

IMPLEMENTING ENTERPRISE INFORMATION MANAGEMENT

PART 1

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.

BY KAREN ANDERSON

Story Keywords

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

The Sundsvall (pictured above) and Härnösand municipalities will provide the platform for a new 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 last two provide an umbrella for document, records and archives management, Web content management and business process management.

The aim of this enterprise information management strategy is to promote support by decision-makers for a whole of organisation approach to sound records and information management.

The overall aim of the research programme is to develop models and implementation methods that will support standards-

compliant, efficient and long-term digital information management in both public and private organisations.

BACKGROUND: A NEW RESEARCH CENTRE FOR RECORDS AND INFORMATION MANAGEMENT

At the beginning of 2009, the Archives and Information Science Group at Mid Sweden University gained 3-years' funding, to develop a Centre for Digital Information Management (CEDIF).¹ The funding is a research and development grant from the European Union's *Objective 2* regional development programme (Europa, nd), managed cooperatively by Mid Sweden University, the Västernorrland county of Sweden and the municipalities of Sundsvall and Härnösand.

Objective 2 Programme funding aims to support the economic and social conversion of relatively low population areas experiencing structural difficulties. In the case of Västernorrland county in Sweden, these are the result of heavy industries moving away from the area.

More and more people and organisations are turning to the information economy as a source of income and activity. However, over the years the Västernorrland region has developed a number of archival organisations and attracted related industries such

as large document and audiovisual digitisation facilities.

So, the project aims to capitalise on that foundation and to offer leadership and research expertise while further developing professional education in the recordkeeping professions.

THE CEDIF BRIEF

CEDIF's brief is to extend Mid Sweden University's research and education activities in the field of digital recordkeeping and to develop a laboratory for testing and teaching about enterprise content management (ECM) systems; EDRM systems; archival management systems and digital storage systems to benefit research needs, partner organisations and teaching programmes.

Through these activities, the region will benefit from stronger relationships forged among existing knowledge institutions and businesses, while also extending the existing network within the region and beyond to the national and international professional communities.

In short, CEDIF aims to use and grow expertise in the region while developing and sharing knowledge about digital recordkeeping.

As the leader of the Centre, Mid Sweden University will develop a regional and international research centre for effective, long-term digital information management, driven by the business need for better information management.

Standards-based models and methods for managing digital information that can be used in both public and private sector organisations will be investigated and further developed. It is seen as particularly important to encourage the development of businesses and activities based on information and records management expertise.

Project findings may also serve as a basis for future commercial products. Most importantly, it will develop records management as a profession in the process.

Outcomes of the first professional education course developed in Sweden for records managers are described in this paper.

A COLLABORATIVE EFFORT

The CEDIF research group at Mid Sweden University draws together expertise in digital recordkeeping, business process management, information architecture, systems design and informatics.

It is a strong collaboration, enabling a sound approach to investigating and exploring issues in the implementation of enterprise wide approaches to information management in general and recordkeeping in particular.

The research aims are prompted by needs for better information management in businesses of all sizes and by contemporary organisations' movement towards business process oriented information management flows and methods of working.

CEDIF will take a research-based approach to evaluating the acceptance and usefulness of the recordkeeping community's standards when implementing a wider enterprise information management programme.

CEDIF RESEARCH THEMES

The CEDIF research group has identified seven foci that are relevant to its research directions in general (CEDIF, 2009), and various aspects of its current principal project in particular. They are:

Enterprise content management & enterprise architecture

An enterprise architecture is an important mechanism for the improvement of cooperation and collaboration between business and the organisation of information technology.

It "identifies the information systems and the main components

of the organisation, including business processes, staff, technology, information, financial, and other resources, and the way in which these components function together"(Erder & Pureur, 2003).

It provides a process for the continuous alignment of business and IT. That shared frame of reference is often missing in organisations. When an organisation-wide view is taken, the importance of information resources is highlighted and thus the field of archives and information management should also be highlighted.

Business process management

Process representation of an organisation is increasing in importance and may ultimately be the line of action taken by organisations when describing their business, and in all situations involving information systems development.

The importance of processes is also recognised within the field of archives and information science, eg, through the ISO Technical Report ISO/TR 26122 "Information and documentation – Work process analysis for records".

The research will focus on issues affecting archives and records management when organisations change from a traditional, hierarchical structure to a business process-orientation.

Documenting changes in business processes and keeping that documentation updated is in itself a challenge.

Documentation

Records are created as a consequence of work processes, and recordkeeping activities must be performed in such a way that they support the needs of the organisation.

This part of the research will investigate the contextual conditions for recordkeeping activities, in order to outline theoretical and methodological foundations for the other areas of the project.

Records management

Models and tools for using and implementing records management standards will be developed. The project will focus on the municipal government environment, but will also consider the needs of small and medium enterprises (SMEs).

Metadata

A fully digital business environment offers opportunities for developing self-documenting records. The project will investigate the applicability of the achievements of the Australian Recordkeeping Metadata Schema, the InterPARES Metadata Specification Model, and the Clever Metadata Project to Swedish government document and archives management.

The borders between records management and archival management: The archive as a function

This area of research involves defining "an archive" and its relationship to the organisation that created the records that form the archive.

