



AC⁺erm Project

Process Facet: Delphi Study
Thematic Analyses



Arts & Humanities
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The AC*erm Project – Accelerating positive change in electronic records management' – ran from 2007 to 2010 and aimed to investigate and critically explore issues and practical strategies to support accelerating the pace of positive change in managing electronic records.

It focused on designing an organisational-centred architecture from three perspectives: (i) people, including vision, awareness, culture, drivers and barriers; (ii) working practices including processes, procedures, policies and standards; and (iii) technology in terms of the design principles for delivering effective recordkeeping.

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CONTENTS

Introduction to Process Facet Delphi Study	i
Round 1	
Introduction	1
List of Questions	2
Analysis of Responses	4
Round 2	
Introduction	25
List of Questions	26
Analysis of Responses	30
Round 3	
Introduction	35
List of Questions / Issues	36
Summary of Responses	38
Round 4	
Introduction	49
List of Questions	50
Round 5	
Introduction	51
Questions and Summary of Responses	
Process Aspects	52
Human Aspects	86

AC⁺erm Output

Process Facet – Delphi Study – Overview of Entire Study

Background *General*

The second facet of the investigative phase of the project related to the process aspects of managing e-records. It included business processes and practices; business systems (not only IT systems); workflow; information flow across the organisation as a whole and within parts of it; the information / records management processes as a sub-set of business processes.

Participants in the Delphi study on the process aspects of ERM responded to five rounds of questions to identify, explore, and clarify the issues and solutions. We analysed the participants' responses using a range of different approaches (subject themes, numerical ratings, subjective explorations) to provide a broad view of the data. The outputs were produced in textual, numerical, and tabular forms.

The study was carried out over five rounds, moving from identification and exploration of the issues through ranking them in order of urgency or importance to suggesting and evaluating solutions. The first four rounds were carried out by means of a series of questionnaires; the final round involved the completion of an online survey.

A diagram of the structure of the various stages of the Delphi Study is given on page (ii) overleaf.

Nature of Output All rounds – lists of questions

Round 1 – thematic analysis of issues (text).

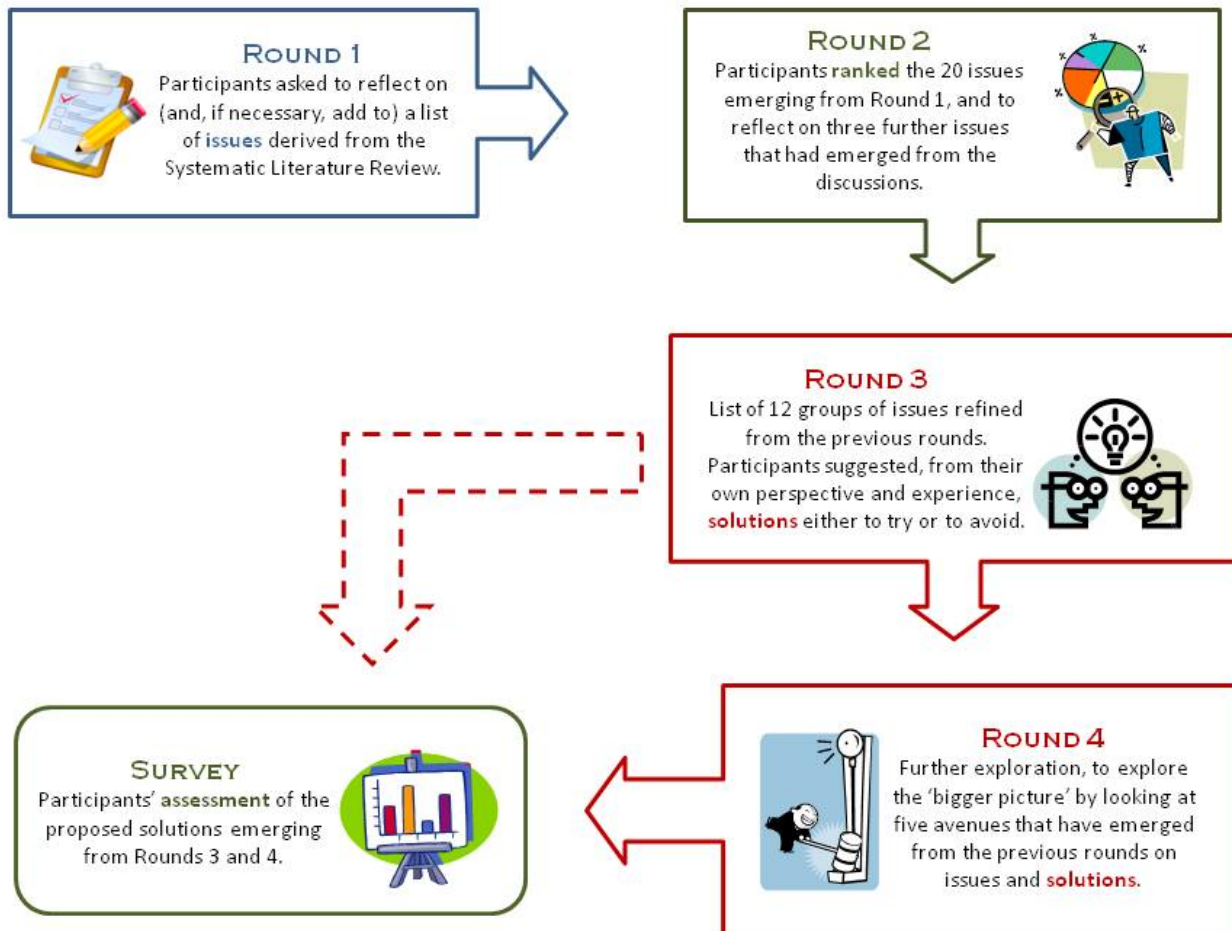
Round 2 – ranking of issues in terms of urgency/importance (graphs and tables).

