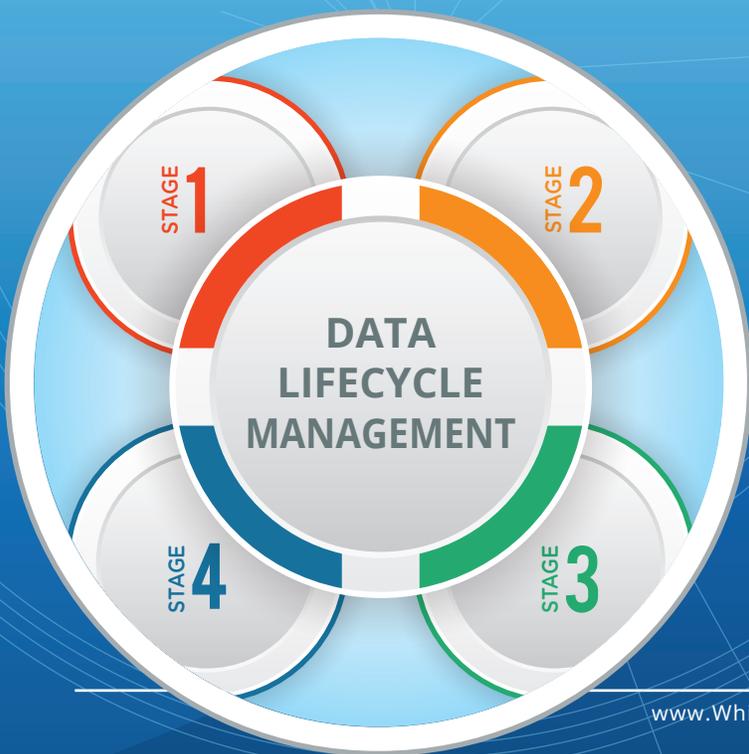


What is Data Lifecycle Management?



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Data is gathered and stored by organizations for their internal purposes. Data will either remain in the organization's databases to be accessed, or it will reside in a database until it is obsolete. While data can be stored and accessed repeatedly, at some point data will reach the end of its utility and need to be removed. The process of moving data through its entire lifecycle and securely purging it is known as Data Lifecycle Management (DLM).

Like many other concepts in information technology, Data Lifecycle Management is key for enterprise users, but the terms are not always clearly defined. This article seeks to clarify Data Lifecycle Management and the implementation of WipeDrive in this process.



The Origins of Data Lifecycle Management

In the 1980s when random access storage was introduced, enterprise businesses began to shift from traditional card-punch systems and other physical records to digital databases, which then increased a widespread demand for a clearly defined data management process. There were many concerns at this early age of database usage, such as keeping data secure and avoiding issues like duplication.

Because of this transition, a new concept was created, information lifecycle management, or ILM. This concept was originally the practice of effective information management for paper and other physical forms but was expanded to include all informational records that existed in digital form. And while this umbrella approach solved several problems in data management at the time, it was clear that this static ILM approach would be too broad to keep up with the technology boom that followed.

In 2004, the Storage Networking Industry Association (SNIA) decided to redefine ILM, giving it a broader scope. The statement SNIA released defined ILM as the following terms:

"ILM consists of the policies, processes, practices, and tools used to align the business value of information with the most appropriate and cost-effective IT infrastructure from the time information is conceived through its final disposition."^[1]

This new definition allowed businesses to align a policy, process and practice-driven approach with the systems and tools necessary for the lifecycle of a piece of data.

Data Lifecycle Management vs. Information Lifecycle Management

DLM and ILM can often be considered two sides of the same coin. Think of it this way — ILM is the overall concept that information needs to be properly managed, and DLM is the loose set of standards that attempt to define how and when this information should be managed. Together, they are two separate but similar strategies that provide guidelines for secure, efficient data management. The biggest difference between DLM and ILM is that DLM focuses on managing files with general attributes such as by file type, size, and age, whereas ILM is more concerned with what's in the file, such as a customer number. Information lifecycle management includes physical and digital information, while data lifecycle management refers only to digital management.

When a robust data lifecycle management strategy is implemented, records that are the most recent or the most useful are easily accessible. However, with the principles of DLM, these records that are passed through a database will slowly become more defined in each lifecycle stage and will become phased out eventually.

Why DLM Benefits Enterprise Businesses

There are many reasons why enterprises should carry out DLM principles. A good DLM strategy can ensure data stays secure and void of being duplicated. It can also help businesses make sure they are compliant, as most industries need to have guidelines for proper data retention. And, as with most IT solutions, a properly implemented DLM and ILM process will help enterprises in making sure their data is clean, organized, and readily available.

Stages of Data Lifecycle Management

There is currently no industry standard for DLM across enterprises, but the majority of IT professionals agree on the following best practices, broken down into four stages across the entire data life cycle:



Stage 1: Data Capture

This is the beginning stage of the cycle where new information is obtained and reviewed for accuracy. It could be as simple as an image, document, or PDF file. That information is then entered into a database where it can be retrieved by specified roles within the organization. For security best practices, this phase is ideal for categorizing data from least sensitive to most sensitive as well as least important to most important to make data removal easier in the final phases.



Stage 2: Backup and Recovery

In stage two, this data is then archived in a way that makes it easy to access with complete accuracy. Stage two is also a great time to implement a disaster recovery plan with a thorough data backup process to ensure a copy is made of all important records.



Stage 3: Data Management

This stage of lifecycle management focuses on making data widely available to permitted users. An example of data management could be a customer record or an invoice with customer information.



Stage 4: Data Retention and Removal

In the final phase of the life cycle, data must be held or destroyed. The categorization of each piece of data implemented during stage 2 will be a determining factor of how to properly dispose of it. Businesses will also want to consider industry standards and guidelines as well as any state or federal regulations regarding data storage. Utilize your IT teams to stay up to date with the most recent guidelines for safety compliance.

In Summary

While there's no set DLM standard yet, it's important to establish the basics of data lifecycle management within your enterprise corporation. Remember that DLM is different from ILM, although both are needed to implement secure and efficient management practices. Having an effective DLM strategy will minimize risk and help with compliance.

Stay Up to Date with Data Protection

Our WipeDrive experts can help your business create a system that properly disposes data when it has reached the end of its lifecycle. To leverage our expertise in large-scale data management and protection, contact us at [1.801.224.8900](tel:1.801.224.8900) or at Sales@WhiteCanyon.com.

Sources:

1. <https://digitalguardian.com/blog/whats-cost-data-breach-2019>.