IMPLEMENTING ENTERPRISE INFORMATION MANAGEMENT

PART 2

A research-based approach in two Swedish municipalities

An implementation programme for organisation-wide recordkeeping systems in two Swedish local governments is being informed by a research-based approach in cooperation with Mid Sweden University. In the previous issue of *iQ*, (May, 2010), the author set out the parameters for the research. In this concluding part of the article, outcomes are discussed.

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The Sundsvall and Härnösand municipalities provided the platform for the Research Centre's major project for 2009-2011, which brings together experience in researching recordkeeping issues in small and medium enterprises as well as expertise in enterprise information architecture and content management.

The municipality of Härnösand has recently completed a project to centralise the registration and documentation of its records into a single digital 'diary system' as they are created and received. However, the following discussion will focus on the Sundsvall municipality, (pictured above) which is in the process of designing and implementing both an Enterprise Information Management system and rolling out a records management system.

The team will be able to follow the roll-out of these systems in Sundsvall: The EIM system rollout commenced in October 2009 beginning in the committee system, to be followed by the implementation of the EDRMS system, which is still at an advanced planning stage.

Story Keywords

- Enterprise information management
- Enterprise architecture
- EDRMS
- Recordkeeping systems

MAJOR ORGANISATIONAL CHANGE

Sundsvall municipality is also in the midst of major organisational change: moving from a traditional hierarchical organisational structure to process-oriented workflows and information management. It had become apparent to the municipality that in the contemporary digital environment it could no longer work in traditional ways.

Like all organisations today, they must focus on the design and provision of customer-centred e-government services. Furthermore, they are under pressure to meet requirements that are familiar to all organisations: pressure to save money and demonstration of greater efficiency.

Although there are very few research-based studies in the literature that focus on the implementation of whole of

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their associated systems, large and small, that potentially create records.

The survey and interviews were undertaken by the two PhD students working within CEDIF on the Sundsvall-Härnösand project. In Härnösand, thirty-three current projects and five recently completed projects were identified.

These covered a wide range of activities; for example, a range of tourism development strategies, the municipality's part in a large railway infrastructure project that runs through the region, the centralisation of the records registry and digital archives project, environmental management projects and safety and emergency response.

At the current early stage of the investigation, Sundsvall appears to have a more integrated approach to project and information management. Furthermore, a lower number of separate development projects were identified. However, given that Sundsvall is four times larger than Härnösand this prompts the researchers to question whether some projects and systems have slipped through the net because documentation is incomplete.

Some important issues that impinge on recordkeeping quality have already been identified. In both municipalities, professional recordkeepers are not among the project leaders or included in project planning teams, with the exception of the Härnösand project to centralise the records registry and the Sundsvall ERMS implementation project.

Hence, most of the systems planned and implemented to manage the various projects are current case administration systems: they are not recordkeeping systems.

Furthermore, these systems are isolated, and communication across the systems is generally not considered. In Swedish, such systems are metaphorically described as 'stovepipes'. Australians call them 'silos'. This situation constitutes major barriers to the capture and management of digital records in the organisations, to knowledge sharing across the organisations and to the development of customer-centred e-services which require flexible access to information, often from several business units and their associated systems.

SUNDSVALL'S RECORDS MANAGEMENT AND EDRMS PROGRAMME

An important part of the Sundsvall municipality's makeover of its information management systems is the introduction of an EDRM system. Planning for the system is well under way, but it is not yet as close to implementation as the EIM system.

A thorough, standards-based approach to planning & designing the system has been used, with particular reference to:

- *ISO 15489* Records Management
- *ISO 23081* Metadata
- *ISO/TR26122* Work process analysis for records
- *ISO 14721* OAIS

organisation digital information and recordkeeping systems, a study in Pakistan by Henriksen and Andersen (2008) offers some very useful observations from the literature.

This focused on the aspirations, expectations and motives that are often present when new IT and IS (Information Systems) are being planned, together with an account of an organisational change to a workflow solution for document and file management, and the implementation of an ERM system.

The restructuring in Sundsvall municipality will fundamentally affect the organisation of records and archives management within the municipality, so the consequent effects on records management requirements and practices will also be documented and studied. These changes will inevitably be extensive in several ways.

Swedish public organisations, including local government, are legally required to reflect organisational structure in their archives, rather than capturing and maintaining records according to functions undertaken. While the hierarchical structure may have reflected functions in the past, with the provision of customer centred e-services these are becoming increasingly blurred.

Also, with the implementation of an EDRMS, the responsibility for capturing records into the system will shift to the creating officers, where formerly paper copies were delivered to the registrars for classification and management.

EXPLORING THE INFORMATION ARCHITECTURE

In order to explore and document the organisational information architecture, interviews across both municipalities were conducted to identify all current development projects and

| 1. Increased competence | → | 2. Increased engagement | → | 3. Capacity for new tasks | → | 4. Need for new competencies |

Fig. 1: The learning cycle

Steps A-E of the DIRKS methodology set out in *ISO 15489-2* and elaborated in the *DIRKS Manual* (State Records NSW, 2007), have been used to guide a high-level planning process for the organisation-wide ERMS. Furthermore, all business units are required to undertake the DIRKS steps A-H to identify recordkeeping requirements and ensure they are met.

RAISING THE PROFILE OF RECORDS MANAGEMENT

Very early in the planning process for the Sundsvall EDRM system implementation, the registrars – officers required by Swedish law in every business unit, who are responsible for registering and retrieving records – were identified as a group crucial to championing the EDRMS rollout and the changes necessitated by extensive organisational change.