Round 3 – solutions to issues, split between those that focused on process aspects and those that addressed primarily human aspects (text).

Round 4 – no separate outputs; list of questions given.

Round 5 – evaluation of solutions (text – collated responses to the survey).

Structure of Process Delphi Study



AC⁺erm Output

Process Facet – Delphi Study – Round 1 – Identifying the Issues for Discussion

Background In Round 1, the participants were provided with a list of 20 issues that had emerged from the Systematic Literature Review (SLR) and asked to reflect on these issues and on how they manifest themselves in practice. They were encouraged to respond from their own perspective and experiences, and to submit real-life examples that could add to the evidence base.

Participants were also asked to add any issues that they felt were missing, and to advise to which stakeholder group(s) they belonged, and what their disciplinary / professional area was.

Nature of Output Thematic analysis of issues (format: text).

This output consists of the original list of issues and an analysis, under thematic headings, of the list as amended by participant responses.

The questionnaires were sent to participants in October 2008 and the analysis compiled in June 2009.

The wording of the responses is derived from the 'coded' versions used for analysis; this version has been 'polished up' from the interim output of June 2009 but has not been fully rephrased into natural language.

Process Facet – Delphi Study – Round 1 – List of questions presented to participants

- 1** IT is used to automate business processes
To what extent?
How effective has this been?
- 2** IT is used to re-engineer business processes
To what extent?
How effective has this been?
Any examples?
- 3** Processes other than IT processes are also needed to conduct business in the digital environment
What kinds of processes?
In which contexts?
Any examples?
- 4** National strategies for information management / records management
Do these help or hinder?
- 5** The plethora of standards
Do these help or hinder?
Are they all needed? Give examples
How can we map between these different standards?
- 6** Organisation-level records management policies
How important are they?
Do they need to follow national strategies?
- 7** Records management processes are poor or lacking
To what extent is this true?
If this is true, why is it happening?
Any examples?
- 8** The e-environment has caused the breakdown of records management / recordkeeping
To what extent is this true?
If this is true, why is it happening?
Any examples?
- 9** The e-environment creates new business processes / affects existing processes
To what extent is this true?
Any examples?
What are the consequences / impact?
Does this affect organisations' desires / expectations?
Does this affect users' desires / expectations?
- 10** The e-environment creates new record management processes / affects existing processes
To what extent is this true?
Any examples?
What are the consequences / impact?
Does this affect organisations' desires / expectations?
Does this affect users' desires / expectations?

