

# MANAGING THE INFORMATION LIFE CYCLE

## STRATEGIES FOR COPING IN A COMPLEX WORLD

Information life-cycle management is a comprehensive approach to managing information to meet the needs of the enterprise and to comply with legal and regulatory mandates regarding data accessibility and retention. SAP provides the tools and technologies to make this possible.



Information has a predictable life cycle. It is created, lives, and changes within databases, repositories, and systems; it is archived and eventually deleted. A comprehensive strategy for information life-cycle management (ILM) is concerned with finding a constant balance among total cost of ownership, risk, and legal compliance; and then taking steps to define, document, and strategize ways to better manage the information that exists across the organization. Information is aligned with business processes through the management of policies and service levels associated with applications, metadata, and data.

The ILM process includes knowing and categorizing your data, defining policies that govern what you do with the data, and setting up your system in such a way that you can apply these policies to your data. You then implement your information management strategy with the help of technology. The added value of ILM over more conventional information management strategies is automation and completeness.

A number of factors have converged to bring about a major change in the way companies manage data. For example, unforeseen events, such as natural disasters, terrorist attacks, and financial meltdowns, set in motion new efforts to protect consumer identity and privacy. This situation led to an explosion in legal requirements. There are currently thousands of regulations worldwide pertaining to the handling of electronic data, and the number continues to grow. Some of the better known include the Sarbanes-Oxley Act, Gramm-Leach-Bliley

Act, Health Insurance Portability and Accountability Act (HIPAA), and European Union Data Protection Directive.

The management and retention of information has become so important that traditional data management approaches are no longer sufficient. Compliance laws are covering more data types across a growing number of industries and countries and for longer periods of time. For example, retention periods based on limitation requirements for documents involved in legal proceedings can range anywhere from 6 years (for example, in the United Kingdom, Greece, and Northern Ireland) to more than 30 years for certain types of claims (for example, in Germany, Austria, and Belgium).

An effective ILM strategy is an essential part of an enterprise's overall strategy designed to deal with the challenges of cost, compliance, and risk. SAP has developed an approach to ILM that meets the complex information management needs of today's organizations.

### SAP and Information Life-Cycle Management

SAP's complete, flexible, and automated approach to ILM gives you the capabilities you need to adapt to constantly changing regulations:

- Identify and categorize your data
- Define policies that govern what you do with data
- Leverage application and storage technology in such a way that you can apply these policies to your data
- Implement your information management strategy

SAP defines information life-cycle management (ILM) as a combination of processes and technologies that provide the right information at the right time at the right place, with the lowest possible costs, over the required lifetime of the data. The additional value of ILM is automation, completeness, and flexibility.

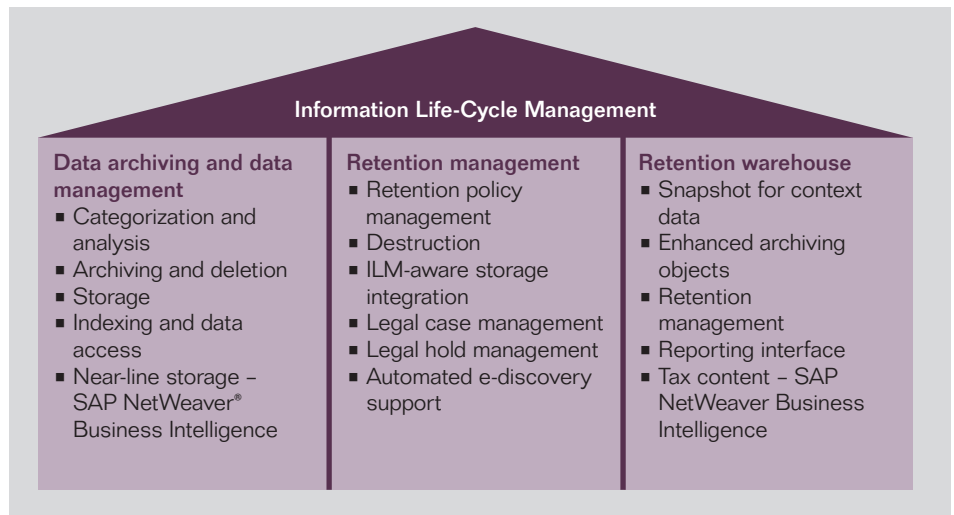


Figure: The Pillars That Support Information Life-Cycle Management

### The Pillars of Information Life-Cycle Management

The SAP approach to ILM addresses different business scenarios and challenges with SAP tools and technologies. As shown in the figure, three “pillars” comprise the approach: data archiving, which focuses on keeping the growth of data volume in check; retention management, which deals with the life cycle of data from the time it is created until it is destroyed; and a retention warehouse, which addresses the decommissioning of legacy applications and systems.

