



Chapter XXVII

**Information Management
in Public Sector Agencies:
A Context-Sensitive
Conceptual Framework of
CIO Competence**

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ABSTRACT

Managerial responsibilities for information technology (IT) have, increasingly, been consolidated in the person of the “chief information officer” (CIO). Despite the increased prevalence of the CIO position, no one model has emerged that explains what can realistically be expected of the CIO in various organizational contexts. This is particularly true of the public-sector CIO. In this chapter, insight into the problems, challenges, and requisite competencies for public-sector CIOs is provided. The conceptual framework of CIO competence presented here is multidimensional and interdisciplinary in nature. In the chapter, the importance of considering the contextual setting in which CIOs operate in understanding the competencies he or she deems critical to the CIO role is illustrated. The competencies deemed critical by CIOs with differing perceptions of the role of IT, as well as those deemed critical by CIOs managing different size IT units, are contrasted. The discussion should inform academicians developing IT management curricula and practitioners engaged in CIO search and development activities.

INTRODUCTION

The need to more effectively and efficiently manage information has led organizations to focus more heavily on the values and challenges of effectively integrating information technology (IT) into their operations. The dynamism of many industries, coupled with the unbridled growth in IT innovations, dictates that organizations periodically rethink the key elements for them in effectively managing their information resources. The *appropriate* approach to managing information resources continues to evolve. Some approaches that have proved effective in the past often hold little relevance in present and future situations. Determining the appropriate role of IT has become a critical agenda item for practitioners within organizations and an intriguing area of research for academicians. A central figure in both arenas for making such a determination is the chief information officer (CIO).

Admittedly, research in this area is difficult due to the constant influx of IT innovations, as well as changes in organizational strategies and management objectives. In addition, most research related to the CIO targets private-sector corporations. There is comparatively little known about CIOs who work in public-sector agencies.

Thus, the primary goal of this chapter is to provide a deeper understanding of the critical competencies for CIOs in relation to their public-sector work environments. To this end, first, a conceptual framework of competence in the CIO position is developed. Here, CIO competence is conceptualized in terms of what CIOs need to know and what activities CIOs need to engage in. A secondary goal of this chapter is to stress the need to account for the context in which the CIO performs his or her job. To this end, the sensitivity of the conceptual framework of CIO competence in relation to two aspects of the CIO's work environment is examined. The two aspects of the CIO's work environment that are examined are IT unit size and IT vision. These two aspects of the CIO's work environment are referred to as the two contextual settings for the remainder of this chapter.

The chapter is intended to flow as follows. First, a comprehensive framework of CIO competence is presented for level-setting purposes, which will provide the basis for discussions in later sections. Second, the importance of placing competence in context is briefly discussed, along with an examination of the various facets of the conceptual framework in relation to the context of the CIO's work environment. Finally, the utility of the conceptual framework in informing the reframing of IT management pedagogy is discussed.

BACKGROUND

Over the past two decades, many organizations have come to rely on their information base as a critical asset. Though organizations, private and public, differ markedly in terms of their information environment (e.g., type of information collected, information sources, information use, information management approach, etc.), the information base is universally becoming one of the most valuable organizational resources. As Porter and Millar stated, "Dramatic reductions in the cost of obtaining, processing, and transmitting information are changing the way we do business" (Porter & Millar, 1985, p. 2). More recently, Michael Dubose Chairman, President and CEO of Aftermarket Technology Corporation, stated, "...information access and flow is absolutely critical to today's businesses" (Prince, 1999, p.66).

Attempts to better harness the power of information for process redesign, new and enhanced product and service offerings, and overall improvements in organizational effec-

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