- 11** The e-environment creates new legal processes / affects existing processes
 - To what extent is this true?
 - Any examples?
 - What are the consequences / impact?
 - Does this affect organisations' desires / expectations?
 - Does this affect users' desires / expectations?
- 12** Traditional principles and methods are appropriate to manage e-records
 - Do you agree / disagree, and why?
- 13** e-Records management needs redefinition of principles and development of new methods
 - Do you agree / disagree, and why?
 - If you agree, what changes are required, and why?
- 14** e-Records management is integrated with business processes and systems
 - To what extent is this happening?
 - Any examples?
- 15** Business process analysis / re-engineering is needed before e-records management / e-records management systems implementation
 - Do you agree / disagree, and why?
 - If you agree, what changes are required, in which contexts, and why?
- 16** Development of the records management infrastructure is needed before e-records management / e-records management systems implementation
 - Do you agree / disagree, and why?
 - If you agree, what changes are required, in which contexts, and why?
- 17** Preservation of e-records
 - What to preserve?
 - Why?
 - When?
 - How?
- 18** Data privacy and security in the e-environment
 - What processes are needed?
 - What are the consequences / impact?
 - Does this affect organisations' desires / expectations?
 - Does this affect users' desires / expectations?
- 19** Access to records in the e-environment
 - What processes are needed?
 - What are the consequences / impact?
 - Does this affect organisations' desires / expectations?
 - Does this affect users' desires / expectations?
- 20** Risk and risk management
 - Does the e-environment cause extra risks?
 - If yes, why?
 - Give examples
- 21** Other process issues
 - Are there any issues missing?
 - What are they and why?

Process Facet – Delphi Study – Round 1 – Analysis of responses

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 only a partial solution ('not the full story'); omission from business processes of certain business activities (change management, cultural, human)
- Lack or challenges of automating records management (RM) processes

IT is used to automate business processes – Effectiveness

- IT effective in achieving automation – agree

Benefits:

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

IT is used to automate business processes – Requirements

- involvement of business analysts and information professionals

Business process analysis requires:

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

Business processes automation requires:

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

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
- significant improvement in the accessibility of authoritative information
- expansion of IT professionals' skills base to working directly for the business
- no paperwork
- fewer complaints

Requirements for Business Process Re-engineering (BPR)

- lesser acceptance of business process analysis as a driver
- greater acceptance of IT as a driver
- 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 information-sharing aspects
- omission of human aspects
- 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
- change-management aspects
- human aspects
- manage staff
- roles and responsibilities
- application of rules by staff
- naming and filing conventions
- informal information-sharing aspects
- awareness of other people's activities
- face-to-face / phone communication
- manual signatures
- personal development
- application of assessment criteria
- manual, paper-based processes

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
- national standards sufficient without national strategies

National strategies for information management / records management – They hinder*Why*

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

National strategies for information management / records management – Requirements

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

Implementation requirements:

- drive
- standardisation of implementation tools
- 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 the practicalities of embedding business processes
- lack of added value
- lack of flexibility ('over-prescriptive'); excessive complexity
- international, national, and state standards not always in agreement
- rapid obsolescence
- organisations lack knowledge of their existence / relevance
- implementation – prescriptive, resource-consuming
- lack of implementation assistance / practical guidance
- superficial adoption ('tick in a box')
- desire for local exceptions

Standards – Requirements

- interoperability of ERM standards
- national body to support context- / industry-specific standards
- evolutionary approach
- need to sell benefits to organisations
- lack of legal compulsion to use standards leads to 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 greatest impact
 - for national body, standards relevant at national level
- international–national–local cascade
- good practice
- consistency of process
- accommodation of individual processes
- removal of ambiguity

Issue 6: Organisation-Level Records Management Policies**Organisation-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 and applying policy
- RM not regarded as high priority so policy not always applied
- often gaps at organisational level and at business-unit level

