Chapter XI

Human Factors in the “System Selection” Stage of Library Automation

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Abstract

The aim of this study was to gain further insight into the suitability of a couple of different methods for investigating the possible human factors that have a significant bearing on the system selection of an automated library system. The two methods tested in this study included first a set of interviews whereby a number of people involved in library automation were asked to identify the factors that they perceived as having a significant bearing on the selection of an automated library system. The second interview method tested was the story telling approach, whereby a librarian was asked to tell her story of how and why the library that she worked for had chosen a particular library system. The results of this study showed that although both methods involved interviews, their outcomes varied somewhat where the story telling method highlighted the social interactions in a more noticeable way. A major point learned from this study was that particular attention should be paid to extracting information about more complex issues where the informants may not be able to easily identify or convey the required information.
Introduction

Since the introduction of automated library systems within libraries\(^1\) a large amount of literature has been accumulating on various aspects of library automation\(^2\). According to Storey (1992, p. 1), the two lines of approach excessively found in the library automation literature are the “machine side” and “what we did in our library to install a system”. Like others (e.g., Fine, 1986, p. 84), Storey finds the amount of literature written on “human aspects” less frequent. However, today the fact that people have a pivotal role in organizations of libraries and in the process of automation is discussed and accepted widely (Clarke & Morris, 1998; Jordan & Jones, 1995; Farley, Broady-Preston et al., 1998; Olsgaard, 1989). For example, it is stated that more than half of libraries’ budgets are spent on staff salaries (Jordan & Jones, 1995), large-scale changes that result from system migration will affect all levels of staff (Clarke & Morris, 1998), and based on indications from research, 90% of change initiatives fail due to human factors not being taken adequately into account (Goulding, 1996). Similarly, Olsgaard (1989) indicates that 85% of all failures in systems implementation could be attributed to people problems.

Despite the vast range of literature and guidelines available regarding library automation, costly mistakes are still made and problems are still recurring on a daily basis. Furthermore, research on the human factors that are of significance in the process of adoption and use of automated library systems are still minimal (e.g., see Clarke & Morris, 1998).

Based on this background, further research in this area seemed to be needed. In the present study, which was conducted in preparation of the design of the data collection instrument of a wider doctoral research, a pivotal point of interest centers on making sense of how and why library workers select their automated library systems.

The ever-changing Automated Library Systems\(^3\) (ALS) of today, even in their simplest forms, are very complex due to the enormity of the number of functions that they have to perform\(^4\). It would be very difficult (if not impossible) for a library to make a rational, fully informed decision about its choice of automated system based on a thorough examination of each detail of all of the potential systems, especially in the light of diminishing library resources, the changing marketplace (Mayo, 1995) and prevalent technologies. DiMaggio (1983) suggests that in situations of technical uncertainty, when rational evaluation of alternatives would be too costly, imitation (mimetic isomorphism) becomes a decision-making strategy. It has further been suggested that under circum-
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