

PROCESS DELPHI ROUND 1 – ISSUES – SUMMARY OF RESPONSES

The 21 questions asked in Round 1 were developed from the issues identified from the systematic literature review. The Process Delphi participants were asked to discuss and explore these questions from their own perspective and experiences. Where applicable, they agreed / disagreed with the issues and gave their reasons.

To avoid delay in sharing this summary, we have taken the wording of the solutions from our 'coded' version of the responses used for analysis rather than rephrased it into natural language at this stage.

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Issue 1: IT is Used to Automate Business Processes

IT is used to automate business processes – Level of agreement

- agree – 10 respondents
- qualified agreement – 4 respondents
- disagree – 2 respondents

- Works best for repetitive, predictable tasks
- Doesn't work well for human intensive tasks
- Automation solutions (partial, 'not the full story') omission from business processes of certain business activities (change management, cultural, human)
- Lack of /challenges of automation of processes (RM)

IT is used to automate business processes – Effectiveness

- IT effectiveness automation agree

Benefits:

- change processes from mechanistic to holistic
- productivity gains
- better service

IT is used to automate business processes – Requirements

- Business analysts/ information professionals involvement

Business process analysis requires:

- involvement by business owner
- understanding (good) of business processes by business owner
- understanding (good) information requirements by business owner

Business processes automation requires:

- business processes identification / documentation prior
- business processes re-engineering prior
- requires information flow identification / documentation prior
- access (good) information (stored)
- requires systems (good)
- requires training (good)
- project management procedures (good)

Issue 2: IT is Used to Re-engineer Business Processes

IT is used to re-engineer business processes – Level of agreement

- agree – 8 respondents
- qualified agreement – 5 respondents

IT implementation provides opportunity re-engineer business processes

IT is used to re-engineer business processes – Effectiveness

Benefits:

- efficiency gains
- information (authoritative, accessibility) improvement (significant)
- IT professionals skills base expansion to working directly for the business
- no paperwork
- fewer complaints

Requirements for BPR

- driver business process analysis acceptance (lesser)
- driver IT acceptance (greater)
- business change and change management
- changing technology to fit the business
- business process analysis
- joining up front end and back end systems
- IT tools
- partnership working by IT professionals and business analysts
- small steps
- role-based

BPR problems/ failure points

- BPR complexity
- whole scale approach
- poor system specification
- poor implementation of business processes
- omission of aspects (information-sharing)
- omission of aspects (human)
- staff resistance to the change
- involving staff after the event
- allowing opt out by staff
- inability to agree product was complete for purposes of implementation
- inability to distinguish implementation from future development
- personnel changes in IT contractor

Issue 3: Processes Other than IT Processes are Also Needed to Conduct Business in the Digital Environment

Processes other than IT processes are also needed to conduct business in the digital environment – Level of agreement

- Agree – 4 respondents
- Disagree – 2 respondents

Processes difficult to automate

- approval/authorisation processes
- processes human input (requirement for)
- processes (unstructured)

Additional non-IT processes required

- strategic development
- governance
- business process flow
- product creation
- manage information assets
- information architecture (integration)
- information architecture processes
- information infrastructure processes
- knowledge facilitation management processes
- systems integration
- link recordkeeping and business strategies
- aspects (change management)
- aspects (human)
- manage staff
- roles and responsibilities
- application (of rules) by staff
- naming & filing conventions
- aspects (information-sharing, informal)
- awareness of other people's activities
- face to face / phone communication
- signatures (manual)
- personal development
- assessment criteria (application of)
- manual, paper-based

Issue 4: National Strategies for Information Management / Records Management

National strategies for information management / records management – They help

- Agree – 9 respondents
- Qualified agreement – 3 respondents

How help

- recognition / increased profile of IM/RM issues (2 responses)
- compliance requirements for IM/RM (2 responses)
- EDRMS interest (increased)
- consistency / standard approaches
- more meaningful cross-organisation comparison

What else is needed

- collaborative design and implementation
- allow individual local adjustment
- standards (national) sufficient without national strategies