Organisation-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 ISO 15489 standard
- regulatory requirement results in compliance
- development of RM in business context
- provision of RM principles within strong intellectual framework to support business needs
- support by senior managers resulting in adoption by staff
- application of national RM strategies requires interpretation at local level
- application of national RM strategies 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
- good software resulting in adoption by staff
- good training resulting in adoption by staff

Negatives

- as end in itself – lack of concern and lack of implementation
- difficulty of use by relevant stakeholders 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

- RM process anarchy causes staff to feel little obligation to follow them
- system can't cope with rare unusual cases
- insufficient RM professionals and 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 by management
- corporate RM policies do not allocate responsibility
- RM processes often lack clarity about identification and storage of records
- RM practice ('RM mindset') lack of development in EDRMS
- lack of management of shared drives leads to lack of structure ('organised chaos') and of benefits
- the high volume of records
- organisations do not comply with data protection requirements for email
- lack of consultation of staff over existing business processes causes poor RM processes in the e-environment
- poor training
- lack of enforcement
- less-regimented behaviour
- lack of clerical staff
- outsourcing

How to improve poor or non-existent recordkeeping

- shift to electronic records as the official record, with the paper record as merely a rendition
- re-examination of RM processes through a holistic and integrated approach
- convergence of information disciplines requires focus on solutions not the practice of separate professions in e-environment
- the way RM processes are done requires redefinition in e-environment
- through corporate IM initiatives
- emphasis on business benefits a better driver to staff and business units
- perception of RM as important leads to good RM processes
- RM processes requires culture shift by staff, resulting in understanding and compliance
- lack of RM processes requires allocation of responsibilities to lead to recognition of records 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
- value of records in their own right forgotten in e-environment
- no storage-space limit means records disappeared into data systems
- ease of storage led to devaluation of staff information-assessment skills
- easy to create information locally at desktop and store it informally
- massive proliferation of documents
- failure to re-engineer business processes before implementation of IT system
- devolution of recordkeeping responsibilities and lack of recognition by staff of its importance
- people uncomfortable with managing ('sorting out') high-volume information; ease of information exchanges result in inappropriate retention ('keep everything')
- most people prefer unmanaged information ('giant data bucket') coupled with search tools

Why disagree

- RM processes were already poor in the paper environment

Effects of the e-environment on records and records management

Benefits

- e-environment delivers greatly enhanced DM / RM tools
- identity theft / internet security scares raise profile of RM

Challenges

- managing content outside of where it was created is the wrong approach to electronic recordkeeping
- seeking to manage all information ('everything') is the wrong approach to electronic recordkeeping
- making recordkeeping a natural part of the content creation process leads to success
- e-environment requires new or different processes resulting in sustainable records
- allowing RM by records creators through structured and unstructured business processes
- records professionals need an understanding of their new role in managing and monitoring information repositories
- software solutions offered by vendors focus on storage not recordkeeping
- corporate IT lacks the capability to match the expectations staff have acquired from their experience of home computing
- IT professionals:
 - lack of planning for RM within IT projects
 - lack of understanding of recordkeeping, which is not taught on IT 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
- new tools offer improvement ('more realistic proposition') for IM, e.g. access, information life-cycle management
- workflow systems implementation introduces new business processes
- information sharing across boundaries causes questioning of shelf-life
- impact of seeking to apply web 2.0 and social technology to organisational processes is unknown

positives

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

negatives

- lack of understanding of the requirements for workflow systems / BPR causes negative perception
- organisations often use IT for areas requiring human intervention or human judgment
- lack of staff training in automation of new business processes
- recordkeeping education has not evolved
- records professionals lack understanding of the change brought about by the e-environment

requirements

- extensive engagement 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 and 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 new and innovative opportunities for recordkeeping
- remote working by cloud computing

positives

- EDRMS systems etc. support better or more automated recordkeeping

negatives

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

requirements

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

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

- organisations / users expect to be able to trust in ERM systems
- IM professionals excessive requirements ('gone overboard') for EDRMS implementations lead to negative perception by staff
- all-embracing approach ('all singing all dancing' systems) fail to meet expectations and cause lack of satisfaction for staff
- users do not desire an RM focus; user resistance to additional responsibilities
- users require RM systems that are simple and easy to use; simplification can '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
- new legal processes relating to accessibility / admissibility / authenticity processes
- data confidentiality / protection / security and impact on RM
- FOI and impact on RM
- existing legal processes in a multi-organisational business environment have a major impact on complex global supply chain
- exploitation of tools for litigation
- system audit requirements for compliance

