

Kepentingan Standard Pengurusan Rekod

- ❑ Adalah kritikal atau mandatori **standard sistem teknologi** yang menghasilkan rekod elektronik mencukupi untuk memastikan rekod elektronik dapat dipelihara bagi kegunaan jangka panjang
- ❑ Pengamal pengurusan rekod profesional perlu memberi kesedaran kepada pewujud rekod tentang betapa mustahak untuk menggunakan **standard teknologi maklumat** sebagai langkah menghalang keusangan sistem dan "hardware and software incompatibility"

Kepentingan Standard Pengurusan Rekod

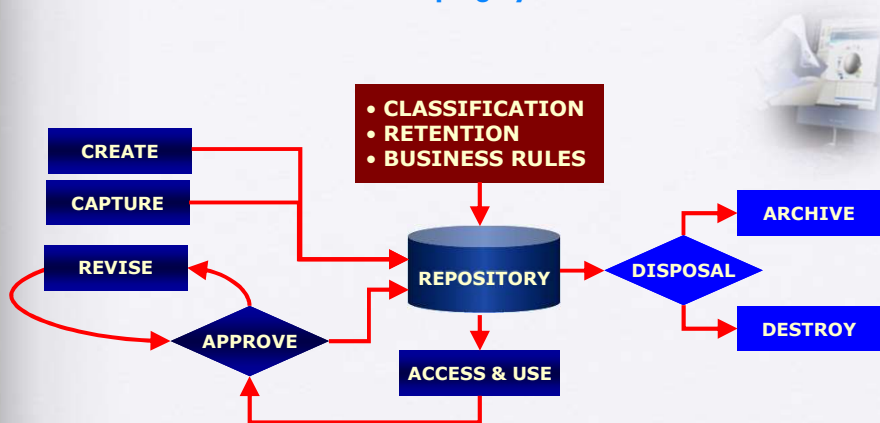
- ❑ Dalam apa jua keadaan pengamal pengurusan rekod profesional perlu memahami tentang keperluan **standard teknologi maklumat** dan pengamal teknologi maklumat (IT professionals/personnel) perlu memahami keperluan **standard pengurusan rekod elektronik**
- ❑ Pengurusan rekod elektronik memerlukan dua jenis standard mandatori:
 1. **Standard teknologi maklumat (IT)**
 2. **Standard pengurusan rekod / rekod elektronik**

Rekod Elektronik Dihasilkan oleh Sistem Pengurusan Rekod yang khusus:

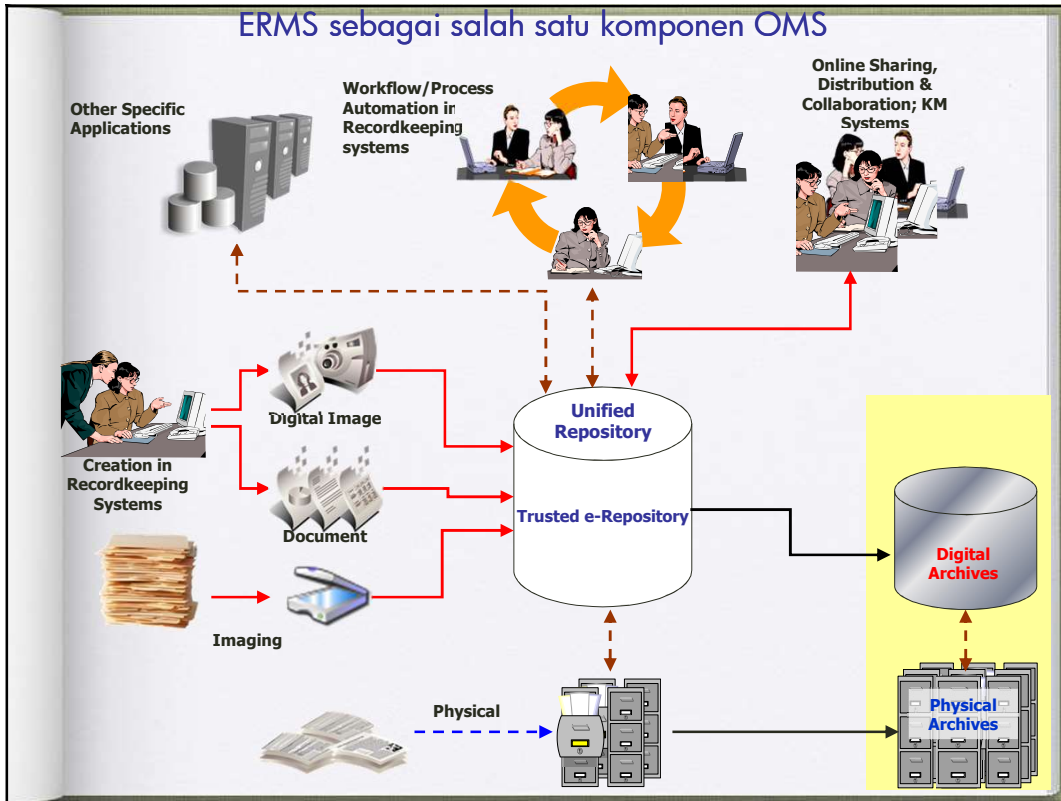
Electronic Records Management System / Recordkeeping System

