Preservation and Access for Electronic College and University Records

Collaborative Models for System Design

Philip Bantin
Indiana University Archivist

ISSUES

- Why is the team approach critical to the success of an electronic records management project?
- Who are the archivist’s/records manager’s “natural” allies?
- What are some model structures for an institution-wide program?
WHY DO WE NEED PARTNERS?

- Archivists have always needed partners, but we have not consistently reached out to these allies.
- But with electronic information, partnerships are more essential because we have less control of the systems, and it is a more complex environment.

WHY PARTNERSHIPS ARE IMPORTANT

- More broad-based support required
- A wider variety of skills required
PARTNERS

- Focus on three partners:
  - Two of these partners create and manage Information or Information Systems: Decision Support Personnel & Systems Analysts
  - One of these partners manages Risk: Internal Audit

INFORMATION RESOURCE MANAGEMENT (IRM)

- IRM has been defined as the “totality of planned and directed activities within an organization which result in usable, accessible, timely, secure, integral, economical, and accurate information for that organization.”
DECISION SUPPORT AND INSTITUTIONAL RESEARCH PERSONNEL

- Decision support is a set of people, procedures and databases used to support decision-making activities and strategic planning.
- The role of decision-support personnel is to: 1) structure and focus information to meet the needs of decision makers; 2) understand and be able to articulate the needs of users; 3) become a focal point for information development and processing, particularly as it relates to information integration, access, and analysis/presentation.

DECISION SUPPORT PERSONNEL AND ARCHIVISTS - SIMILARITIES IN MISSION AND GOALS

- Both are focused on understanding the research needs of users.
- Both are concerned with providing ready access to information or records.
- Both are concerned with creating and maintaining accurate, reliable, and authentic information or records.
SYSTEMS ANALYSTS

- System analysts translate business needs and requirements into information requirements and systems
- The “primary role of the systems analyst is to study the problems and needs of an organization in order to determine how people, methods, and information technology can best be combined to bring about improvements in the organization.”
- The products of this activity may be improved business processes, better information systems, or new and improved computer applications

SYSTEMS ANALYSTS AND ARCHIVISTS - SIMILARITIES IN MISSION AND GOALS

- Both professions regard an understanding of business processes as critical to the design of an information or recordkeeping system
In any institution, several agencies are involved in identifying, assessing and monitoring activities or projects that represent considerable risk or exposure to loss.

Professionals who manage risk in a university environment: Legal Counsel, Risk Management, and Internal Audit.

INTERNAL AUDIT

**OVERALL MISSION**

“The examination and evaluation of the adequacy and effectiveness of the organization’s system of internal controls and the quality of performance in carrying out assigned responsibilities”
INTERNAL AUDIT

SPECIFIC OBJECTIVES:

- Determining the accuracy and propriety of financial transactions
- Determining the level of compliance with University policies and procedures and state and federal laws
- Evaluating the accuracy and effectiveness of the University’s electronic information and processing systems

ARCHIVISTS AND AUDITORS - SIMILARITIES IN MISSION AND GOALS

- Accuracy of Information
- Reliability of Information
- Authenticity of Information
- Secure and Accountable Systems
- Compliance with Laws and Policies
- Importance of Risk Assessment
PARTNERSHIP STRATEGIES WITH INFORMATION MANAGERS AND DECISION SUPPORT PERSONNEL

- Forming an overall structure for managing electronic records
- Committee on Institutional Data and Information
- Committee of Data and Information Stewards
- Assistant Director, Data and Information Management

COMMITTEE ON INSTITUTIONAL DATA AND INFORMATION

- Composition: Senior University Officials, typically at the level of Dean or Director
- Responsibilities: Establish overall policy and guidelines for management of data and information, and regularly review the performance of the overall information management function
Committee of Data and Information Stewards

Composition: 2 major types:
1) Individuals who have planning, policy and operational responsibilities for the management and use of institutional data
2) Information specialists who develop and use management information systems and decision support systems

Functional Areas Represented:
COMMITTEE OF DATA AND INFORMATION STEWARDS

- Responsibilities: Recommending policies and establishing procedures and guidelines for the university-wide management of institutional data and information
- Specific areas of concern: quality, integrity, documentation, access, security, and archival requirements of data and information

Assistant Director, Data and Information Management

- Responsibilities: Provide leadership for the data and information management activities
- Direct the functional areas of system analysis and the modeling of systems, information access, and the Information Repository System
- Chair the Committee of Data and Information Stewards and function as this group’s liaison to the Committee on Institutional Data and Information
In reviewing and analyzing information systems, the IU Methodology uses a variety of Conceptual Models depicting Content (data models), Context (business process models), Evidence (metadata models), and Descriptions of the System (system documentation).

These Models are NOT created solely by the Archives staff. Creating and analyzing the various models are a joint enterprise involving archivists, systems analysts, and other information managers.
COLLABORATION WITH SYSTEMS ANALYSTS

- Archives staff largely responsible for generating business process models
- Systems analysts and other information managers largely responsible for generating data models and system documentation
- Both systems analysts and archives staff are responsible for generating metadata models

ARCHIVES/INTERNAL AUDIT PARTNERSHIP

- 4 Stages:
  - 1) Preliminary Review
  - 2) Field Work
  - 3) Audit Report
  - 4) Follow-up Review
**PRELIMINARY REVIEW STAGE**

- Goals:
  - Define the Objectives of the Audit
  - Gather Information on Business Processes - Create Process Models

**FIELD WORK STAGE**

- Archives and Internal Audit go forward in parallel with their own unique, though complementary, reviews
- Team members meet frequently to compare notes and discuss possible adjustments to the overall strategy
AUDIT REPORT STAGE

- Create a joint report incorporating the findings and recommendations of both Archives and Internal Audit
- Report sent to dean or director of unit, to selected high-level administrators, and to the IU Board of Trustees
- Within one month, dean or director must submit written response

FOLLOW-UP REVIEW STAGE

- One year after distribution of initial report, a follow-up review is initiated
- Goal is to determine whether problems identified earlier were addressed
- All unresolved problems are described in a follow-up report
VALUE OF PARTNERSHIP - EVERYONE BENEFITS

- Archives
- Participation in the authorized and routine review of information systems
- Opportunity to exchange ideas on the overall management of systems with experienced analysts and auditors

BENEFITS

- Internal Audit:
  - Access to detailed business process models
  - Access to previously unavailable analyses of systems from a recordkeeping perspective
To the University:

Having its information systems much more thoroughly reviewed and analyzed, resulting in more accountable, compliant, and trustworthy systems.