

Data Governance Tools and Technologies

Data Governance (DG) is a collection of practices and processes that ensure the accuracy, integrity, and security of an organization's data. DG tools and technologies play a crucial role in implementing and maintaining a successful DG program. Here are some key terms and vocabulary related to DG tools and technologies:

- 1. Metadata Management:** Metadata is data that describes other data. Metadata management involves the creation, maintenance, and usage of metadata to support DG objectives. Metadata management tools help organizations to create, store, manage, and catalog metadata. Examples of metadata management tools include Collibra, Informatica MDM, and IBM InfoSphere Information Governance Catalog.
- 2. Data Quality Management:** Data quality management involves ensuring that data is accurate, complete, and consistent. Data quality management tools help organizations to identify, cleanse, and monitor data quality issues. Examples of data quality management tools include SAP Data Quality Management, Informatica Data Quality, and Talend Data Quality.
- 3. Data Integration:** Data integration involves combining data from different sources into a single, unified view. Data integration tools help organizations to extract, transform, and load (ETL) data from various sources into a target system. Examples of data integration tools include Informatica PowerCenter, Talend Data Integration, and Microsoft SSIS.
- 4. Master Data Management (MDM):** MDM involves creating a single, authoritative source of data for key entities such as customers, products, and suppliers. MDM tools help organizations to create and maintain a master data repository, ensure data consistency, and provide a unified view of data. Examples of MDM tools include Informatica MDM, IBM InfoSphere Master Data Management, and SAP Master Data Governance.
- 5. Data Lineage:** Data lineage involves tracking the origin and movement of data throughout the organization. Data lineage tools help organizations to understand how data is transformed, where it comes from, and where it goes. Examples of data lineage tools include Informatica Data Explorer, Collibra Data Lineage, and erwin Data Intelligence.
- 6. Data Security:** Data security involves protecting data from unauthorized access, use, disclosure, disruption, modification, or destruction. Data security tools help organizations to implement access controls, encryption, and other security measures. Examples of data security tools include Symantec Data Loss Prevention, McAfee Data Loss Prevention, and Forcepoint DLP.
- 7. Data Privacy:** Data privacy involves ensuring that personal data is collected, used, and shared in compliance with applicable laws and regulations. Data privacy tools help organizations to manage data privacy risks, implement privacy policies, and ensure compliance with data protection regulations such as GDPR and CCPA. Examples of data privacy tools include OneTrust, TrustArc, and BigID.
- 8. Data Catalog:** A data catalog is a central repository of metadata that provides a unified view of data assets across the organization. Data catalog tools help organizations to discover, document, and manage data assets, and provide self-service access to data for business users. Examples of data catalog tools include Alation, Collibra Data Catalog, and Informatica Enterprise Data Catalog.

9. **Data Governance Framework:** A data governance framework is a set of policies, procedures, and standards that define how data is managed and governed within an organization. A data governance framework typically includes roles and responsibilities, data policies, data standards, data quality metrics, and data governance processes. Data governance framework tools help organizations to create, implement, and maintain a data governance framework. Examples of data governance framework tools include erwin Data Intelligence, Collibra, and Informatica MDM.

10. **Data Governance Council:** A data governance council is a group of stakeholders responsible for making decisions about data governance policies, procedures, and standards. A data governance council typically includes representatives from business units, IT, and data governance teams. Data governance council tools help organizations to manage council meetings, document decisions, and track action items. Examples of data governance council tools include Confluence, SharePoint, and Asana.

In summary, data governance tools and technologies play a critical role in ensuring the accuracy, integrity, and security of an organization's data. Metadata management, data quality management, data integration, MDM, data lineage, data security, data privacy, data catalog, data governance framework, and data governance council are some of the key terms and vocabulary related to DG tools and technologies. Understanding these terms and concepts is essential for implementing and maintaining a successful DG program. Examples, practical applications, and challenges related to each of these terms and concepts are provided in the Postgraduate Certificate in Data Governance course.