

## **Implementing Information Lifecycle Management (ILM): An Analysis of End User Perspectives**

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### **Abstract**

Driven by new compliance, records retention and security regulations, ILM became an industry buzzword in 2004. Although criticized as little more than vendor marketing promises, the elements of ILM are found in every IT infrastructure and data organization. In affected industries such as telecommunications, healthcare and banking, regulatory compliance is driving several, large-scale efforts. ISIC is undertaking a major project in ILM, explained in this project description. We invite ISIC sponsors and other interested companies to participate in this research.

### **ILM in Brief**

According to the Storage Networking Industry Association's (SNIA) Data Management Forum, Information Lifecycle Management is an end to end concept, comprised of the practices, policies, processes and tools used to align the business value of information, with the most cost effective and flexible IT infrastructure needed to provide it. In essence, the promise of ILM is seamless information access and storage, where storage efficiency and cost effectiveness are driven by the value of the information stored. That at least is the concept. Implementing ILM certainly is, and will be, a complicated exercise. Most storage management implementations, as well as those beyond storage (examples: data center applications, corporate records management, etc.) could easily fit under an ILM banner. Consequently, while ILM "specific" purchasing plans may be limited, companies are implementing elements of ILM without

necessarily having a budget or project plan tied to ILM. For example, data protection can be viewed as part of ILM - hence implementations of backup systems could be viewed as partial implementations of ILM.

As one measure of industry take-up, a December 2004 Gartner poll of 95 companies found 12% had an active ILM project underway. A third responded that they planned to initiate an ILM effort in 2005, and another 20% responded that they had plans to initiate an ILM effort in 2006.

### **ISIC's ILM Project**

The goal of ISIC's ILM research is to contribute to management thinking and policy development in addressing ILM. In user firms, how is ILM defined, who is responsible for it, and what steps are being taken to address it? In adopter firms, what are their ILM plans and how are they implementing them? What are the costs of ILM implementations? In non-adopters, what are the reasons for non-adoption and how are they addressing the business drivers associated with ILM in alternative ways? For example, are companies focusing the bulk of their investment on classifying and structuring data to achieve improvements in data access, retention, migration and storage? Or are they instead focusing investments on advanced ways of finding information in less well-structured information environments, investing in better search and data mining technologies? Where do they see ILM going? And what ultimately will be the business value of ILM and how will it be realized?

Three study levels are planned: a senior management policy level; a project team implementation level; and an IT systems (infrastructure) level. At the management policy level, we will ask senior business and

technology management about their ILM plans. Specifically, what business factors are driving interest in ILM, what aspects of ILM are they addressing and how, and what do they see as the business value of ILM?

Secondly, at the project team level, we will study a sample of ILM project implementations, including collecting data on project definition, sponsorship, team composition and reporting relationships. Our goal at the team level is to understand through the study of comparative practice how companies are defining and implementing ILM.

Thirdly, at the IT systems level, we will ask CIOs, data center managers, and owners of key business applications whether (and how) ILM is driving greater automation of corporate information management, and specifically, what they see as the benefits and risks of increasing automation of data movement within the enterprise? Our goal is to ask their views as to whether inevitably we are the road to fully automated information management, and if so, what are the benefits and risks of this (technologically-determined) path?

We will also conduct an issues-centered, web-based survey of storage professionals as backdrop to our detailed field studies. The purpose of the web survey will be to ask storage management professionals their views and implementation experience with ILM initiatives

### **Project Deliverables and Timing**

As close working relationships with the individuals and companies involved in ISIC research is essential to our success in generating new insights applicable to industry and to researchers, we plan the core project deliverables to be interactive, building up research results through periodic briefings, face to face meetings, and hosted forums as project milestones are completed.

Specific project deliverables include:

- Three research reports, produced at the end of each phase of the project. For example, a

center report and executive summary will be completed and distributed to sponsors and participants at the conclusion of senior management interviews;

- A report on the industry web survey (and any follow-up surveys undertaken);
- Forum meetings, hosted by ISIC and sponsors as appropriate, bringing together companies and researchers to discuss study progress and results;
- Participation in industry conferences and other forums where study results can be discussed and reviewed;
- In-progress telephone conferences and site visits for companies directly involved in the research.

Finally, we will incorporate ideas from the diverse number of industry associations and media that have interest in ILM, including the End User Council of SNIA (Storage Networking Industry Association), the American Records Management Association (ARMA), and the industry and trade press covering storage and IT management policy issues (examples: CIO magazine, ComputerWorld, etc.). Our initial project timeline is one year, with phased updates of progress.

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### **For More Information**

We invite individuals and companies interested in obtaining further information on the ILM project, including participation as a field site or as a participant in the web survey, to contact the Principal Investigator at [jshort@ucsd.edu](mailto:jshort@ucsd.edu).

**ABOUT ISIC**

The Information Storage Industry Center (ISIC) at the University of California, San Diego is a university-based, management research program studying the business applications and economics of advanced storage technologies in the modern information-intensive corporation. ISIC's program areas include industry studies (competitive dynamics, product innovation and manufacturing, industry structure), business innovation and applications of advanced storage systems (data management, data mining, distributed information management), and the management of storage as an integral part of the firm's IT business resource. ISIC works closely with the Center's StorageNetworking.org community of practice in conducting industry facing, direct observation research.

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