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 to a large
amount of literature has been accumulating on various aspects of library
automation. 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 organiza-
tions 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 signifi-
cance 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 (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. 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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The Geography of Digital Literacy: Mapping Communications Technology Training Programs in Austin, Texas
[www.igi-global.com/chapter/the-geography-of-digital-literacy/138045?camid=4v1a](www.igi-global.com/chapter/the-geography-of-digital-literacy/138045?camid=4v1a)