National strategies for information management / records management – They hinder

Why

- requirements (excessive, 'overspecified', prescriptive)
- on their own, impact (limited)
- inappropriately sold/pitched
- lack of targeting (effective)
- lack of capability to match change (pace of)
- lack focus on organisational / business needs
- if no local adaptation to local needs
- lack perspective (end-user)
- expense of implementation (excessive) for organisations (many)
- no implementation guidance
- lack of examples (positive)

National strategies for information management / records management – Requirements

- universal perspective
- approach based on context (organisation, individual)

Implementation requirements:

- drive
- standardisation of tools (implementation)
- action strategically in key pathfinder departments
- education and support

Issue 5: The Plethora of Standards

The plethora of standards – They help

- Agree – 4 respondents
- Qualified agreement –5 respondents

The plethora of standards – They hinder or don't help

- Agree – 4 respondents

Why

- don't reflect how people work
- lack of concern for embedding (practicalities of) business processes
- lack of value (added)
- lack of flexibility ('over-prescriptive), complexity (excessive)
- standards international national state agreement (sometimes lacking)
- obsolescence (rapid)
- lack of knowledge of existence/relevance by organisations
- implementation - prescriptive, resource consuming
- lack of implementation assistance / practical guidance
- adoption (superficial, 'tick in a box')
- desire for exceptions (local)

Standards – Requirements

- ERM standards (interoperability)
- National body to support standards context / industry specific
- Evolutionary approach
- selling (benefits) to organisations
- standards lack of compulsion (legal) lack of credence by organisations
- lack of engagement of records managers with major vendors

Mapping between standards

- Required – 2 respondents

How

- Selection:
 - By cross-jurisdictional working by community
 - By cross-organisational working by community
 - by community, for impact (greatest)
 - For National body, standards relevant at national level
- international, national, local cascade
- good practice
- process (consistency)
- accommodation of processes (individual)
- removal of ambiguity

Issue 6: Organisational Level Records Management Policies

Organisational level records management policies are important/needed – Level of agreement

- Agree – 10 respondents
- Qualified agreement – 4 respondents
- Disagree – 2 respondents

Why agree

- reflects well on organization
- supports information regulations and legislation
- vital for positioning and integrating recordkeeping
- crucial to ensure practices are pushed from top down
- consistency of process
- ensures organisational information / legacy information is available for future generations
- sharing of data across different sections
- better customer service

Why qualified agreement

- cultural issue of understanding & applying policy
- RM not regarded as high priority so policy not always applied
- gaps at organisational level and at business unit level often

Organisational level records management policies – Alignment with national strategies – Level of agreement

- Agree – 2 respondents
- Qualified agreement – 4 respondents
- Disagree – 2 respondents

Requirements of organisational policies

Positives

- basis in standards (ISO, 15489)
- requirements (regulatory) results in compliance
- development of RM in context (business)
- provision of RM principles within framework (intellectual, strong) to support business needs
- support by managers (senior) resulting in adoption (staff)
- strategies (RM, national) application requires interpretation at local level
- strategies (RM, national) application requires scaling (down) at local level
- interaction with risk management policies producing strategic tool (else) ignored
- interaction with information security policies producing strategic tool (else) ignored
- brevity and simplicity
- software (good) resulting in adoption (staff)
- training (good) resulting in adoption (staff)

Negatives

- as end in itself – lack of concern and lack of implementation
- difficulty (use) by stakeholders (relevant) leads to lack of value

Issue 7: Records Management Processes are Poor or Lacking

Records management processes are poor or lacking – Level of agreement

- Agree generally – 4 respondents
- Agree specifically in e-environment – 5 respondents
- Qualified agreement generally – 1 respondent
- Qualified agreement specifically in e-environment – 3 respondents
- Disagree generally – 1 respondent
- Disagree specifically in e-environment – 1 respondent

Why agree generally

- processes (RM) anarchy causes (little) obligation to follow by staff
- system can't cope with rare unusual cases
- insufficient RM professionals & lack of understanding of staff responsibilities
- resistance to change
- no sanctions for non compliance
- poor training
- operator error / demotivation

