

Data Management Survey DRAFT

On a scale of 1 to 10 with 1 being defined as lowest on the scale and 10 being defined as the highest level of accomplishment in the area, please rank your institution's maturity related to the following data management areas.

Data governance

1 - my institution has no formal data governance policies and no governance bodies currently in place.

10 - every data decision is governed by a formal process and/or policy. Each data area has a formal governance body that oversees the quality and use of its respective data. Data policies are strictly enforced. All data movement throughout the organization is regulated and managed.

Data architecture, analysis, and design

1 - there is no formal architecture related to data. Data exists in multiple files and databases, using multiple formats and technologies. Changes to any data structures are made "on the fly", based on the needs of individual areas or project teams. Changes are made by the project teams or DBA's responsible for the applications. There are no data models of any sort, and limited if any documentation regarding the data or the structures.

10 - a data architecture exists which encompasses all data for the institution. Metadata management is a top priority, and is used to document all data. Change management best practices require that any change to production data stores requires review and documentation. Data models are maintained at an enterprise level for both logical and physical views of the data.

Database management

1 - Databases are managed by the software that uses them (schema is installed out of the box, scripts are run as provided by the vendor or developer to maintain the database). At times individual DBAs are called in to do tasks that cannot be done by vendor provided scripts. There is no database optimization outside what the vendor provides.

10 - Database needs and schemas are analyzed before projects start. Standard maintenance processes and change control are applied across all databases. Standard schema supports formal data architecture.

Data security management

1 - data security is handled by individual application administrators, many times being a project leader or programmer who manages the system. Security is provided at a screen or function level, with that functionality being granted individually to a person. There are no security audits, and minimal transaction log review.

10 - data security is managed at the role level. Regular audits of data security and policy are conducted, with divergences acted upon appropriately. A central data security management tool is utilized, with the security metadata being populated to the required systems for population in each respective format. Automated reviews of update logs are conducted to look for variances.

Data quality management

1 - information quality is poor. There is no consistency of data across systems or data stores. Multiple sources of data entry for the same data element are allowed, with no cross correlation of validity and standardized form of entry.

10 - continuous data quality improvement programs are in place and stewarded. Automated methods are employed to review the data quality, with feedback being forwarded to the respective data stewards.

Reference and master data management

1 - there are multiple versions of coded values used in many areas across the institution. No validation across the codes occurs, therefore the codes are horrendously out of sync. This causes problems with reporting and consistent validation.

10 - there is a single view of master data across the institution. All validation occurs against the master data view. Regular updates are made to the master data to reflect changes at the institutional level.

Data warehousing and business intelligence management

1 - if a data warehouse exists, it contains minimal data areas. Minimal if any dimensions exist to the data, and most likely is a copy of the transactional image of the application system. Meta data is limited, master data is not synced across the various data domains. Reporting is done in an ad hoc manner, requiring intimate knowledge of the context and structure. Updates to the data are done at random.

10 - data from all strategic institutional systems is housed in a data warehouse, with dimensions and data marts established which allow for the major types of analysis and review. All associated meta data and master data is integrated with the reporting tools that access the warehouse. Reporting from all systems is conducted through a portal in the warehousing environment, thus ensuring consistent results and cross functional analysis. Data updates to the warehouse occur on a frequency associated with the business cycles.

Electronic Document, record, and content management - should we split these out separately ? I think that document and content management are very similar. Records management is somewhat different. But I struggle to make that difference to account for more than just a small difference in the way the question is asked. I think we should make clear that this is electronic (no paper based) system and records. Let em know what you think.

Document management or Content management

1 - There is no (are no) formal designated areas for unstructured institutional data. Documents are on departmental file systems, user desktops, google docs and other places. There is no formalized classification, retention period, archival and workflow.

10 - Management of institutional unstructured data is a priority. There is still room for improvement but classification schema with designated retention period and security controls are clear. There is an archival process and document management workflow for sensitive documents. (HR, patient and other records)

Records management

Metadata management

1 - metadata is not a priority to the institution. Minimal, if any, metadata is maintained.

10 - metadata management is a top priority, and is used to document all data. Metadata supports an SOA architecture. A metadata repository is automatically maintained, and is essential for auditing and integration purposes. Sufficient resources are allocated to the development and support of metadata tools and processes.