WHITE PAPER

The Information Lifecycle Management Imperative

Sponsored by: HP

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INTRODUCTION

The Information Tug of War

Information has become the fuel that drives today's organizations. Scratch the surface of any business process, and you find information collected, retrieved, acted upon, and stored again to accomplish a task. An integrated approach to capturing, managing, retaining, and delivering information is imperative if the enterprise is to protect its central business processes, as well as its reputation and brand, while still encouraging appropriate use of information both inside and outside the organization.

Because information has become so valuable, effectively managing information has become a major concern across an organization — from the CEO to the IT manager. But good information management also presents significant challenges.

Making it easy to exchange and collaborate on information improves knowledge worker productivity and aids in decision making. It also makes it easier to manage relationships with customers, suppliers, and partners, thus providing a competitive advantage. However, information in the wrong hands raises specters of compliance violations and expensive litigation, to say nothing of lost intellectual property.

Business executives must constantly negotiate a virtual tug of war between the urge to lock down information in a digital vault and the need to facilitate its flow among and use by employees, business partners, and customers.

Ending the Conflict with an Information Lifecycle Management Strategy

IDC believes that organizations can address this challenge with an information lifecycle management (ILM) strategy. IDC defines ILM as a process, not a technology, that enables an organization to manage data to meet organizational objectives. The process provides persistent access and use rights, ensures secure access, and provides the tools to collect, organize, maintain, archive, access, analyze, and deliver information. Figure 1 shows this process and the types of information that a well-integrated ILM strategy handles uniformly within the enterprise. Note that it is by integrating all types of information that customers have gained the biggest strategic advantage because they gain a unified view of the business from documents, reports, email, sales, contracts, customer information, employee information, and more.

FIGURE 1

Information Processes in the Enterprise
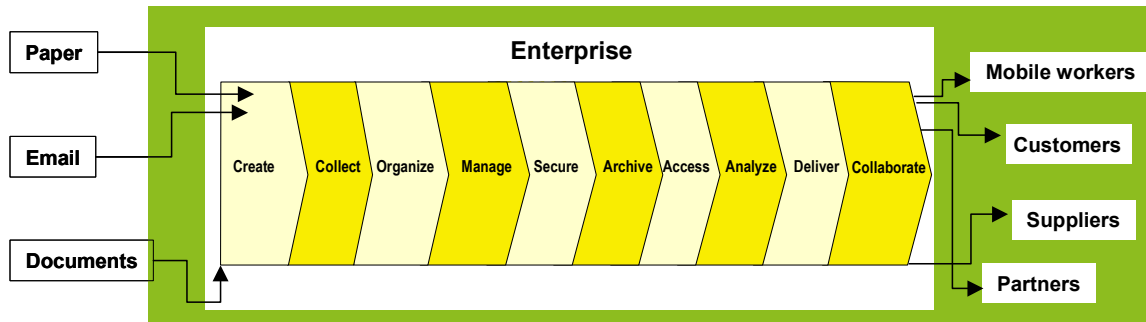
Source: IDC, 2006

This set of processes unites multiple types of information, the applications that gather and consume it, and the people both inside and outside the organization who must be linked to the information and to each other.

Barriers to implementing an ILM strategy are:

☑ **Information control.** Documents and data must be simultaneously available and protected and be searchable but invisible to unauthorized users. Control of the processes for accessing and protecting information must govern the use and distribution of information as well as comply with regulations.

☑ **Information everywhere.** Information today is distributed across geographies and technologies. Solutions must accommodate information in multiple locations on multiple servers, desktops, and laptops.

☑ **Information anywhere.** Mobile employees, partners, and customers need to connect no matter where they are or what time of day it is. They expect to be able to see appropriately formatted and packaged information for each of the multiple devices they use regardless of form factor and available bandwidth.

☑ **Information context.** Perhaps most critically, people expect the appropriate information to be delivered within the context of a particular task or role.

The Value of Information Lifecycle Management to Your Business

Today, information processes remain disconnected; they often are scattered among departments and must be implemented manually by individuals. For example, it is very common today for individual knowledge workers to have to remember that records older than five years, from the old content management system that was replaced two years ago, are stored separately offsite and are not accessible through the usual portal. In addition, processes may duplicate each other, and they may also have significant holes in management and policies.

IDC's recent surveys point to millions of dollars lost in wasted information worker time, in moving from one disconnected manual process to another, in cutting and pasting and rekeying, and in trying to locate information scattered among hundreds of repositories. For example, information workers spend an average of 9.5 hours a week looking for information. Over a third of that time is wasted because they fail to find what they are looking for, and they spend another three hours a week in recreating existing content that they haven't found. This adds up to a loss of roughly $10,000 per worker, if we assume a base salary plus benefits of $60,000 per year. A business with 1,000 knowledge workers loses a whopping $10 million a year from poor productivity tools in search alone. But it also leaks millions of dollars when information workers have to reformat documents, rekey data, resolve version control issues, or retrieve archived records.