Why agree specifically in e-environment

- development in / focus on paper environment
- lack of emphasis (management)
- policies (corporate, RM) lack responsibility allocation
- processes (RM) lack of clarity about records (identification of) / storage often
- practice (RM, 'RM mindset') lack of development in EDRMS
- recordkeeping systems (electronic, shared drives) lack of management lack of structure ('organised chaos') lack of benefits
- records (high volume)
- data protection requirements lack of compliance for email by organisations
- lack of consultation of staff causes business processes (existing) [become] processes (RM, poor) in e-environment
- training (poor)
- lack of enforcement
- behaviour (less regimented)
- lack of staff (clerical)
- outsourcing

How to improve poor/lack of recordkeeping

- shift to electronic records as the official record paper record as a rendition
- re-examination of processes (RM) by approach (holistic) approach (integrated)
- information disciplines convergence requires focus on solutions not practice (professions, separate) in e-environment
- processes (RM) way they are done requires redefining in e-environment
- through IM initiatives (corporate)
- benefits (business) emphasis driver (better) to staff to business units
- RM importance (perception of) causes processes (RM, good)
- processes (RM) requires culture shift of staff resulting in understanding & compliance
- processes (RM, lack of) requires recognition (of records) through responsibility allocation by staff

Issue 8: The E-Environment has Caused the Breakdown of Records Management / Recordkeeping

The e-environment has caused the breakdown of records management / recordkeeping – Level of agreement

- Agree – 5 respondents
- Disagree – 5 respondents
- Qualified agreement – 5 respondents

Why agree

- RM thought of as paper based and dismissed as not relevant; records professionals failed to oppose this
- records value in own right forgotten in e-environment
- no storage space limit records disappeared into data systems
- storage (ease of) devaluation staff skills (information assessment)
- easy to create information locally (at desktop) stored informally
- massive proliferation of documents
- failure to reengineer business process before implementation of IT system
- devolution of recordkeeping responsibilities & lack of recognition by staff of its importance
- people lack of comfort management ('sorting out') information (high volume) information exchanges (ease of) resulting in retention (inappropriate, 'keep everything')
- people (most) preference information (unmanaged, 'giant data bucket') tools (search)

Why disagree

- processes (RM) were poor in paper environment

Effects of the e-environment on records and records management

Benefits

- e-environment delivery DM / RM tools (enhanced, greatly)
- scares identity theft / internet security raises profile of RM

Challenges

- recordkeeping electronic content managed outside where created approach (wrong)
- recordkeeping electronic management (everything) approach (wrong)
- recordkeeping electronic natural part of content creation process success
- requires processes (new/different) resulting in records (sustainable) 2293 47
- allowing RM by records creators through structured and unstructured business processes
- records professionals understanding new role (their) managing and monitoring information repositories
- vendors focus solutions (software) storage not recordkeeping 1473 49
- IT (corporate) lack of capability to match expectations (staff) from experience (home computing)
- IT professionals:
 - lack of planning for RM within IT projects
 - lack of understanding recordkeeping || not taught on degree courses

Issue 9: The E-Environment Creates New Business Processes / Affects Existing Processes

The e-environment creates new business processes / affects existing processes – Level of agreement

- Agree – 12 respondents
- Qualified agreement – 4 respondents
- Disagree – 1 respondent

Reasons for qualified agreement:

- adaptations of existing processes
- evolution not revolution

Effect of the e-environment on business processes

- changes nature of interactions between organisations and processes constantly change/evolve
- tools (new) improvement ('more realistic proposition') for IM, e.g. access , information life-cycle management
- workflow systems implementation introduction of business processes (new)
- information sharing across boundaries causes questioning of shelf life
- web 2.0 social technology seeking application for organisational processes impact (unknown)

positives

- availability (greater) of content
- causes involvement (level, greater)
- communication (enhanced)
- efficiency gains
- web 3.0 semantic use (potentially greater) for business outcomes in future

negatives

- lack of understanding requirements workflow systems / BPR causes perception (negative)
- organisations use IT for areas (requiring intervention, human) / areas (requiring judgment, human) often
- business processes (new) automation lack of staff training
- recordkeeping education lack of evolution
- records professionals lack of understanding change (e-environment)

requirements

- engagement (extensive) by users
- need for better software
- invisibility of RM
- need for better, more intuitive user interface

