an alarming figure of only 15% of e-Gov projects being considered as being successful. The concept used by Heeks for e-Gov project success refers to situations where the majority of stakeholders have their main goals achieved and don't experience undesired results (Heeks, 2004, p.2).

Project Management Body of Knowledge—PMBOK, from the Project Management Institute—PMI is a guide that consolidates the best practices on the subject of project management, and it's one of the most comprehensive guides in the market (Neto e Bocoli, 2003, Charbonneau, 2004). While it's not ICT projects-specific, a complementation to PMBOK called Government Extension to PMBOK (PMI, 2006) focuses on public sector project peculiarities.

Understanding the aspects that favor e-Gov project management proves relevant particularly when providing citizens with integrated services, where there's no need to identify which government agency they are dealing with. Good management practices, such as those proposed by PMBOK, are even more critically important in particular for e-Gov projects that deal with complexities referring to the integration among multiple government agencies,

Therefore, the purpose of this paper is to analyze Nota Fiscal Eletrônica – NF-e (Electronic Invoice) implementation project, performed by 26 states and the Federal District, in cooperation with the Brazilian Federal Revenue Service, from the conceptual, theoretical references in A Guide to the Project Management Body of Knowledge, Third Edition (PMI, 2004) and Government Extension to the PMBOK Guide Third Edition (PMI, 2006).

A brief review of the Literature on Project Management will be presented next, as well as a NF-e case description. Subsequently, methodology aspects of the research on NF-e project

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