Enterprise Information Management Survey

Enterprise Information Management Capability Maturity Survey for Higher Education Institutions

August 27, 2007

Rev. 1.2

Instructions

This survey should be completed by the most technically competent information management professional in your campus. This individual might have a title such, such as "Enterprise Data Architect", "Data Administrator", "Data Warehouse Manager", "Director of Institutional Research", "Chief Information Officer", or "Chief Financial Officer".

Please answer the following questions to the best of your knowledge regarding the current status of information management practices in your institution. To answer, select the number that best matches the situation in your campus and enter it in the box. The numbers correspond to the following six maturity states: None (0), Initial (1), Under Development (2), Defined (3), Managed (4), and Measured (5). The survey consists of six sections and an overall maturity score can be derived by averaging the scores in each of the sections.

Vision

The situation in my campus is best described by:

- 0. Most senior- and executive-level campus administrators are unaware that information management is a problem for the institution. The central campus IT organization does not seem to care. End users treat institutional data with disdain and mistrust.
- 1. Information is used as a source of "power" on campus, but is managed in silos. Administrators spend time arguing about whose data is correct, instead of seeking uniformity to take consistent, decisive actions.
- 2. The institution has formalized objectives for appropriate information sharing and access to achieve operational efficiencies. Progress is hampered by cultural and organizational barriers.
- 3. Most senior- and executive-level campus administrators see cross-functional information sharing as necessary for improved institutional performance. The campus moves from departmental and project-level to enterprise information management.
- 4. Most senior- and executive-level campus administrators recognize information as a strategic asset. They embrace an Enterprise Information Management strategy and market and communicate it to the campus. Information is viewed as a tangible enterprise asset.
- 5. Most senior- and executive-level campus administrator know the value of information, see it as a competitive differentiator, and exploit it to drive operational efficiency and enhanced academic and scholarship outcomes.

Strategy

The situation in my campus is best described by:

- 0. Information is viewed as a system by-product. Strategic decisions are made without adequate information.
- 1. People see the power of information and develop strategies to hoard it. At the same time, individuals complain that there is too much data, and not enough action-oriented content.
- 2. Administrative and academic units realize the value of information and share it on cross-functional projects.
- 3. The campus is embracing top-down strategies, as evidenced by ERP, Customer Relationship Management, Enterprise Data Warehousing, and Enterprise Content Management Initiatives. A high-level sponsor has been named to define an Enterprise Information Management strategy and communicate the vision. Sponsor coordinates the definition of broad agendas, including business requirements, startup budgets, and roadmaps.
- 4. An Enterprise Information Management (EIM) program is funded to maximize the use of information across the institution and across all stages of IT development. An EIM program articulated by a high-level sponsor is funded. The EIM strategy addresses all stakeholders, their requirements and their priorities.
- 5. The central IT organization puts in as much support as possible to make information management transparent to campus users, with departmental and business-level data stewards playing very active roles. EIM links to strategic initiatives, such improved student experience, better accountability and operational efficiency, and improved academic and scholarly outcomes.

Governance

The situation in my campus is best described by:

- 0. There is no information governance or security. Information is fragmented across many different applications. Information quality is poor. Data cannot be trusted
- 1. The central IT organization realizes that efficiencies can be gained by delivering information across departments and takes steps to normalize information through integration efforts, such as enterprise data warehousing.
- 2. The central IT organization takes steps towards upstream cross-departmental data sharing, such as attempts at prospect-applicant-student-alumni-employee data integration and other master data management.
- 3. A government council supports the management of information as an asset. An information-centric "swim-lane" of related data management functions is targeted for adoption in the enterprise systems development life cycle.
- 4. Policies and standards are defined to achieve data standardization and consistency. The governance council and steering committees are empowered to resolve cross-functional information management issues. Best practices are capture, managed and refined.
- 5. EIM drives operational efficiency, improves accountability and academic outcomes while reducing risk. The monitoring and enforcement of information governance is automated throughout the institution. Incentives and disincentives are established and carried out.

Organization

The situation in my campus is best described by:

- 0. Everyone is in his or her own in terms of storing and managing data and documents. Archiving and purging are done to prevent system performance degradation or to control costs.
- 1. Managers push local, personal projects and maintain private data. People want consolidated views, but can't get them from the central IT organization. There are roles for structured data (such as database administrators or data modelers), but unstructured content and e-mail are still managed haphazardly.
- 2. The institution remains in "fire-fighting" mode and seeks to resolve short-term information management challenges. Everyone is too busy to see the efficiency of coordinating information management efforts across the enterprise.
- 3. A formal data quality program is tied to the formalized governance program, with the active participation of key administrative units.
- 4. A group is tasked with coordinating all information-centric activities across the enterprise. A formalized data quality process is adopted. Data stewards are identified and charged with data quality responsibilities in the administrative and IT areas.
- 5. A formalized EIM program is adopted that includes roles and responsibilities within a defined strategy or program.

Process

The situation in my campus is best described by:

- 0. No one is in charge or accountable for managing data or documents. Archiving and purging are done to prevent system performance degradation or to control costs.
- 1. There are informal information management guidelines, but they are not enforced, or they are limited to tactical efforts.
- 2. Information is shared on a "Good Samaritan" basis. There are no change management procedures to deal with the impact on downstream systems and departments when upstream modifications to enterprise systems occur.
- 3. There are guidelines for archiving data, and data retention periods are enforced. There is a process to collect and organize metadata as part of a project reuse strategy.
- 4. A formalized, information-centric swim lane is adopted in the system development life cycle. Policies and mandates are well-documented and understood. Several campus-wide monitoring systems are put in place, including automated data profiling for data quality.
- 5. An EIM group is instituted. This group maybe organized into a central, autonomous unit, or it may follow a matrix model. The EIM group actively coordinates all information management efforts, such as master data management, content management, business intelligence, enterprise data warehousing, data quality programs, etc.

Enabling Infrastructure

The situation in my campus is best described by:

- 0. IT is project-focused. It constantly "reinvents the wheel". People don't know what metadata means or why it is important. There are no common taxonomies, vocabularies, or data models. E-mail is the de facto document management, workflow, and archive system.
- 1. There are islands of content or records management, but only by necessity. Extracts from enterprise systems make their way to rogue spreadsheets or shadow databases, significantly adding to risk.
- 2. Integration efforts remain localized and redundant, as epitomized by widespread point-to-point interfaces. There is a push to consolidate data marts into a single view for consistent analytics. There is an awareness of metadata, but it is still not managed proactively or strategically. There is no enterprise content management strategy.
- 3. Data models are maintained locally, but aligned to an enterprise information architecture. Distinct architectures for analytics, master data and unstructured content are emerging and are being unified at the logical level. A data service layer is planned to achieve integration efficiencies. There are coordinated content management projects.
- 4. EIM becomes a key part of the application planning, design, and development process. The information architecture is extensible and increasingly distinct from the application architecture. Analytical and operational reporting are melded together to reduce need for stand-alone analytic applications or business intelligence tools. A metadata management and semantic reconciliation infrastructure resolves inconsistencies and supports service-oriented architecture (SOA) objectives.
- 5. The following five EIM technology functions are achieved:
- a. Integrated subject and domain areas
- b. Continuous and seamless information flows
- c. Metadata management and semantic reconciliation
- d. Data integration across the IT portfolio
- e. Unified and converged content