The e-environment creates new business processes / affects existing processes – User expectations

- that things *will* change
- speed / level of service by all organisations (public & private)
- high quality, intuitive software interfaces

Issue 10: The E-Environment Creates New Record Management Processes / Affects Existing Processes

The e-environment creates new record management processes / affects existing processes – Level of agreement

- Agree – 9 respondents
- Qualified agreement – 5 respondents
- Disagree – 1 respondent

Why agree

- decision making processes remain same, change steps in the process rather than process per se
- should happen but little evidence of change - required processes are not clearly defined - needs proactive records professionals

Effect of the e-environment on record management processes

- RM process embedded into each step of the business process with the records information being collected as the record is being created and modified
- information sharing across boundaries causes questioning of shelf life
- service orientated architecture / web services provide opportunities (new/innovative) for recordkeeping
- remote working by cloud computing

positives

- EDRMS systems etc. support better or more automated record keeping

negatives

- functionality (IT, potential) exploitation for creation of processes (RM, new) slow
- creation divide (generational) often
- causes issues (major) duplication / version control

requirements

- processes (RM, new) for database systems / EDRMS
- RM of media (new)
- removal recordkeeping burden for staff
- ERM systems requires:
 - RM by records professionals, not by staff
 - recordkeeping (automatic, easy) by staff

The e-environment creates new record management processes / affects existing processes – Effect on desires / expectations

- organisations / users expectation trust in ERM systems
- IM professionals requirements (excessive, 'gone overboard') EDRMS implementations perception (negative) by staff
- systems approach (all-embracing, 'all singing all dancing') expectations (failure to meet) causes staff lack of satisfaction
- users desire lack of focus on RM / user resistance to responsibilities (additional)
- users requires RM systems simplicity (ease of use) simplification ('take away the pain')

Issue 11: The E-Environment Creates New Legal Processes / Affects Existing Processes

The e-environment creates new legal processes / affects existing processes – Level of agreement

- Agree – 5 respondents
- qualified agreement – 2 respondents
- disagree – 2 respondents

- depends on country and its legal system

The e-environment creates new legal processes / affects existing processes – Any examples? What are the consequences / impact?

- electronic information admissible in courts – disclosure discovery
- accessibility / admissibility / authenticity processes (legal, new)
- data confidentiality/protection/security and impact on RM
- FOI and impact on RM
- business environment multi-organisational processes (legal, existing) impact (major) on global supply chain (complex)
- tools (exploitation of) for litigation
- requirements (system audit) for compliance

positives

- record lifecycle records (metadata) access (audit trail) causes audit (records) straightforward (more)
- ERMS enables disclosure (easier) / discovery (easier) in courts
- processes proof (forensic) ease (greater) – by media (tapes, back-up) / hardware/servers (examination of)
- records (electronic) forensics easy facilitation confidence (more) about RM processes and records (electronic) by users

negatives

- disclosure / discovery (more difficult)
- e-discovery technology solutions inappropriate e.g. selling to organisations of email vaults
- process proof (forensic) ease (less) by recordkeeping systems
- recordkeeping systems assistance with compliance myth

requirements

- e-environment requires change in processes (legal, existing):
 - debate across jurisdictions
 - reinforcing processes (legal, existing)
 - contractual obligations
 - digital asset management
 - information re-use
 - intellectual property
- compliance (with legislation) requires resources by organisations 1897 36

Issue 12: Traditional Principles and Methods are Appropriate to Manage E-Records

Traditional principles are appropriate to manage e-records – Level of agreement

- Agree – 8 respondents
- Qualified agreement – 2 respondents
- Disagree – 2 respondents

Why agree

- based on a solid foundation of rules and processes that apply to the information/records irrespective of format or environment

