FROM PAPER TO ELECTRONIC RECORDS
MANAGEMENT
MANAGING THE TRANSITION

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Managing the Transition

- Setting the Stage for Transition
- Managing the Transition
  - Leading Practices
  - Software Considerations
  - Storage Issues
- Conclusion
Setting the Stage

- Concepts and Definitions
- Records and Information Management
- Archives Management
- Electronic Records Management
Concepts

- Documents
- Records
- Archives
Definition of a Record (FRA)

- “... “records” includes all books, papers, maps, photographs, machine read-able materials, or other documentary materials, regardless of physical form or characteristics, made or received by an agency of the United States Government under Federal law or in connection with the transaction of public business and preserved or appropriate for preservation by that agency or its legitimate successor as evidence of the organization, functions, policies, decisions, procedures, operations, or other activities of the Government or because of the informational value of data in them.” (44 USC 3301)
Definition of a Record (MN)

“... “state record” means state and local records, including all cards, correspondence, discs, maps, memoranda, microfilms, papers, photographs, recordings, reports, tapes, writings, optical disks, and other data, information, or documentary material, regardless of physical form or characteristics, storage media or conditions of use, made or received by an officer or agency of the state and an officer or agency of a county, city, town, school district, municipal subdivision or corporation or other public authority or political entity within the state pursuant to state law or in connection with the transaction of public business by an officer or agency.”

(138.17 – 2010 Minnesota Statutes)
Definition of a Record

Record – “Evidence”

- Information created, received and maintained as evidence by an organization or person in pursuance of legal obligations or in the transaction of business (ISO 15489)

- Contemporaneous evidence of a business transaction

- “Adequate record” includes content, context, and structure
Record Formats

- Hardcopy (paper-based)
- Electronic (digital)
- Photographic
- Samples
Record Formats

- **Hardcopy**
  - Forms, maps, files, reports, engineering drawings, computer printouts, vellum, parchment

- **Electronic**
  - Computer files, email, voicemail, instant messages, electronic document images, audio and video recordings, electronic datasets, databases

- **Photographic**
  - Slides, motion picture film, filmstrips, aperture cards, microfilm, optical, negatives,

- **Physical Samples** (Supporting material to records)
  - Soil, water, tissue
R&IM Definition

- Records and Information Management
  - Systematic control of records throughout life cycle (ISO 15489)
  - Records Life Cycle from
    - Creation (or receipt) until
    - Disposition (destruction or long-term preservation as archives)
  - Promotes
    - Compliance
    - Accountability
    - Transparency
Archives Definitions

- Archives – “Memory”
  - Historical records or documents so preserved
  - A facility in which historical records are preserved and used.
  - T. R. Schellenberg
    - “Those records of any public or private institution which are adjudged worthy of permanent preservation for reference and research purposes and which have been deposited or have been selected for deposit in an archival institution.”
Archives Definitions

- Archives Management
  - Oversight of a program to appraise, acquire, arrange and describe, preserve, authenticate, and provide access to permanently valuable records.
  - Distinguished from library, museum, and historical manuscripts traditions by the principles of provenance, original order, and collective control to preserve the materials’ authenticity, context, and intellectual character.
Records and Archives

Relative Volume

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Electronic Record Defined

- Numeric, graphic, or text information, that satisfies the definition of a record, and that is recorded on any medium capable of being read by a computer.
  - Magnetic tapes, magnetic disks
  - Optical disks
  - Electronic information systems, regardless of computer type
  - Information in email messages
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  - Storage Issues
- Q&A / Discussion
Transition

- Reasons to Make Transition
  - Technology Impact
  - Legislation
  - Case Law
  - Leading Practices
Transition - Technology

- Electronic records growth
  - 90% of records now “born digital”
  - 60% of records transmitted via email
  - 56% of records stored on “C:” drive

- How Much Information
  - 7.5 billion documents / day
Electronic Records Challenges

- Inadequate Controls
- Information Redundancy
- Unstructured Electronic Records
- System Dependence
- Media Stability
- Transparent Arrangement
- Remote Access
- Total Cost of Ownership
Transition - Technology

- New Technologies
  - Text messaging, portable storage devices, social networking, etc.

