

## Chapter III

# The Evolution of Information Technology Management at the Federal Level: Implications for Public Administration

Stephen H. Holden  
University of Maryland, Baltimore County, USA

### ABSTRACT

*Federal agencies rely extensively on information technology (IT) to perform basic missions. Arguably, public administration should be driving the theory, policy, and practice for managing these increasingly important resources. This is especially true as public organizations move to electronic government.*

*Despite some maturation in the literature for managing IT in federal agencies in the last several years, public administration has contributed little to this effort. Other academic fields, such as information science, business administration, and practitioners from the federal government and related contractors have contributed more recently to the theory and practice of IT management at the federal level than public administration.*

*This chapter analyzes federal IT management literature from several academic disciplines and government documents. The analysis compares federal IT management with a normative model of management maturity focusing on the strategic objectives for IT and related management approaches. Public administration's minimal contribution to federal IT management raises profound questions whether federal agencies are performing commensurate with public expectations in an information age.*

## INTRODUCTION

Given the growing importance of effective information technology (IT) management to the basic functioning of most public programs, the sophistication of the policy, theory, and practice in this area should be evolving quickly. Unfortunately, that is not so (Holden, 1996; Holden & Hernon, 1996; Fountain, 2001). As a result, it is quite possible that the current generation of public administration scholars and practitioners may be ill equipped to face the challenges of the information age in which we find ourselves trying to govern.

A mere gap in IT management theory might not be fatal; but in reality, the implications for the practice of public administration, and therefore governance, are quite grim. Press accounts of the year 2000 conversion effort potentially causing chaos in air traffic control and other vital business interests present one example of how integral public sector IT has become to the safety and economic well-being of the country. While the billions of dollars currently spent by the federal government on IT make up an insignificant portion of the budget, IT underpins almost the whole budget directly or indirectly. Just ponder the implications to the government's cash flow if the Internal Revenue Service could not collect taxes or the Social Security Administration could not post employee earnings.

This chapter compares the federal IT management literature with a normative model of management maturity, examining the strategic objectives for IT and the related management approaches. The academic disciplines that contribute to an understanding of the management of IT in the federal government include business administration, state and local government management, information sciences, and public administration. Although the analysis of the literature does include government publications, it does not discuss the pertinent public law or government-wide policy (see instead Beachboard & McClure, 1996; Holden, 1994; Plocher, 1996).

19 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: [www.igi-global.com/chapter/evolution-information-technology-management-federal/28206](http://www.igi-global.com/chapter/evolution-information-technology-management-federal/28206)

## Related Content

---

### Investigating Factors Affecting Intention to Use Government Websites for COVID-19-Related Information: An Empirical Study

Asad Ahmad and Mohd Danish Kirmani (2020). *International Journal of Electronic Government Research* (pp. 60-74).

[www.irma-international.org/article/investigating-factors-affecting-intention-to-use-government-websites-for-covid-19-related-information/267140](http://www.irma-international.org/article/investigating-factors-affecting-intention-to-use-government-websites-for-covid-19-related-information/267140)

### Trust in People, Organizations, and Government: A Generic Model

Mahmood Khosrowjerdi (2016). *International Journal of Electronic Government Research* (pp. 55-70).

[www.irma-international.org/article/trust-in-people-organizations-and-government/167749](http://www.irma-international.org/article/trust-in-people-organizations-and-government/167749)

### Identification in E-Government

H. Leitold and R. Posch (2007). *Encyclopedia of Digital Government* (pp. 984-987).

[www.irma-international.org/chapter/identification-government/11621](http://www.irma-international.org/chapter/identification-government/11621)

### Rethinking E-Government Adoption: A User-Centered Model

Ajax Persaud and Priya Persaud (2013). *International Journal of Electronic Government Research* (pp. 56-74).

[www.irma-international.org/article/rethinking-e-government-adoption/103893](http://www.irma-international.org/article/rethinking-e-government-adoption/103893)

### A User-Centric Evaluation of e-Government Services in the GCC Region: Case of State of Qatar

Karim Al-Yafi, Nitham Mohammed Hindi and Ibrahim Hassan Osman (2016). *International Journal of Electronic Government Research* (pp. 15-34).

[www.irma-international.org/article/a-user-centric-evaluation-of-e-government-services-in-the-gcc-region/176647](http://www.irma-international.org/article/a-user-centric-evaluation-of-e-government-services-in-the-gcc-region/176647)