Why qualified agreement

- need interpretation and implementation in the specific recordkeeping environment
- principles (RM, traditional) lack of modification ('in their raw state') lack of suitability to ERM alone

Why disagree

- RM rules need to be built into e-systems in advance

Traditional methods are appropriate to manage e-records – Level of agreement

- Agree – 2 respondents
- Qualified agreement – 3 respondents
- Disagree – 5 respondents

Why qualified agreement

- technology can undertake more sophisticated / automated decisions (e.g. retention)
- need to assess their applicability in any recordkeeping environment
- methods (RM, traditional) lack of modification ('in their raw state') lack of suitability to ERM alone

Why disagree

- ERM requires development methods (RM, new) definitions (revised)
- so much can be automated
- much more support can be offered by systems
- storage media changing by the year
- retention scheduling in shared drives impossible
- difficult to identify & delete data in data systems

Issues

- principles (RM, traditional) translating implementation processes to ERM too slow
- better education/training on principles (RM, traditional) required by records professionals – about application of principles in changing environments
- systems (new) / tools (new) facilitation of IM methods (new) in e-environment
- RM methods (new) requires:
 - processes (quality)
 - buy in by users
 - training

Issue 13: E-Records Management Needs Redefinition of Principles and Development of New Methods

E-records management needs *redefinition of principles* – Level of agreement

- Agree – 3 respondents
- Qualified agreement – 5 respondents
- Disagree – 7 respondents

Why qualified agreement

- is it the principle or understanding of what it means that needs to be reviewed

Why disagree

- existing principles apply to the record irrespective of format or environment
- RM methods (not principles) need to change
- widely applicable, medium independent

Redefinition of principles required

- destruction means deletion of all copies
- relate to new security and legal requirements
- redefinition principles (RM, specific) on information (re-purposing)

E-records management needs *development of new methods* – Level of agreement

- Agree – 8 respondents
- Qualified agreement – 2 respondents

Why agree

- to address issues and complexities of e-environment
- limitations caused by IT

Why qualified agreement

- is the method or its application that needs reviewing

Development of methods required

- regular revision
- preservation (earlier)
- in advance/early records classification / metadata application / retention scheduling
- ERM requires control of file-plan

Issues

- environment (organisational) change impact (negative) on methodology (RM, existing)
- technology (new) change impact (negative) on methodology (RM, existing)
- methodology (ERM) focus (inappropriate, 'gone down rabbit holes') – equivalence of classification schemes and retention schedules
- desire for solutions (all-embracing, 'the answer') by people ('everyone')
- best practice requires:
 - openness to ideas ('less dogma')
 - flexibility (greater)
 - influence (more effective) on business processes
 - integration (with business environment)
- best practice (RM) for ERM - lack of acceptance requires techniques (variety of) related to business needs

Issue 14: E-Records Management is Integrated with Business Processes and Systems

E-records management is integrated with business processes and systems – Level of agreement

- Agree – 7 respondents
- Qualified agreement – 3 respondents
- Disagree – 1 respondent

Why agree

- RM synonymous with business processes and systems
- information/records element (essential, 'at the heart') of business processes

Why qualified agreement

- once one process done another emerges
- done locally not centrally
- not always done well or sustainably; 5-10 year system life less than life of records (some)
- ERM lack of integration for systems (data)

Why disagree

- records management rarely considered as a part of BPR but should be
- functionality (IT, potential) exploitation for ERM integration (with business processes) slow

How is ERM integrated with business processes / systems

- ERM integration (extensive) for business processes, in systems (line of business) in private sector (finance)
- ERM integration of documents by ERMS in central/local government
- effective (behind the scenes RM)
- perspective (recordkeeping) facilitation integration ERM with business systems in organisations