To eliminate this waste, organizations need to manage information intelligently in support of all business processes, unifying policies, access rights, distribution rights, storage, templates, and materials. Viewed as a single, unified system, an information system should present a single set of policies for access to as well as retention and disposal of records. Pertinent related materials should be presented together, no matter where they reside. Organizations that have managed this feat can expect to be more flexible and better able to deal with changing market conditions. To accomplish this, enterprises need a strategy, and the infrastructure to implement that strategy, that unifies management throughout the lifecycle of information. To do this, both the strategy and the supporting infrastructure must exhibit the following characteristics:

☑ Accommodate rapid increases in information types and volume

☑ Ensure that information is available when needed and that the source of the information is transparent to the user

☑ Minimize the administrative burden on IT and business organizations

☑ Deliver security and data protection — the information needs to be available, accessible, and secure

IDC believes that ILM is now emerging. Executives need to look for a partner that can bring together a strong portfolio of hardware, software, and business services that delivers these characteristics. The partner portfolio should allow for flexible and modular expansion of capacity as well as rapid and reliable information backup and recovery and should incorporate centralized systems for managing assets and assigning policies.

THE CASE FOR INFORMATION LIFECYCLE MANAGEMENT

The case for making information lifecycle management a priority is an easy one. Better information management increases productivity and revenue and also reduces costs and risk.

Productivity

While rarely quantified, information work costs the enterprise so much that even a small reduction in hours spent at information-related tasks can save millions for an organization. In Tables 1 and 2, the results of IDC's survey of information workers (see *The Hidden Costs of Information Work*, IDC #201334, April 2006) show some of the costs that a streamlined information management strategy can decrease. The larger the number of information workers, and the more pervasive the tasks, the greater the savings.

TABLE 1

The Cost of Information Tasks to the Enterprise

	Average Hours per Worker per Week	Cost per Worker per Week ($)	Cost per Worker per Year ($)
Create documents	13.3	334	19,953
Edit/review	8.8	254	13,202
Gather information for documents	8.3	240	12,482
File and organize documents	6.8	196	10,201
Manage document approval	4.3	124	6,451
Manage document routing	4.0	115	6,001

n = 234

Note: Costs per worker per week and per worker per year are based on average salary plus benefits totaling $60,000 per year ($28.85 per hour in a 40-hour week).

Source: IDC's *The Hidden Costs of Information Work,* 2006

TABLE 2

Hours Wasted per Week per Task

	Average Weekly Hours	Cost per Worker per Week ($)	Cost per Worker per Year ($)
Reformatting from multiple formats into one document format	3.8	110	5,701
Search but not find	3.5	101	5,251
Recreating content	3.0	87	4,501
Multichannel publishing with multiple applications	2.8	81	4,201
Moving documents from one format to another	2.4	69	3,600
Acquiring archived records with little or no automation	2.3	66	3,450
Version control issues	2.2	63	3,300

n = 234

Notes:

Costs per worker per week and per worker per year are based on average salary plus benefits totaling $60,000 per year ($28.85 per hour in a 40-hour week).

Annual cost for enterprise information workers is based on companies with 1,000+ knowledge workers.

Source: IDC's *The Hidden Costs of Information Work,* 2006

Increased Revenue

Improved information management and access advances productivity, and in the process, it also improves boosts revenue flow. This is true in three areas in particular:

- ☐ **Call centers.** Whenever a question is answered online, a call center saves from $4.00 to $40.00 per call, depending on the salary level of the technical support person. But if a call center has ready access to customer information and business rules are applied, a call center can increase revenue by suggesting additional products and services as well as answering customer questions. To do this requires that information be managed according to business policies that ensure correct, current, and quickly available data. (Information control)

- ☐ **Sales portals.** Salespeople are a good example of how a mobile workforce needs instant access to internal information from an array of portable devices. Furthermore, the information must be drawn from a number of databases, customer records, and documents. One electronics firm reported that it saw a 400% increase in sales after it improved its information access and management. (Information anywhere)

◻ **eCommerce.** eCommerce is perhaps the easiest ROI case to make. IDC has noted that online sales for a financial services firm increased by over $125,000 per month, just by improving information access. However, that access is based on careful catalog information structuring and management.

Cost Reduction

In a recent IDC study of content management and retrieval software implementations, 65% of respondents told us that they had reduced their costs as a result of the new systems. But they also pointed to less tangible benefits: improved consistency and productivity, lower error rates, and improved customer satisfaction. Each of these benefits also translates into lower costs for an organization.

Risk Mitigation and Regulatory Compliance

One of the biggest drivers for investment in improved information management today is to avoid risks. Outdated information, rogue statements of company policy, nonstandard contracts, and noncompliant email messages all spell risk for a business. Because of the huge volume of information that any enterprise accumulates, however, it is impossible to control all the information that travels inside and outside a company. For that reason, it is imperative that consistent rules and policies be applied across applications and departments. The policies must govern not only who can create documents and speak for the company but also who can see information — even down to which parts of a document are visible to which individual, which information is retained and for how long, and which information is destroyed. Failure to manage all company information, in any format and in any location, can result in costly litigation.

