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## The Implementation and use of ERMS

## A Study in Icelandic organizations

The research that we are discussing today is about the implementation and use of electronic records management systems in Icelandic organizations. These systems are used to manage and preserve all records, in any format, in an organization as long as these records have historical and economic value and are required by law.

In the following minutes I will introduce to you the aim of the research and my background for undertaking it. Then I will present the participants in the study and the methodology in the data collection and analysis. My presentation will conclude by presenting to you the main findings and the value of the research.

The aim of the research was to contribute new and valid knowledge on the implementation and use of electronic records management systems in Icelandic organizations. The study aimed at finding answers to the following research questions:

First, which were the perceived objectives of introducing these systems and were these objectives being met. Second, how were the systems implemented and how successful was the implementation. Third, was there a difference between public and private organizations regarding the success of the implementation. Fourth, did the systems differ in how easily they were implemented. Fifth, how did the employees actually use the electronic records management systems, if they did, and if not, what did they use as a substitute. Sixth, how did the employees feel about working with these systems, and, finally, seventh, what role did the implementation play in the subsequent successful use or non-use of the system.

My background covers a career that now spans 20 years as a consultant in records management working for over 100 organizations in Iceland. I have had the opportunity to learn a great deal about the situation regarding the subject, that is records management and electronic records management systems. For nearly ten years I have worked for many companies that have installed these systems for the purpose of managing their records more efficiently. Unfortunately, I had a reason to believe that the return on investment on the considerable amounts of money spent to buy and install electronic records management systems was often limited. I had witnessed organizations where not all the employees who were intended to use these systems did so. These systems were in addition not being used correctly and the opportunities that they offer were not fully utilized. Failure in the implementation process seemed to be the reason. I had developed an interest to investigate the subject. Upon examination there was no research available on how ERMS had been implemented in Icelandic organizations. A review of the literature revealed only a few descriptive cases of implementing ERMS abroad which were published after this present study was carried out. The only guidance was from studies of implementing other information systems that sometimes made little demands on sharing personalized information. No studies were available on how ERMS were actually used. This was the reason for choosing this topic.

The participants in the research were eight organizations in Iceland. The study focused on the implementation and use of electronic records management systems in these organizations. The main data collection took place during the period September 2001 to July 2004. Four organizations, where 34 employees were interviewed, were studied in detail. Seven participant observations were also conducted in these organizations. Four other organizations, where four key employees were interviewed, corroborated the findings. Six computer consultants at six different software providers were also interviewed, making the total number of interviewees 44. The consultants at the software providers knew the situation in many organizations, in addition to those organizations studied

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from their own work in the field. One participant observation was conducted as well at one of the software providers.

The sample for the study was purposive. These eight organizations selected operated in different fields of industry. They had implemented four different electronic records management systems, with two using each system. These systems were all part of a groupware. A groupware is a software program that had been installed to facilitate group work. The organizations were both public and private. They are representative of medium to large size organizations in Iceland and had experienced varying success rates in the implementation, although detailed results were not known before this study.

Qualitative methodology was used in the data collection. Different interview guides, with open-ended questions were developed for different groups of interviewees. Participant observations were used as well but the interviews played a substantially more important part in the study than the participant observations. Qualitative research methods involve in addition the analysis of text. Such analysis was also used in the research by looking at both internal and external material such as rules, policy statement and handbooks as well as laws, regulations and standards on records management. These sources added a third dimension to the study. This triangular approach was also used in the sample selection were interviews with a key employee in four organizations as well as the six consultants at the software providers made up two groups that corroborated the findings in the four organizations studied in detail.

Now, I will turn to the main findings. The managers of the eight organizations studied discussed seven objectives of implementing an electronic records management system in their organization. These were increased productivity, improved customer or client service, anticipated cost savings, reduced space required to store paper documents, integrated work procedures, gaining a better overview of cases and better meeting legal requirements. There seemed to be little difference between public and private organizations regarding most objectives except that the public organizations were more concerned with saving space to store paper documents and recent legislation granting individuals access to information about themselves was only applicable to public organizations.

Of the many other important findings revealed by the study, the following were the main findings in a nutshell:

(1) The support by top management was important for the successful implementation of the electronic records management system. The support by the managers was exemplified in their interest and control of the project, their own use of the system and their motivation and rewards given the employees in using the system. Managerial support alone, however, was not sufficient for the success of the project. What was necessary as well was the co-operation of the information technology and records management functions in the system development and in the training of the users who must receive at least basic training in records management in addition to good and well organized training in using the system itself. The users should participate in the implementation process as appropriate, especially in adapting the functional classification scheme to the electronic records management system. It was not enough to examine the individual factors alone, but their total relationship had to be taken into account as suggested by the Gestalt approach.

(2) There was a strong correlation between the successful implementation factors and positive outcomes of the process. These positive outcomes were a high level of use of the electronic records management system, better work procedures in records management, meeting legal obligations, increased output or productivity, and finally, meeting the expectations of the implementation. The study revealed no difference regarding the success of the implementation in terms of whether the organization was public or private. Nor did it matter which type of electronic records management system was being implemented. The result could be a success or a failure. Success depended on how well each system was implemented.

(3) The study also revealed how employees of the organizations actually used the electronic records management systems, that is, how they registered records into the system and what search parameters they used to search for records. The study covered both records created in-house and those received. The study showed that e-mail was regarded more as a documented conversation and had not yet gained the status of a record although the content actually was a record. E-mail was, therefore, often not captured into the electronic records management system to the extent that it should be. This finding agreed with surveys in other countries. Training determined how widespread the level of use was among the employees, but their participation in the adaptation of the functional classification scheme to the system determined how skilful they were in registering and searching for information in the system and how user-friendly they regarded the system to be. Employees did not object to their work being monitored and their completed work being shared with their fellow workers, although they might have some second thoughts whether their spelling and grammar was up to standard. In the cases when employees did not want to or were unable to use the electronic records management systems for recordkeeping they used informal and not standardized methods in the handling of records. These findings are of value to the management of organizations in Iceland that want to introduce or reintroduce electronic records management systems. The theoretical contribution of the study is the uncovering of the input factors of the implementation that influence the outcome factors. These findings can, therefore, be of value to middle-sized organizations in Western Europe, North America and Australia as the organizational culture regarding work, co-operation and competition and style of management is not that different in these other parts of the world. The research can also form a basis for future studies.