positives

- access to audit trail of records metadata during record life-cycle causes records audits to be more straightforward
- ERMS enables easier disclosure and discovery in courts
- greater ease in providing forensic proof of processes – by examination of back-up tapes / hardware / servers
- easy facilitation of forensics for electronic records results in more confidence about RM processes and electronic records by users

negatives

- disclosure / discovery more difficult
- e-discovery technology solutions inappropriate e.g. selling of email vaults to organisations
- forensic process proof less easy by recordkeeping systems
- it is a myth that recordkeeping systems assist with compliance

requirements

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

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
- traditional RM principles alone, without modification ('in their raw state'), are unsuited to ERM

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
- traditional RM principles alone, without modification ('in their raw state'), are unsuited to ERM

Why disagree

- ERM requires development of new RM methods and revised definitions
- 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 and delete data in data systems

Issues

- traditional RM principles too slow in translating implementation processes to ERM
- better education / training on traditional RM principles required by records professionals – about application of principles in changing environments
- new systems / tools facilitate new IM methods in e-environment
- new RM methods require:
 - quality processes
 - 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, rather than 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 of specific RM principles 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 it the method or its application that needs reviewing?

Development of methods required

- regular revision
- earlier preservation
- carry out records classification / metadata application / retention scheduling in advance or at an early stage
- ERM requires control of file-plan

Issues

- change in the organisational environment has a negative impact on existing RM methodology
- change brought about by new technology has a negative impact on existing RM methodology
- ERM methodology has inappropriate focus ('gone down rabbit holes') – e.g. equivalence of classification schemes and retention schedules
- people ('everyone') desire for all-embracing solutions ('the answer')
- best practice requires:
 - openness to ideas ('less dogma')
 - greater flexibility
 - more effective influence on business processes
 - integration with business environment
- best RM practice for ERM – lack of acceptance requires a variety of techniques 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 as essential element ('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 some records
- ERM lack of integration for data systems

Why disagree

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

How is ERM integrated with business processes / systems

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

Issues

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

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, not the system itself, cause success or failure

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 alignment ('absolutely essential') with organisational requirements
- framework of ERM projects requires a basis in RM principles and business needs
- information management rarely aligned with business processes
- lack of sufficient emphasis on business analysis causes EDRMS failure
- users resist to re-engineering where there is a lack of prior process analysis

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, not the system itself, cause success or failure

Why qualified agreement

- ERMS implementation depends on its development
- lack of prior development for ERMS implementation
- lack of prior development of realistic IM / RM policies
- a luxury – approach usually piecemeal because of resource constraints and lack of skills

Issues

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

Issue 17: Preservation of e-Records

What to preserve

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

How to preserve

- same principles, different techniques
- increased ('enormous') storage capacity may require change in emphasis to destruction of electronic records ('what to throw away') rather than preservation ('what to keep')
- metadata standards
- retention policies
 - same as for other records media because no need to distinguish e-records
 - apply retention schedule
- better migration strategies
- normalisation strategy (poor)
- business analysis framework for future systems
- review file formats and storage devices regularly
- collaboration for preservation of electronic records between RM and archives corporate functions
 - issue for Archives over the long term
 - issue for RM over the medium / long term
- need to capture preservation information as part of record creation
- preservation of vital records / long term records at creation by using (Australian) VERS method to ensure readable, accessible and integrity retained
- conversion to archival format at capture of records to be retained for 10+ years because of compatibility / obsolescence issues
- preservation of special document types requires conversion at capture in native format and additional archival format because of compatibility / obsolescence issues
- real, practical guidance with examples

Problems

- failure in addressing preservation of electronic records
- preservation of electronic records not seen as important by organisations / clients
- preservation of electronic research records in national repositories fine for interview and survey data and publications etc, but other records fall through the cracks
- preservation of electronic student records 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 of 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

