

INFORMATION LIFECYCLE MANAGEMENT SIMPLIFIED

Definition:

Information Lifecycle Management is the process of managing data from creation to disposal, ensuring it is properly stored, used, archived, and securely deleted.

Stages of Information Lifecycle:

1. Creation – Data is generated (e.g., reports, emails).
2. Storage – Data is saved securely in physical or digital form.
3. Use – Data is accessed for operations and decision-making.
4. Archival – Older data is stored for legal or historical reference.
5. Disposal – Unneeded data is securely destroyed.

Data Retention & Archiving:

- Legal and regulatory policies determine how long data must be stored.
- Examples: Tax records (7 years), medical records (HIPAA compliance).

Data Management Tools:

- Document Management Systems (DMS): Organizes documents digitally.
- Cloud Storage with lifecycle rules: Automatically archives old files.
- Encryption: Protects sensitive data.
- Backup & Recovery: Ensures business continuity during disasters.

Challenges:

- Complexity: Multiple file sources/formats.
- Cost: Infrastructure and tools.
- Security Risks: Cyberattacks.
- Compliance: Legal consequences if rules are not followed.

DATA QUALITY MANAGEMENT (DQM):

Ensures data is accurate, complete, consistent, and timely.

Key Dimensions:

- Accuracy
- Completeness
- Consistency
- Timeliness

Master Data Management (MDM):

Creates one accurate version of core business data.

Example: Standardizing a customer's name across systems.

Reference Data Management (RDM):

Standardizes codes and categories (e.g., PHP = Philippine Peso).

Benefits of MDM & RDM:

- Removes duplicates
- Ensures consistency
- Supports decision-making

DATA INTEGRATION:

Combining data from multiple sources.

Methods:

- ETL (Extract, Transform, Load)
- ELT (Extract, Load, Transform)
- Data Pipelines (automated data flow)

Data Provenance:

Tracking the origin and movement of data to ensure transparency and compliance.

Conclusion:

Proper information management ensures data security, quality, compliance, and supports efficient business operations.