Issues

- ERM architecture solutions pros/cons requires thinking/analysis good models
- RM may require storage of information/records (some) in:
 - records repository (electronic, central) 1602 35
 - systems (line of business) 1601 35
 - systems (various) 1603 35
- records repository (electronic, central) causes integration (increased) of ERM with business systems in organisations
- systems (applications) structures appropriate for integration (with business processes)
- workflow systems structures appropriate for integration (with business processes)
- RM requirements failing to be articulated for document management / data management
- systems (applications) lack of RM (good) often
- workflow systems lack of RM (good) often
- ERM integration (lack of) causes longer retention (records) for business processes in systems (line of business) resulting in non-compliance (DPA)

Issue 15: Business Process Analysis / Re-engineering is Needed Before E-Records Management / E-Records Management Systems Implementation

Business process analysis is needed before e-records management / e-records management systems implementation – Level of agreement

- Agree – 4 respondents
- Qualified agreement – 5 respondents
- Disagree – 1 respondent

Why agree

- processes behind the system cause success/failure not the system itself

Why qualified agreement

- doesn't matter which way round
- usually piecemeal approach because of resource constraints and lack of skills
- good records management practice can be applied without extensive BPR

Why disagree

- prefer less formalised systems
- cynicism about who is pushing the change and why, and need for change

What business process analysis

- analyse current issues
- look at aims and objectives
- look at desired outcomes
- change perceptions of staff using current system

Business process re-engineering is needed before e-records management / e-records management systems implementation – Level of agreement

- Agree – 2 respondents
- Qualified agreement – 5 respondents
- Disagree – 1 respondent

Why agree

- BPR makes the business case
- need to change processes to achieve user benefits

Why qualified agreement

- doesn't matter which way round
- usually piecemeal approach because of resource constraints and lack of skills
- only when organizations are information literate, else EDRMS implementation is quite enough change

Why disagree

- prefer less formalised systems
- cynicism about who is pushing the change and why, and need for change

Issues

- systems configuration requires ('absolutely essential') alignment with requirements (organisational)
- ERM projects framework requires basis in principles (RM) in business needs
- information management alignment with business processes rarity
- business analysis lack of emphasis (sufficient) causes EDRMS failure
- users resistance to re-engineering where lack of process analysis (prior)

Issue 16: Development of the Records Management Infrastructure is Needed Before E-Records Management / E-Records Management Systems Implementation

Development of the records management infrastructure is needed before e-records management / e-records management systems implementation – Level of agreement

- Agree – 7 respondents
- Qualified agreement – 2 respondents
- Disagree – 2 respondents

Why agree

- ERM is part of whole organisation not isolated
- RM infrastructure sets the architecture and framework in which records will be created, captured and managed
- RM technology must link to organisation's technology/information architecture, have senior support
- otherwise new system and old ways of working
- processes behind the system cause success/failure not the system itself

Why qualified agreement

- ERMS implementation dependence on its development
- lack of development for ERMS implementation prior
- lack of development policies (IM/RM, realistic) prior
- luxury, usually piecemeal approach because of resource constraints and lack of skills

Issues

- ERM/ERMS implementation requires:
 - business architecture prior
 - communications architecture prior
 - enterprise architecture
 - critical
 - requires involvement by information architects
 - information architecture
 - more critical
 - prior
 - decision information environment
 - technical architecture prior
- ERM/ERMS implementation requires:
 - development policies (IM/RM, realistic) prior
 - management platforms (several)
 - RM platforms (part of)
- EDRMS project implementation benefits by applying recordkeeping (good) automated retention
- infrastructure (RM) development dependence for ERMS implementation
- infrastructure (RM) lack of development for ERMS implementation prior
- infrastructure (RM) vendors (majority) poor
- lack of culture (recordkeeping) causes ('doomed to') EDRMS projects failure in organisations

Issue 17: Preservation of E-Records

What to preserve

- the same as before
- the record, its history and the process association
- records (some, proportion small)
- all records possible (unlimited, 'secure everything') with technology and storage capabilities, and cheap storage