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

Consequences / impacts

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

Access requirements

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

Consequences

- e-environment causes information loss on a larger scale
- legislation (Data Protection, Freedom of Information) a driver for records management implementation
- complexity of access to electronic records causes difficulty in automation
- access to electronic records has an impact on preservation methods – high cost of digitising / indexing records, maintaining them to meet user expectations
- easy Information access supports information sharing / business learning / knowledge management in theory
- reduction in access time (by up to 60%) to electronic records causes improvement in business intelligence / productivity in organisations
- access to electronic records enables assessment of context and meaning of records
- access to electronic records increases users' confidence in information retrieved
- time saved in access to electronic records causes individual benefits for user
- access to electronic records causes increased control / greater freedom by users
- some staff reluctant to share information
- users expectation / desire for new IT solutions with improved access
- users expectation of assisted, easy flexible access

Issue 20: Risk and Risk Management

Risks in the e-environment

Risks and causes

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

Risks greater, different in e-environment

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

The same, less in e-environment

- improved access controls
- IT systems functionality has potential for reducing risk
- e-environment does not cause additional risk; risks are different

Risk management

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

Issue 21: Other Process Issues

- too much information causes disposal problems
- electronic records – loss of integrity easy in e-environment
- multiplicity of formats causes RM problems
- multiplicity of formats requires avoidance of all-embracing RM solutions ('one system to rule them all')
- lack of enforcement of RM policies in e-environment
- lack of monitoring of RM policies in e-environment
- often lack of responsibilities of specific staff for recordkeeping processes in e-environment
- additional recordkeeping responsibilities for all staff
- responsibilities for recordkeeping processes lay with specific staff 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 personal and shared drives causes problems, such as appraisal
- isolation of electronic records from paper records causes problems
- retrieval of records in very large data-sets is problematic
- data-mining of records in research organisation
- National archives lack the ability to manage content in data form
- ERM systems' lack of perfection causes need for compromise
- ERM systems implementation has limited focus on specific records types ('ad hoc Office items')
- ERM systems implementation lack of focus for electronic communication ('rather ignored')
- ERM systems implementation lack of extensive focus for multiple records types
- ERM systems implementation requires realistic expectations about:
 - corporate commitment to change
 - about extent of effort of change
 - about users and change
- cloud computing use for IM / RM

AC⁺erm Output

People Facet Delphi Study – Round 2 – Ranking of Issues

Background In Round 2, delegates were asked to rank the issues identified in the literature, and supplemented by the comments and discussion in the first round, according to their urgency.

They were also asked to reflect on three extra issues which had emerged as needing further exploration.

Nature of Output Analysis of the participant rankings (tables and charts).

This output consists of the list of issues given to participants; the weighted ranking of the issue groups in line with the responses (bar charts and tables); and a summary view of the rankings (table). The analysis includes an explanation of the weighting method used.

The questionnaires were sent to participants in October 2008 and the analysis was compiled in November 2008.

Process Facet Delphi Study – Round 2 – List of questions presented to participants

1 IT is used to automate business processes

- You gave examples of this in practice, mostly involving the automation of repetitive, workflow processes. However a few of you disagreed about its appropriateness in certain circumstances. Benefits included streamlining, better productivity, etc. Among the questions you raised are, has the effectiveness of this automation been measured? And how could it be measured?

2 IT is used to re-engineer business processes

- You gave a few examples of this in practice. However, a number of you disagreed. Re-engineering of business processes is difficult and complex. Issues raised included whether it could be done more easily? Is it effective? How could its effectiveness be measured?

3 Processes other than IT processes are also needed to conduct business in the digital environment

- Most of you agreed with this. The additional processes are mostly human ones: human nature, human compliance with systems and procedures, need for humans to input data into systems, need for face to face communication. These are difficult to automate/embed into systems, if indeed they ever could/should be. Other additional processes are manual/paper-based ones which still exist in some places/circumstances, although most information/records are born digital.