- New Entrants
  - CA, IBM, Microsoft, Oracle

- Software Vendors Consolidate
  - Extempore ➔ Optika ➔ Stellent ➔ Oracle
  - MDY ➔ CA ➔ Autonomy
Transition - Legislation

- Transparency – Sarbanes Oxley
- Privacy – HIPAA, GLB Act
- Economic Stimulus - ARRA, EHR Incentives
- Security - PATRIOT Act
- Finance – Dodd-Frank, Basel II
- Contracts - E-SIGN Act, UETA
- ESI Defined - FRCP (2006)
- Food/Drug ERM - FDA 21 CFR 11
Transition – Leading Practices

- Standards
- Risk Management
- E-Discovery
- Regulatory Compliance
Transition – Leading Practices

- Standards / Guidelines
  - DOD 5015.2 – ERM Design Criteria
  - MoReq2 – Model Requirements ERM (Europe)
  - EAD- Standard to describe archives, similar to MARC
  - ISO 9000 – Quality Manufacturing records
  - ISO 15489 – Records and Information Management
  - ISO 23081 – Metadata in R&IM
  - OAIS – Open Archival Information System
  - VERS – Victoria Electronic Records System (Australia)
  - Sedona Guidelines
Records Life Cycle

Create / Receive
Use
Maintain
Disposition
Destroy / Archive
Document / Record Lifecycle

**Author Control**
- Document Creation
- Collaboration
- Version Control

**Corporate Control**
- Regulatory Compliance
- Business Rules
- Security and Access Control
- Litigation Support

Activity
- Publish/Declare

Time
- DM
- RM

- Archive
- Transfer
- Destroy
Records Continuum
Characteristics of a Record

- From ISO 15489
  - Content, Context, Structure
  - Authenticity
  - Reliability
  - Integrity
  - Useability
Leading Practices

- Paper Environment
  - Focus: Manage storage media

- Electronic Records Management
  - Focus: Manage content
Leading Practices

- Manage records in 5 environments
  - Hardcopy Records Environment
    - Active Records - Workstation
    - Active Records – Business Unit Area
    - Inactive Records – Records Center
  - Electronic Records Environment
    - IT-managed applications
    - Desktop applications
Leading Practices

- Change the way RM and AM work in order to meet challenges of changing records creation, use, maintenance, disposition.
  - Change focus
  - Acquire new tools, methodologies
  - Work closely with IT, Legal, Risk Management
  - Seize opportunities - proactive
Leading Practices

- Obsolete records destroyed
- Archival records managed
- Vital records protected
- Confidential records secure
Leading Practices

- Clear Policies
- Accountability
- Comprehensive Procedures
- Current Records Retention Schedule
- Routine “Compliance Days”
- Routine Compliance Reviews (Audits)
- Training
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Software Considerations

- Electronic Records Management Systems
  - Records Management Systems
  - Imaging Systems
  - Electronic Document Management Systems

- Managing Electronic Records in Legacy Systems
  - Transactional Processing
  - Content Management
  - Enterprise Document Management
  - Enterprise Resource Planning
  - Decision Support
  - Email
ERMS

- Implement software with R&IM functionality
  - Capture and declare record and metadata
  - Support Classification
  - Support Audit Control
  - Ensure records are useable
  - Manage security and control
  - Support records preservation
  - Apply Legal Hold / Release
  - Enforce Retention
Move records from native application to be maintained as official records in ERMS
Legacy Systems

- Add R&IM Functionality to existing system
  - Capture
  - Classify
  - Audit
  - Retrieve (Use)
  - Secure / control
  - Hold / Release
  - Preserve
  - Disposition
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Electronic Records Storage

- Storage Media
  - Magnetic
  - Optical
  - Solid State

- Storage Devices
  - Magnetic: Disks and Tapes
  - Optical Disks: CDs and DVDs, Memory Cards
  - Solid State: SDs, Memory Sticks, USBs
Electronic Records Storage

- Storage Location
  - Online, Nearline, Offline
  - Shared drive, network drive, C: drive, mainframe
Conclusion

- Electronic Records = Biggest Change
- Basic R&IM principles still apply
Let your Eminence give orders throughout each and every province that a public building be allocated, in which building the magistrate is to store the records, choosing someone to have custody over them so that they may remain uncorrupted and may be found quickly by those requiring them, and let there be among them an archives, and let that which has been neglected in the cities be corrected.

- Emperor Justinian I (reigned 527 – 565 CE)
  (quoted by Baldassare Bonifacio, De Archivis, 1632)
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Discussion

- And thank you!

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