How to preserve

- principles (same) techniques (different)
- storage capacity (increased, 'enormous') may require emphasis (changed) to records (electronic) destruction ('what to throw away') not preservation ('what to keep')
- metadata standards
- policies (retention)
 - same as for other records media because no need to distinguish e-records
 - application retention schedule
- migration strategies (better)
- normalisation strategy (poor)
- business analysis framework for future systems
- review file formats and storage devices regularly
- collaboration preservation records (electronic) by corporate function (RM) and corporate function (archives)
 - issue for corporate function (archives) long term
 - issue for corporate function (RM) medium/long term
- preservation information requires capture as part of record creation
- vital records / long term records preservation at creation by using (Australian) VERS method to ensure readable, accessible and integrity retained 2227 46
- conversion at capture records retaining 10+ years, in archival format because compatibility/obsolescence
- special document types preservation requires conversion at capture in native format and (additional) archival format because of compatibility/obsolescence
- guidance (real, practical with examples)

Problems

- records (electronic) preservation failure addressing
- records (electronic) preservation lack of importance by organisations (clients)
- research records (electronic) preservation in national repositories fine for interview and survey data and publications etc, but other records fall through the cracks
- student records (electronic) preservation by storage ('archiving') less able to produce electronic records than in the past with hardcopy student files

Issue 18: Data Privacy and Security in the E-Environment

Processes required

Design/new systems

- requires inclusion data protection/privacy and information security
- inclusion of data protection/privacy and information security requires understanding of systems requirements / capability by organisations

Information/data privacy/security requirements

- approach/mechanisms (corporate) - clear, documented, continuing support
- security mind set
- policies/procedures about sharing (information) with external organisations
- policies/procedures about information use outside work environment
- processes (different), e.g. security classifications, encryption
- processes (information security) that (do not affect) readability/accessibility
- processes, everything instantly accessible unless restrictions are in place
- processes (clear, simple); responsibilities (clear)
- privacy/security description of: information infrastructure; information repository; records (electronic); users
- access/security controls application to: business processes; mandates; people; records; relationships
- security rating for recordkeeping entities (all) by permissions matrix
- collaboration by records and information security professionals
- audit log (unchangeable) capture changes
- user restrictions – cannot alter records cannot see records
- buy in by staff; guidance (clear); training / enforcement of staff

Consequences / impacts

- expectations (societal) of access (increased) requires alignment concerns (privacy, information security) with records by organisations
- users expectation data privacy/security
- information sharing causes: access changes; security changes
- systems (new) tension between security and usability
- information tension between sharing and control
- organisations / users lack of comfort about choice between security and usability often
- processes – data privacy, security, access – complex nested set
- information exchanges (ease of) causes records access (unauthorised) release (unauthorised)
- information security breaches easier (because of) IT
- people cause issues (information security, 'scares')
- data privacy/security lack of understanding by organisations about implications and requirements
- organisations interest (greater) in record protection; users interest (less)
- publicity (adverse, 'embarrassing exposures') causes awareness (increased) / prioritisation (high) about data/information security/protection/privacy
- security concerns paralyse (can) action by organisations
- lack of information security creation opportunity for RM because of publicity (adverse, 'recent losses')
- people's trust in organisations causes expectations of good RM within organisations

Issue 19: Access to Records in the E-Environment

Processes

Design/new systems

- inclusion information access options (new) requires understanding of systems requirements / capability by organisations

Access requirements

- approach/mechanisms (corporate) - clear, documented, continuing support
- robust architecture in ERMS
- mix (appropriate) techniques (IM) processes (automated, built in)
- permissions automation (potential) by: event based / role based computing
- access (structured) via: canned queries; ad hoc queries
- intuitive search and display
- search and filter of records (metadata) with ease
- password protection
- rendering/representation of records (on) many devices
- variable output formats
- records non-electronic (legacy) digitising costly unnecessary
- policies (information security) access (default, unrestricted) requires ERM implementation of justification (function-based) access (restriction)
- contextualisation
- access rights for staff
- access records (ease of) requires assurance of access rights, to allay fears of reduced security
- records (electronic) access not axiomatic requires negotiation of: needs; permissions
- lack of requirement for processes (new) 1247 33