**Data archiving.** ILM covers the flow of information systems data and metadata from its creation and initial storage to

the end of its life cycle when it becomes obsolete and no longer has to be retained to meet regulatory or other legal requirements. SAP’s approach to ILM enables you to perform analysis and categorization of data. The SAP NetWeaver® technology platform automates all aspects of handling your organization’s data, rather than just automating storage procedures.

**Retention management.** SAP tools and technologies for ILM provide retention-policy management functions that support the complete information life cycle – from creation to retention to destruction. They enable you to enter different rules and policies reflecting various criteria, including where data is stored, the duration of data retention, and when data can be destroyed. The policies, usually based on external legal requirements or internal service-level agreements, can be applied to both structured and unstructured data on all types of media, including paper. ILM-aware storage integration means that

your storage systems understand and can act on the stored data based on rules you define. The SAP® solution includes functions that support legal case management, legal hold management, and automated electronic discovery.

**Retention warehouse.** Functions of the SAP NetWeaver Business Intelligence (SAP NetWeaver BI) component are used to extend an ILM warehouse with centralized auditing and reporting functions. The SAP approach provides a complete solution for the decommissioning of business applications while retaining a structured view of the original data. An ILM solution includes functions that enable you to create archiving snapshots of master and customizing data, support cross-system archiving, and provide on-demand analysis of archived data using SAP NetWeaver BI.

## Implementing Information Life-Cycle Management

ILM represents a comprehensive approach to managing information that ranges from the largest data stores to information about each customer. Companies that are struggling with data management issues or are considering centralizing their IT landscape need to develop an ILM strategy that includes the use of the most advanced technology available.

Implementing ILM is an incremental process, not something that can be done overnight or by a single department. An important initial step is to create an ILM team to ensure ongoing communication among the various departments that are most affected by the implementation. For example, you can select representatives from legal, IT, and finance. In addition, gaining support from upper management is important to the success of your company's ILM strategy.

A phased approach to implementation works best. It's important to have a clear grasp of your existing IT landscape and current data situation. You may also want to classify your data into different categories. The ILM team can set up a policy catalog based on legal requirements, retention periods, and other factors.

To apply the policies to your enterprise data, you need technology that can support your ILM processes. For example, this could entail finding an ILM-certified storage partner to set up your storage system. At this point you are ready to implement the strategy and

policies that you have developed in the previous phases.

You now have a comprehensive set of activities that enable you to realize your overall ILM strategy. Of course, these activities or processes do not have a fixed beginning and end point. Rather, they are part of a larger ongoing ILM strategy that reflects changing information management needs.

## The Business Case for Information Life-Cycle Management

The three pillars of ILM reduce the total cost of ownership in your IT investments and improve your return on those investments (ROI).

Data archiving helps you stay in control of your data volumes, resulting in:

- Increased system availability
- Improved system performance
- Better use of existing system resources, leading to reduced costs for disk space and storage administration

Retention management enables you to implement a responsible and transparent data destruction strategy, resulting in:

- Reduced discovery costs through more efficient information-gathering practices and elimination of penalties for not presenting essential information
- Less money spent on unnecessary fines by helping to prevent the accidental deletion of important data



A retention warehouse allows you to stop maintaining the systems you don't use, resulting in:

- The elimination of unnecessary time and money spent on keeping old systems running
- An increasingly fast ROI – the more systems you decommission into one central retention warehouse, the faster your ROI
- Better legal compliance, by continuing to harness the value of your information, even though the original system has been shut down

### For More Information

To learn more about how you can use information life-cycle management tools and technologies from SAP, please contact your SAP representative, write to us at [ilm@sap.com](mailto:ilm@sap.com), or visit us on the Web at <https://www.sdn.sap.com/irj/sdn/nw-datamanagement>.

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## Summary

SAP provides the tools and technologies to support information life-cycle management activities that meet enterprise needs for data retention, data destruction, and compliance with legal and regulatory mandates.

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## Challenges

- Surge in legal requirements regarding the handling of electronic data
- Traditional data management techniques that no longer meet enterprise needs
- Ongoing introduction of complex country- and state-specific compliance laws that cover more data types and mandate longer retention periods

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## Supported Business Processes and Software Functions

- Governance – Determine and apply policies for attributes and categories such as data retained for legal compliance
- Data management – Analyze data, determine data types, and define attributes
- IT management – Support automated archiving, migration, deletion, and data access
- Retention management – Support the complete information life cycle – from creation to retention to destruction

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## Business Benefits

- Increase productivity – Automate all aspects of handling your organization's data, rather than just automating storage procedures
- Reduce total cost of ownership – Optimize use of resources while reducing hardware and administrative costs
- Comply with legal requirements and internal service-level agreements – Implement storage systems that understand and can act on data using rules you define
- Reduce risk – Experience greater system availability with faster backup and recovery
- Maintain flexibility – Adapt to the never-ending flow of new regulations and requirements

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