In a digital networked environment, that relationship is no longer likely to be that of a body of physical records kept in a physical place, which may or may not be transferred to secondary storage and finally to "the archives", as was common practice in the paper world.

It goes to the heart of archival theory, considering issues of the relationship of the archive to the creator and the custodian, the contextual description of the creating body and the functions from which the records arise.

The methods by which these contextual relationships can best be represented is a central issue, for example through design of a metadata schema and approaches to archival description.





About the Author

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Creating a trusted digital repository

One of the major problems for organisations is the paucity of reliable methods that are widely known and understood by business to ensure that their digital information will remain accessible over the very long term. Issues surrounding reliable ingest of authentic records will be a focus of the research: receiving information from the business process into the repository.

These seven foci were initially broadly identified over a series of meetings with representatives of the two partner organisations in CEDIF's principal project. They are the Härnösand and Sundsvall municipalities, which will provide the setting for the principal research and development project that will run from 2009-2011.

LOCAL GOVERNMENT PARTNERS

Härnösand and Sundsvall municipalities differ in size, in their strategies and in their approach to changes in records and information management. They are providing opportunities for the research team to investigate the prior planning process for an enterprise information management (EIM) system and for an EDRMS.

A description of the way Swedish local government is constituted, their roles and responsibilities and the enterprises which fall within their ambit is essential to understanding the organisational environment in which the research is taking place.



Fig. 1: Implementing EIM – general representation

General representation of Swedish municipal government structure

Swedish local government has a much wider set of responsibilities than Australian local government. In addition to the functions found in Australian municipal government, they are responsible for the provision and management of schools in their area, from pre-school to senior high school level, for local social welfare issues and provision of rehabilitation and retraining programmes for the unemployed and for the disabled.

They directly provide a wider range of cultural facilities and activities than do Australian municipal councils.

Most importantly, they are involved in the commercial provision of utilities and services such as power, heating and water through companies which are 50% owned by the municipality.

Because they are partly publicly owned, these companies must manage their records and archives under the same legislation and meet the same standards and requirements as the municipalities themselves.

Elected councillors play a major role in decision-making concerning all business conducted in Swedish municipalities. The main municipal council consists entirely of elected representatives. The council has its own executive committee and a non-elected administrative unit to assist it.

Figure 1 here is merely a representative structure of a municipality. In reality, each municipality would have more of the committees responsible for various functions and service areas than the few that appear on the left of the figure. Those committees consist of elected councillors who set policy and are responsible for all major strategic decision-making.

The administrative unit associated with each committee implements policies and manages the day-to-day business of the function(s) overseen by the committee. They also oversee the actual provision of services, such as the schools and other facilities and services like libraries, parks and gardens, environmental services including recycling and rubbish collection, and so on.

Sundsvall is a city of 100,000 inhabitants, situated some 400 kilometres from Stockholm. The Sundsvall municipality employs approximately 8,500 people across all of its administrative units, services and utility providers.

Härnösand is a large town or small city of approximately 25,000 inhabitants, some 50 kilometres north of Sundsvall. Both are coastal cities on the east coast of Sweden.

Continued on page 52



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- Endnote: 1 Centrum för Digital Informationsförvaltning: <http://www.cedif.org/>

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Continued from page 31

A Single Source of the Truth...

As both organisations share information for land titles which are maintained by the Office of Regulatory Services, ACTPLA staff are able to access this information through the system as they have been granted Read access.

FUTURE FOUNDATIONS

By having all its information in this IDMS, ACTPLA is compliant with the Territory Records Act. It also provides the agency with an electronic foundation to support future electronic business systems.

Going forward, ACTPLA wants to build upon the electronic foundation it has established by upgrading to the latest version of Objective which facilitates collaboration and document management with SharePoint.

This interface is used for ACTPLA's newly released eDevelopment system, which allows development applications to be lodged online.

This can only make our single source of truth all the more valuable to the organisation. **iQ**

Continued from page 34

Implementing Enterprise Information Management...

RESEARCHING THE IMPLEMENTATION OF ENTERPRISE-WIDE INFORMATION MANAGEMENT

Enterprise information architecture and content management provide an umbrella for document, records and archives management, Web content management and business process management.

The aim of this enterprise information management strategy is to promote support by decision-makers for a whole of organisation approach to sound records and information management that is seamlessly integrated into all systems and work processes.

An important outcome of the project

will be a set of guidelines for records managers and archivists, identifying factors crucial to success when implementing records management systems.

The research will explore changing roles as the boundaries between the functions of records management and the archive blur. In this process it is important that the professional profile of records managers and archivists is recognised as being crucial to the success of the organisation's information management (CEDIF, 2009).

• **In Part 2** In the second and final part of this article, to appear in the August, 2010 issue of *iQ*, the research study and its results will be discussed. **iQ**

Continued from page 38

A Virtual Reprieve. But the Challenges Remain...

we cannot and will not try anything new, and keep demanding things remain the same? Will we grab the opportunities afforded by the information revolution, or will we cling on to worthwhile but outdated information delivery methods? (Johnson, 2002)

As the virtual RIM world continues to expand, the physical RIM world will continue to contract. For the moment, we in Australia have a real world reprieve. We should use it, while it lasts, as an opportunity to consider the virtual world possibilities. **iQ**

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