In addition, regulations such as Basel II, Sarbanes-Oxley, and HIPAA create an insuperable burden unless they are handled with some sort of information management system. There is a reason why 79.5% of the healthcare companies we surveyed pointed to improved compliance and reduced legal liability as major benefits of their information management systems.

HP AND INFORMATION LIFECYCLE MANAGEMENT

Although ILM is a process, not a product, technologies and applications like storage and storage software, content management, records management, and search are required for unifying the management of information across an enterprise. Therefore, ILM has become a major focus area for technology providers. Each vendor has a different approach to ILM, and no one yet dominates this space. For organizations embarking on an ILM strategy, this means that there are no turnkey, plug-and-play information lifecycle products. Understanding your vendor's position and ensuring that it has the relevant hardware, software, and services areas will be key to your success. In particular, a strong services presence is a requirement. A services organization that understands both information processes and the business of the customer is a must if all of the separate applications are to interoperate efficiently.

As a provider of storage and imaging products as well as related services and end-user devices, HP is emerging as one of the major contenders in this arena. It has strong server, imaging, printing, and storage products. HP's computer and handheld devices bracket the information process from creation to use. The company's own management software as well partnerships with other software vendors contribute the tools needed to manage information. In addition, HP has a well-developed services organization that has spent years developing internal information systems as well as solving information problems for customers.

HP's ILM product line includes six high-level solutions, each of which has an associated network of partners and services. The solutions are:

⊡ HP ILM Application Solution

⊡ HP ILM Tiered Storage Solution

⊡ HP ILM Information Capture Solution

⊡ HP ILM Information Management Solution

⊡ HP ILM Information Retention Solution

⊡ HP ILM Information Delivery Solution

Figure 2 demonstrates the products and services that HP brings to the table.

FIGURE 2

Overall ILM Solution Taxonomy
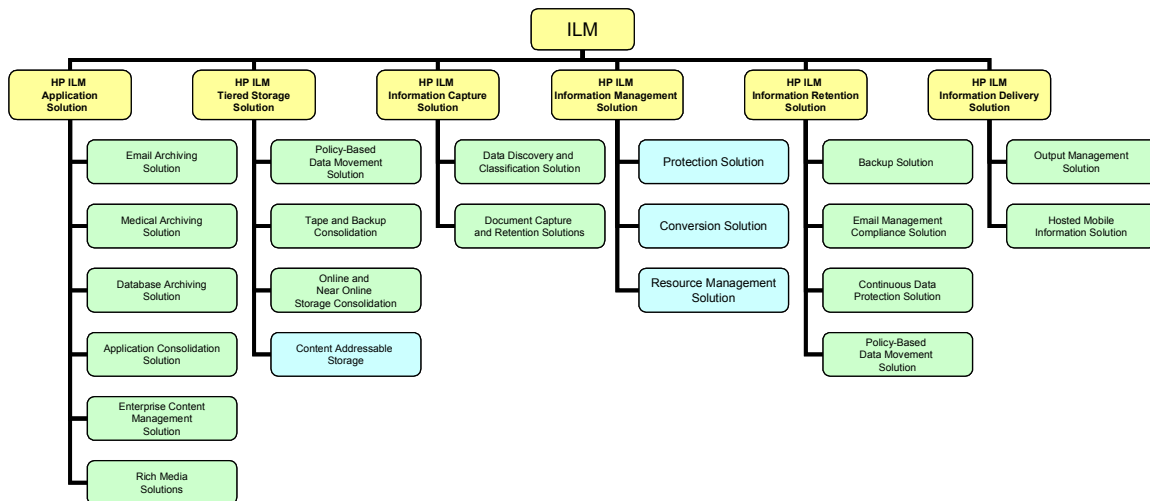
Source: HP, 2006

CONCLUSION

ILM has gained significant buzz in the marketplace for good reason: ILM solutions offer the promise of improving efficiency, reducing costs, and increasing revenue. These benefits appeal to today's executives, who are intent on leveraging IT into a competitive advantage. That's a tall order, but ILM addresses all of these areas.

IDC believes that enterprises that invest in ILM systems will gain a significant competitive advantage in the marketplace for two reasons. One, because having a firm grasp on the business requires a company to have a full understanding of the data, messages, and documents that support it. Two, because not having that sweep of understanding constitutes a significant risk to the enterprise. Four years of IDC surveys demonstrate that scattered information that is not centrally managed poses a threat that executives want and need to avoid. In the past two years, this concern has deepened. Regulatory compliance and the need to mitigate risks have elevated the topic of management of information up to the top level of the executive suite.

Proper management of all kinds of enterprise information enlarges management's view of the enterprise and its business. An enterprise can't afford not to manage its information wisely throughout all phases of the lifecycle. A unified approach to managing information throughout its lifecycle helps decision makers discover connections across applications, departments, and repositories. In the process, it also mitigates risk, enables regulatory compliance, and improves decision making. In other words, ILM makes good business sense.

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