Consequences

- e-environment causes information loss (larger scale)
- legislation (DPA, FOI) driver for records management implementation
- records (electronic) access complexity causes automation (difficulty)
- records (electronic) access impacts preservation methods - high cost of digitising/indexing records, maintaining them to meet user expectations
- Information access (easy) supports information sharing / business learning /knowledge management in theory
- records (electronic) access time (reduced by up to 60%) causes improvement organisation in business intelligence / productivity in organisations
- records (electronic) access enables assessment (of context) (of meaning) of records by people
- records (electronic) access increase confidence in information (retrieved) by users
- records (electronic) access time (saving) causes benefits (individual) for user
- records (electronic) access causes: control (increased) / freedom (greater) by users
- Information sharing reluctance by staff (some)
- users expectations / desire solutions (IT, new) with access (improved)
- users expectation: access (assisted, ease of, flexible)

Issue 20: Risk and Risk Management

Risks in the e-environment

Risks and causes

- risks caused (by) information sharing by people across long distances
- risks (security) because information can be copied / moved / shared more easily
- lack of management causes risks in agencies (most)
- system choice (poor) causes risks
- ERM (poor quality) can cause reliance on records (outdated)
- access controls (permissions) complexity (excessive) consequences (unintended) errors (unintended) 1396 48
- access controls (poor, 'awful') give users (authorised) power (excessive) in paper environment
- system goes down lack of back-ups
- disaster recovery inadequate
- data loss because of hardware failure, disaster or malicious activity
- threats (litigation) because documents (private) entering the public domain

Risks greater, different in e-environment

- information leaks (larger scale) because of speed, volume & performance
- e-environment (uncontrolled) causes risk (different)
- risk greater, because:
 - fragility of records (electronic)
 - storage media changes every 5 years
 - storage media degrades over time
 - easier to change information & affect record integrity
- risk additional:
 - lack of control
 - data (personalisation)
 - data corruption
 - distribution (inappropriate)
 - release (unauthorised)
 - data loss (accidental)
 - 'where is my memory stick?'
- records (missing, inability to find) in information (unmanaged, 'electronic swamp')
- rapid technology changes causing readability & access problems, with preservation implications

The same, less in e-environment

- access controls (improved)
- IT systems functionality potentiality for risk (reduced)
- e-environment causes (does not) risk (additional); risks are different

Risk management

- tension between risk and business element (essential, 'at the heart') for IM in organisations
- business analysis / recordkeeping analysis risk-based approach beneficial
- E-environment risk management by: firewalls; piracy protection
- records professionals focus on quality (RM) because forensic capability removes need to focus on risk

Issue 21: Other Process Issues

- too much information causes disposal problems
- records (electronic) integrity loss (easy) in e-environment
- formats (multiple) causes RM problems
- formats (multiple) requires avoidance of RM solutions (all-embracing, 'one system to rule them all')
- policies (RM) lack of enforcement in e-environment
- policies (RM) lack of monitoring in e-environment
- lack of responsibilities for processes (recordkeeping) by staff (specific) in e-environment often
- recordkeeping responsibilities (additional) for staff (all)
- responsibilities processes (recordkeeping) by staff (specific) in past
- issues for e-records:
 - appraisal requires addressing
 - migration requires addressing
 - migration requires definition of processes
 - ownership requires definition
 - custody requires definition
 - responsibility requires definition
 - stewardship requires definition
- legacy records in business systems causes problems, such as appraisal
- legacy records in drives (personal, shared) causes problems, such as appraisal
- records (electronic) isolation (from paper records) causes problems
- records in very large data sets retrieval problematic
- data mining of records in research organisation
- RM services (government, national archives) lack of ability management content in data form
- ERM systems lack of perfection causes compromise (need for)
- ERM systems implementation focus (limited) for records types (specific, 'ad hoc Office items')
- ERM systems implementation lack of focus ('rather ignored') for communication (electronic)
- ERM systems implementation lack of focus (extensive) for records types (multiple)
- ERM systems implementation requires expectations (realistic) about:
 - commitment (corporate) to change
 - about effort (extent of) of change
 - about users and change
- cloud computing use for IM / RM