

## Chapter 8

# E–Government Maturity Levels in Brazil: Lessons Drawn from Several Brazilian States

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### ABSTRACT

*This chapter examines the experiences of e-government programs in state public administrations, identifying differences in trajectory and levels of maturity achieved, by focusing on the Brazilian states of Alagoas, Minas Gerais, Paraná, Pernambuco and São Paulo. The study devised and implemented a framework for analyzing the development of e-government, incorporating components and factors related to strategy and organizational structure. The evidence collected corroborates the hypothesis that strategic vision, planning and organizational coordination structures are associated with experiences that have progressed through to the deployment of e-government projects of greater complexity. It was further detected that the alignment between strategy and program is a critical factor for achieving higher stages of maturity, although a linear and sequential linkage is not always verifiable between the stages of vision, planning, organization and implementation of electronic government.*

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## INTRODUCTION

In general, experiments in e-government are more easily recognized by the presence of Internet services, which is a high visibility aspect that seems to represent a means for obtaining tangible results swiftly and inexpensively. However, escalation by simply placing a growing number of Internet services should not be dissociated from concerns about their quality, comprehensiveness and adequacy to the needs of citizens (OECD, 1998; 2003; UKP-POST, 1999; Commission, 2003). Electronic government has the potential to transform the manner of rendering services to citizens and, from a broader perspective, the political relationship between the two parties (Fountain, 2001; Burn & Robins, 2003). However, e-government is faced with the characteristics of functional insularity that are typical of public administration. The integrating potential of new technologies can be undermined by the institutional bureaucracy of public administration (Marche & Mcniven, 2003).

In Brazil, e-government has been included on the agenda of federal government policies since 2000, incorporating a comprehensive vision of the strategic application of Information Technology (IT) in building the information society (Fernandes & Pinto, 2003). The prior trajectory of the organization of IT left a technological and institutional legacy that hinders progress, particularly in terms of functional verticalization and specialization that was exacerbated by the obsolete technology of centralized data processing (Saur, 1997).

In the Brazilian states, e-government is an item that is currently being assimilated in the government agenda, with several experiences in progress. A survey in 2003 found that IT management in state government is characterized by dismantling and decentralization, as strategic positioning plans are adopted separately in each organ (PNAGE, 2004). This situation reveals a degree of fragmentation and a lack of a coordinated and comprehensive policy. Another survey in 2006 detected advances in policy implementation, organizational struc-

tures and projects identified with the concept of e-government, particularly the dissemination of portals of unified services (Fernandes, 2006).

Thus, this chapter analyzes the trajectory of electronic government programs in Brazil focusing on the progress achieved in its states. It adopts the premise that there are identifiable levels of maturity associated with the degree and intensity with which projects and initiatives are transforming agents of the structures and processes. The hypotheses of the research consider that the maturity of e-government depends on the ability to give ongoing support to a process of transformation, requiring the alignment between strategies and structures of public administration and the e-government program.

## BACKGROUND

The experiences of e-government are advanced applications of IT in the highly complex context of public organizations (Snellen, 2000). The need to provide prescriptive indications generated models for comparative analysis of experiences, based on parameters of maturation or development (Deloitte Research, 2000; Heeks, 2001; Accenture, 2002; PWC, 2002; UN/DPEPA-ASPA, 2002). The enhancement of these models depends on the incorporation of organizational factors and dimensions, and especially the strategic perspective, considering that it involves longitudinal experiences of prolonged maturation (Davison et al., 2005).

The application of information technologies can work towards a change in processes and the transformation of the organization, provided that it is geared to meeting the perceived needs for the achievement of institutional goals and objectives (Davenport, 1994; Hammer and Champy, 1993). A similar approach is found in the literature on the public sector, as the integration of IT systems and infrastructure on the management process is essential for effective results and reflects the

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