Electronic Record Management System (ERMS)

Recordkeeping System



Preservation of availability, retrievability, readability, usability and continuing access of information



Contoh Keakuran Standard dan Amalan Terbaik

RM Functional Requirements

- NARA's Fast Track Guidance
- DoD Standard 5015.2
- NAA's Corporate Memory in the Electronic Age
- MOREQ1 & MOREQ2
- UKNA FR Standards

Security Standards

- United States Department of Defense 5015.2-STD – Chapters 2 and Chapter 4

Metadata Standards

- Victorian Electronic Records Strategy (VERS)
- Dublin Core
- ISO 2788 (Thesaurus Standards)
- NISO/AIIM

Contoh Keakuran Standard dan Amalan Terbaik



RM Functional Requirements Standards

- NARA's Fast Track Guidance
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- NAA's Corporate Memory in the Electronic Age
- MOREQ1 & MOREQ2
- UKNA FR Standards

RM Functional Requirements Elements

- *Capturing*
- *Creating*
- *Maintaining*
- *Providing Access*
- *Ensuring Security*
- *Retention*
- *Disposition*
- *Transfer*
- *Preservation*

**Rekod Elektronik Yang
Dihasilkan oleh ERMS /
*Recordkeeping Systems***

Ciri Ciri Rekod Elektronik Menjadikannya Bergantung Kepada Standard

<i>Category of e-records</i>	<i>Data types included in e-records</i>	<i>Applications used to create/manage/distribute e-record</i>
Office documents (sets of digital documents, digitised paper images; links/bundles created via office suites; groupware; HTML)	Alphanumeric data; mark-up data; raster and vector graphic	Word processing; spread sheets; document image processing; office suites; groupware, document management systems; relational databases.
Structured Texts (Literary texts; formal documents; corporate publications; commercial publications; web pages)	Alphanumeric data; mark-up data; tags to other data types (raster and vector graphics)	Word processing; text editing; HTML; editors; desktop/corporate publishing; La TeX; SGML and application specific Document Type Definitions; XML.
Data sets (Survey data; results of experiments; transaction data; event data; administrative data; attribute data; bibliographic data)	Alphanumeric data	Wide range of data processing applications packages; managed in flat file; networked; hierarchical; relational and object oriented databases; presented via presentation graphics; modelling software; report writers; etc.

Ciri Ciri Rekod Elektronik Menjadikannya Bergantung Kepada Standard

<i>Category of e-records</i>	<i>Data types included in e-records</i>	<i>Applications used to create/manage/distribute e-record</i>
Design data (product data; as built drawings; models; plans)	Alphanumeric data, vector and raster graphics	Word processing; document image processing; relational databases; object oriented databases.
Presentation graphics (Business presentations; formal courseware)	Vector/raster graphics; moving graphics alphanumeric data; full motion video; interleaved audio and video	Business graphics; clip art; creative graphics; presentations systems; Computer Based Training; multimedia.
Visual images (Fine art; picture libraries; photographic libraries; medical images; images of historic / manuscript documents)	Alphanumeric data; raster graphics	Image capture software; image processing and editing software; object oriented; relational and flat file databases.
Speech & Sound recordings (Music libraries; sound effects; radio broadcasts; sound recordings; media)	Audio data; MIDI; metadata	Speech processing; audio recording and playback; symbolic music recording; relational and flat file databases.

