Key Issues in Information Systems Management: An Empirical Investigation from a Developing Country’s Perspective

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ABSTRACT

There have been periodical studies on key IS management issues facing the IT industry in North America; however, an empirical investigation on key IS management issues in developing countries has been largely ad hoc and inadequate. This paper identifies and analyzes important issues faced by CIOs in the developing country of China. The results of this study are based on two national wide CIO surveys in China, where the first was conducted in 2004 and followed by a more recent survey in 2008. The authors provide insight for both IS practitioners and researchers who have interests in developing countries. Data analysis indentified key IS management issues and demonstrated similarities as well as differences between the two rounds of surveys. Although some strategic IS issues were still within the top 10 on both the 2004 and 2008 lists, their importance ratings were different. Implications of the findings are also discussed.

Keywords: China, CIO, Developing Countries, Information Systems Issues, Information Systems Management

INTRODUCTION

Research on key issues in IS management has been published by MIS Quarterly (MISQ) or MISQ Executive (MISQE) in the last three decades (e.g., Ball & Harrison, 1982; Brancheau & Wetherbe, 1986; Watson, 1989; Niederman, Brancheau, & Wetherbe, 1991; Brancheau, Janz, & Wetherbe, 1996; Hovar, 2003; Luftman, Kempaih, & Nash, 2006; Luftman & Kempaiah, 2008). Since these studies were conducted by surveying U.S. senior managers, the top IS issues from the findings largely reflected perspectives and views of senior managers in North America. Additionally, key IS management issues could be influenced by political, economical, cultural, and technological infrastructure factors in different

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countries (e.g., Deans et al., 1991). Therefore, key issues in IS management identified from the perspective of North America may not be the exact ones faced by senior managers in other countries, especially when such countries have different technological infrastructure and cultural background.

Although there were a few prior studies examined key IS management issues from outside of North America’s perspectives, this research stream has not been systematically studied in other countries periodically. Particularly, no such study has been done for the last eight years from the perspective of an Asian developing country. Asia has maintained relatively faster economic development speed in the last decade, especially in its IT industry, even during the current world economic downturn period. A study on key IS management issues facing an Asian country is important and timely.

The rest of the paper is organized as follows: first, existing research literature on the top 10 key IS management issues is reviewed; second, this study’s survey method is presented; third, data gathered through the survey are analyzed and presented. Discussion and implications were provided in the final section of the paper.

PREVIOUS FINDINGS REGARDING TOP IS MANAGEMENT ISSUES

The top IS management issues have been systematically examined by IS researchers. Before 1990, IS strategic planning was clearly the most important issue. It was consistently ranked as the number one issue among U.S. private sectors (Ball & Harrison, 1982; Dickson et al., 1984; Hartog & Herbert, 1985; Branchceau & Wetherbe, 1986). During this time, there were rapidly and complex changes in the application of technology in the business environment. Business organizations began to be more dependent on Information Technology. The urgent need for the integration of technology into business missions makes IS strategic planning the top priority for IS managers. This top priority was strengthened by the imperative need for end-user training because of the proliferation of end-user computing technology. Lack of support from top management also make the strategic IS planning a priority. During the 1980s, IS managers were trying to position themselves within their organizations. The issues about the role of IS managers, particularly how to measure the effective of IS in terms of the alignment with organization strategic goals, i.e., the contribution of the IS organization frequently turned up on the top issue list. At the beginning of the 1980s, technology issues such as communication protocols, network layers, system development methodologies were also among the priority list of IS managers.

During the middle of the 1980s, the issues of software development, database administration, information architecture development and integration of technologies gained more attention. End-user computing continued to receive a lot of attention. IS managers tend to focus on end-user computing training and satisfaction. The management of IS human resources only made the top 10 list twice (Ball & Harrison, 1982; Dickson et al., 1984). Communication with the top management also received insignificant attention among IS managers (Number 8 on Hartog & Herbert’s 1985 list).

At the end of 1980s, Caudle, Gorr, and Newcomer (1991) conduct a national survey about the key information system management issues in the public sectors of the U.S. They found that although IS strategic planning was consistently ranked number one in previous studies, long term planning is only ranked number seven on the public sector IS managers’ list. The comparison of U.S. public sector with the private sector may indicate an interesting difference: while U.S. private sector has consistently seen the importance of the IS planning process, this issue is not even in the top 5 management issues list in the U.S. public sector. One possible reason could be that the public sector tended to focus more on operational issues than on strategic direction. The importance of integration of the current and future technologies was ranked number
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