



**Chapter VIII**

**Key Issues in IS  
Management in Norway: An  
Empirical Study Based on  
Q Methodology**

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Information systems (IS) departments face many challenges in today's rapidly changing environment. One approach to understanding these challenges is to survey IS managers to elicit what they consider are key issues. Studies of key IS management issues have been conducted for some years in many nations and regions. However, most of these surveys lack a theoretical basis for the selection of key issues. Furthermore, most studies have used a single-round or a multi-round Delphi method. This paper provides an overview of research approaches to key issues studies combined with key issues results from previous research. The paper presents methodological issues and choices for a survey on key issues in IS management which was conducted in Norway. A three-step procedure for key issues selection is introduced, and a Q-sort analysis is adopted. The paper presents results from the Q-sort survey and analysis. The highest ranked key issue in Norway, according to the survey, is concerned with improving links between information systems strategy and business strategy.

**INTRODUCTION**

Information systems (IS) departments face many challenges in today's rapidly changing environment. One approach to understanding these challenges is to survey IS managers to elicit what they consider are key issues. According to Niederman,

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Brancheau and Wetherbe (1991), the primary purpose of such studies is to determine the IS management issues expected to be most important over the next 3 to 5 years and thus most deserving of time and resource investment.

This paper provides an overview of research approaches to key issues studies and presents methodological issues and choices for a survey on key issues in IS management which was conducted in Norway in 1998. A three step procedure for key issues selection is introduced, and a Q-method analysis is adopted. Finally, the paper presents results from the Q-sort survey and analysis.

## LITERATURE REVIEW

This research is concerned with key issues selection procedure and key issues survey approach: it is assumed that the ranking results of the studies presented above were influenced by selection procedure and survey approach. The most common selection procedure is to start with an old key issues list and let it be revised in multiple survey rounds as shown in Table 1. Some studies start from scratch by asking respondents to specify issues that they think will be key issues. The most common survey approach is the Delphi technique as shown in Table 1. Some studies apply other methods. This research applies Q-sort that already has been used in Brazil by Morgado, Reinhard and Watson (1995, 1999).

## KEY ISSUES SELECTION

Some key issues appear to emerge quickly. The sudden prominence of business process redesign in many recent studies (e.g., Brancheau, Janz & Wetherbe, 1996) indicates that IS managers may be too willing to respond to a current hot topic, and their attention may be too easily diverted from fundamental, long-term issues. If asked in 1998, many Norwegian IS managers would probably rank "Year 2000" as a key issue. The Year 2000 issue was, however, both a short-term problem and an issue that is part of the larger problem of maintaining software. Hence, the selection of key issues for survey research is associated with several problems as listed in Table 2.

The lack of theory is a major concern. Watson, Kelly, Galliers and Brancheau (1997) suggest that a sufficiently relevant theoretical model on which to base a new key issues framework should be identified. They discuss role theory, managerial IS competencies and general management practices as "redesign" approaches to potential new key issues frameworks (Watson et al., p. 111).

Advantages of the "redesign" approach include the possibility that the framework be complete, consistent, parsimonious, and both regionally and temporally stable. Disadvantages include the lack of continuity with previous studies and the danger that the issues might become so abstract that they would cease to have meaning to IS managers and executives, thus breaking an important link to practice.

Niederman et al. (1991) made a theoretical contribution by classifying key issues along three dimensions and categorizing them into four groups. The three

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