Ciri Ciri Rekod Elektronik Menjadikannya Bergantung Kepada Standard

<i>Category of e-records</i>	<i>Data types included in e-records</i>	<i>Applications used to create/manage/distribute e-record</i>
Video recordings (Media libraries; training centres; video clips games)	Digital video; full screen; full motion video; interleaved audio and video; metadata	Digital video; audio files; audio/video interleaved; compression systems; Relational & Flat File Databases.
Geographic / mapping data (Maps; coordinates; range of overlay data; links between data types)	Vector and raster graphics; alphanumeric data	GIS systems; mapping software; relational & object oriented databases.
Interactive multimedia publications (Electronic publishing; educational and training material; marketing material; games etc.)	Interleaved audio and video data; moving graphics; vector and raster graphics; alphanumeric data	Authoring software; editing software; access software.

Standard Mandatori Dalam Melaksanakan Strategi Pemeliharaan Rekod Elektronik

<i>Electronic Records</i>	<i>Preservation Strategy</i>	<i>Subset of Strategy</i>	<i>Notes</i>
Office Documents	Digital Records Migration	Conversion to Standard Formats; Backward Compatibility; Change Media	
Structured Texts	Digital Records Migration	Conversion to Standard Formats	
Data sets	Digital Records Migration	Conversion to Standard Formats	
Design data	Digital Records Migration	Backward Compatibility; Interoperability; Conversion to Standard Formats; Change Media	Technology preservation / emulation as short term strategy for product data on obsolete systems.
Presentation	Digital Records	Backward	

Standard Mandatori Dalam Melaksanakan Strategi Pemeliharaan Rekod Elektronik

Electronic Records	Preservation Strategy	Subset of Strategy	Notes
Visual images	Digital Records Migration	Backward Compatibility; Conversion to Standard Formats; Change Media	
Speech & sound recordings	Digital Records Migration	Backward Compatibility; Conversion to Standard Formats; Change Media	A specialised area where additional work is needed by experts in the field.
Video recordings	Digital Records Migration	Backward Compatibility; Conversion to Standard Formats; Change Media	A specialised area where additional work is needed by experts in the field. Technology preservation / emulation needed in short term where data

Standard Mandatori Dalam Melaksanakan Strategi Pemeliharaan Rekod Elektronik

Electronic Records	Preservation Strategy	Subset of Strategy	Notes
Geographic / mapping data	Digital Records Migration	Backward Compatibility; Conversion to Standard Formats; Interoperability	A specialised area where additional work is needed by experts in the field. Technology preservation / emulation needed in short term where data locked in proprietary systems.
Interactive multimedia publications	Technology preservation / emulation in short term for data in proprietary systems until agreed strategies		A specialised area where additional work is needed by experts in the field.

Standard Mandatori Dipakai untuk Memastikan Kualiti Rekod yang Wajib Dilindungi



- **Reliability:** the trustworthiness of a record as a statement of fact. A reliable record is complete and generated according to a controlled procedure
- **Accuracy:** the exactness and correctness of a record content, dependent on the competence of the author and the controls on the process by which data are recorded and transmitted through space (i.e., between persons, systems or applications) and time (i.e., when stored off line, or when the hardware or software used to process, communicate or maintain it is upgraded or replaced)
- **Authenticity:** the trustworthiness of a record as a record. An authentic record is one that has not been tampered with or otherwise corrupted. Authenticity is maintained by protecting a record identity and integrity. It differs from
- **Authentication:** a means of declaring authenticity at a point in time

Dr Luciana Duranti – Project Director - The InterPARES Project

Slide 17

Standard Pengurusan Rekod Malaysia

- ❑ MS 2223 /ISO 15489 Records Management Pt.1 & Pt 2
- ❑ MS /TR 13028: Implementation and guidelines for digitization of records.
- ❑ ISO 16175: Principles and functional requirements for records in electronic office environment – Part 1: Overview and statement of principles.
- ❑ ISO 16175: Principles and functional requirements for records in electronic office environment – Part 2: Guidelines and functional requirements for records in electronic office environment.
- ❑ ISO 16175: Principles and functional requirements for records in electronic office environment – Part 3: Guidelines and functional requirements for records in business systems.