In moving from a classical hierarchical organisational structure with recordkeeping systems developed for paper records to a business process oriented digital environment, it became clear that this group would be required to undertake a greater variety and much higher level of records management tasks.

They are a key group whose strategic importance was formerly not recognised. Now they are targeted as an important means of articulating the coming changes in capturing and managing records and acting as advocates for the new EDRM system.

Under the old system, their responsibilities were confined to receiving and classifying records and retrieving records, since they were and still are more familiar with the classification system than are the action officers. Their new responsibilities will be markedly more extensive and more professional.

These include:

* coordinating the creation and maintenance of a records management plan for the administrative unit in which they work;

* ensuring that all tasks in the record management plan are fulfilled;

* implementing the action plan for developing records management in their own administrative unit; and

* providing an annual report to the municipal archives, evaluating how their unit's records management strategy is progressing towards meeting the Municipality's guidelines.

Therefore, one of the early decisions of the EDRMS Implementation Project was to commission Mid Sweden University to develop and provide an education programme for Sundsvall's municipality's registrars. The course is undertaken part-time over two semesters, with all group meetings taking place at Sundsvall municipality's facilities, rather than having the group travel to the University.

This strategy is a first step towards compliance with the ISO15489-1 recommendation to "establish an ongoing programme of records training". The recommendation is that training should be addressed to "all members of management, employees, contractors, volunteers and any other individuals responsible for the whole or part of a business activity of an organisation in making records during their work and in capturing those records into records systems. The training programmes can be designed and set up in cooperation with external organisations" (ISO 15489-1 Section 11).

The aim was to turn the 'registrars', a group whose original employment conditions did not require any professional qualification or training, into records managers, providing them with a greater understanding of the importance of their role, giving them the knowledge and tools necessary to meet their new responsibilities and setting them on the path to 'professionalisation'.

THE SUNDSVALL – MID SWEDEN UNIVERSITY TRAINING PROGRAMME; A REAL SUCCESS STORY

The records management education programme is a real success story. The registrars have experienced real empowerment through the education programme. Although they were previously isolated and scattered across the many organisational units and partly-owned utility providers of the Sundsvall municipality, they have developed a professional identity and a community of practice in records management within the organisation. Having overcome their former isolation, they now actively network and discuss administrative and professional issues.

Because one of the CEDIF project aims is to raise the profile of records management as a profession, and it is difficult to find research reporting on actual changes in the role of records managers in organisations undergoing structural change, an action case study of the participants in the records management education programme was made.

Action case methodology is appropriate when there is a mix of intervention and interpretation in the research (Braa & Vigden, 1999; 2000). In this project the research group was intervening through the provision of the education programme and through their interaction with the records managers, while also observing and interpreting the changes that occurred.

Over the course of the education programme, questionnaires, group interviews and formal discussions were used to gather data. When analysed, the data showed that the records managers experienced a learning cycle that can be conceptualised as shown in Figue 1 above.

Their increased competence resulted in enthusiasm for accepting responsibility for the new records management strategy in the municipality's administrative units. This enthusiasm, together with growing professional knowledge in turn stretched their capacity for new tasks and responsibilities.

These new tasks resulted in a need for further increased competence and so they experienced an upward spiral of learning, engagement and competence. This education project is more fully reported in Borglund, Anderson and Samuelsson (2009).

The education programme has also led the group to expect greater acceptance and understanding of their role in the organisation. Observing whether or how the professional standing of the group changes will be a particularly interesting aspect of the study. As in all organisational change, some resistance to shifting responsibilities and working methods has been observed.

Those completing the programme have been offered credit for the studies they have undertaken, which will allow them to continue their recordkeeping studies and also complete a bachelor degree. Some have expressed interest in taking up this option.

This customised records management education programme has also commenced in another large public organisation in

Sweden. The profile and responsibilities of registrars is being raised to that of records managers through an education programme inspired by ISO15489 and the need for record-keeping workforce that will advocate the changes in recordkeeping practices throughout an organisation.

CONCLUSION

Although the research project is still in its very early stages, issues of importance to the recordkeeping community are already emerging that will repay careful observation and deeper investigation.

In Sundsvall, implementation of both the enterprise information management and EDRM Systems is moving forward, but there is some reason to believe that some projects and activities are still under the radar, highlighting the difficulties of planning, designing and implementing systems that are truly enterprise-wide.

One of the major challenges for the future will be to draw in all of the outlying, project-specific systems and to ensure new projects are always created within the net of both the EIM and the records management systems.

It is also crucial to ensure that steps are taken so these two systems mesh well. They are currently being planned by two different groups, one IT-focused and the other records-focused. Although the two groups are each well aware of developments in the other, it is conceivable that a mismatch could happen.

A more pressing issue for the recordkeeping profession in general is the development of strategies to ensure that recordkeeping professionals are always on project planning and leadership teams from their inception. It is clear that recordkeeping quality is not a prime consideration of those who develop systems that support new projects within their organisations.

Recordkeeping professionals need to find and adopt more effective strategies to advocate their services as expert advisers and to have recordkeeping requirements written into all system development projects, large and small, within an organisation.

It is more crucial than ever to educate and train recordkeeping professionals to be outgoing within their organisations, to put forward their expertise and be prepared to audit information management programmes for recordkeeping quality. Without this effort on the part of our profession, enterprise information management risks covering far less than the whole of the enterprise, and will be more focused on IT systems than the information they purport to manage. **iQ**

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