Standard Pengurusan Rekod Malaysia

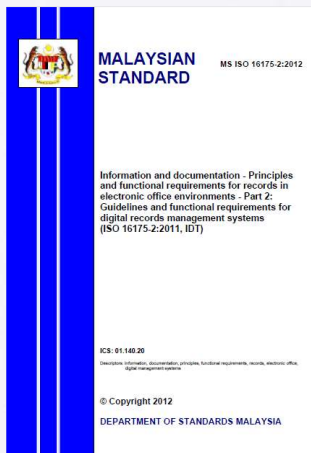


MS 2223:2009 (1 & 2):

Building RM Networks

Dr Rusnah Johare

Standard Pengurusan Rekod Malaysia



MS 16175: System Specification

Building RM Networks

Dr Rusnah Johare

Perlaksanaan Standard Perlu Dibuat Berdasarkan Rangkakerja Organisasi Pengurusan Rekod Elektronik

Building RM Networks

Rangkakerja Organisasi Pengurusan Rekod Elektronik



Recordkeeping Sumber: State Records Authority of New South Wales, 'The Regime', Government Recordkeeping Manual, 1999.

Rangkakerja Organisasi Pengurusan Rekod Elektronik

- ❑ **Polisi:** Asas untuk merangka kerja strategi dan objektif pendekatan pengurusan rekod elektronik yang akan dilaksanakan. Polisi perlu dalam bentuk dokumen dan diberitau kepada seluruh warga kerja agensi.
- ❑ **Perundangan:** Memberi tanggungjawab kepada agensi untuk mengurus rekod melalui konsep kitaran hayat rekod dari pewujudan sehingga pemeliharaan untuk tujuan kearkiban.
- ❑ **Standard:** Di negara maju seperti Australia dan Kanada, standard yang dikeluarkan oleh pihak berkuasa Rekod Negara adalah mandatory, memaklumkan keakuran minima yang diperlukan dan diaudit.

Rangkakerja Organisasi Pengurusan Rekod Elektronik

- ❑ **Kod Amalan Terbaik:** Dokumen mengandungi petunjuk dan menerangkan amalan amalan terbaik. Ia berfungsi sebagai penanda aras yang dapat digunakan untuk agensi membuat pengukuran terhadap praktis dan sistem yang digunakan oleh sesuatu agensi.
- ❑ **Panduan dan Manual:** Dalam bentuk dokumen untuk edaran kepada seluruh wargakerja agensi untuk rujukan bagi mencapai keseragaman praktis dan amalan pengurusan rekod elektronik.
- ❑ **Latihan, Perkhidmatan dan Sokongan:** Latihan, perkhidmatan dan sokongan lazimnya disediakan oleh institusi arkib negara/negeri dan universiti.

AMALAN TERBAIK PENGURUSAN REKOD ELEKTRONIK

Amalan Terbaik Pengurusan Rekod Elektronik

Amalan	Australia	Kanada	United Kingdom	USA	Malaysia
Polisi	3	4	5	7	✓
Perundangan	7	4	5	3	✓
Standard	7	10	13	7	✓
Kod Amalan Terbaik	5	20	13	5	✓
Panduan dan Manual	6	13	9	8	✓
Latihan, Perkhidmatan dan Sokongan	12 Universiti; Organisasi Profesional; Arkib Negara; Arkib Negeri	4 Universiti; Organisasi Profesional; Arkib Negara; Arkib Negeri / Wilayah	5 Universiti; Organisasi Profesional; Arkib Negara; Arkib Negeri	2 Universiti; Organisasi Profesional; Arkib Negara; Arkib Negeri	1 Universiti; Arkib Negara; Arkib Negeri
*Rujuk Table 1					