4 National strategies for information management / records management

- You provide some case examples of their use, but these are very context dependent. Strategies are criticised for being complex, over specified, lacking user input and a business focus. These factors hinder their adoption and their usefulness. They can help, however, if adapted locally and targeted to the organisational context. They can then provide benefits such as consistency, standard approaches, cross organisation comparisons etc

5 The plethora of standards

- You provided some case examples of where specific standards have helped. But organisations often lack knowledge of the existence of standards, their relevance to them and how they could implement them. Implementation of a standard in an organisation is difficult and resource extensive, and may therefore not be achievable for small organisations. However, unlike national strategies, local exceptions are dangerous. Simplification is needed within and between standards, with mapping between different standards.

6 Organisation-level records management policies

- Most of you thought organisational-level policies were important and useful, with the proviso that they need to be fit-for-purpose and specific to the organisational context, not just formalities or 'tick-the-box' exercises. Benefits of 'fit-for-purpose' policies include consistency and data sharing. However, policies are only useful if they are implemented, and this is dependent on organisational culture. The need to align with national strategies is very context-specific, dependent on the sector involved.

7 Records management processes are poor or lacking

- Many of you agreed with this, with a range of reasons why. These were mostly human reasons, such as organisational culture, lack of emphasis, lack of enforcement, lack of knowledge, poor training, etc. Disagreement tended to come from those working in highly regulated sectors.

8 The e-environment has caused the breakdown of records management / recordkeeping

- There was no clear 'majority' view on this, with some of you agreeing and others disagreeing. The nature of technology (ease of creation, storage, copying etc.) has the potential to create problems if IT systems aren't designed to embed recordkeeping procedures, or an organisation has existing poor records management. However, some circumstances can raise the profile of records management, such as scares over data security and privacy.

9 The e-environment creates new business processes / affects existing processes

- Most of you agreed with this, citing new tools and facilities such as email. These are faster, more flexible, and allow greater communication and involvement. But have the processes really changed, or are we carrying out an existing process 'communication' with a new tool 'email'? The e-environment can be viewed as evolutionary not revolutionary. However, recordkeeping is not evolving as rapidly as the e-environment

10 The e-environment creates new records management processes / affects existing processes

- A number of you agreed, citing tools such as database systems and EDMS (electronic document and records management systems). These automate/embed recordkeeping procedures, with greater or lesser success. However, are they new processes or new tools carrying out existing processes? The e-environment has altered users' expectations; they look for systems that are intuitive, flexible, fast. If new systems don't meet these expectations then users are dissatisfied and reluctant to use them.

11 The e-environment creates new legal processes / affects existing processes

- A number of you cited examples of data protection, freedom of information, and data security. However, these are not specific to the e-environment, and are more about the impact of the e-environment on existing legal processes: written signatures v digital signatures. Computer systems make some processes harder, e.g. disclosure/discovery, and some easier, e.g. forensics. One aspect of the law which was identified as having undergone significant development as a result of the e-environment is that of intellectual property rights (IPR).

12 Traditional principles and methods are appropriate to manage e-records

- Most of you felt that traditional *principles* were appropriate to manage e-records. In contrast, most of you felt that traditional *methods* were not appropriate, and that new ones needed to be developed

13 E-records management needs redefinition of principles and development of new methods

- Few of you felt that e-records management need redefinition of principles. However, most of you felt that new methods were needed.

14 E-records management is integrated with business processes and systems

- A number of you agreed with this, with some saying that the two were actually synonymous. However, the question remains of whether ERMS (electronic records management systems) up to this task.

15 Business process analysis / re-engineering is needed before e-records management / e-records management systems implementation

- Most of you disagreed with this, or qualified your agreement. To what extent is business process analysis/re-engineering feasible, considering its complexities? Some of you noted particular things that needed to be done, such as establishing aims, objectives and desired outcomes for new systems, and changing staff perceptions and behaviours.

16 Development of the records management infrastructure is needed before e-records management / e-records management systems implementation

- Your response to this was mixed. Achievement of this may not be possible because of resource constraints and lack of skills, etc. However, this may be redundant if records management is embedded into the IT platform and occurs automatically.

17 Preservation of e-records

- There are two main approaches to this in the e-environment: store everything (computer storage is so cheap) v. identify and preserve some records (via retention policies). When you decide on what records are to be archived long term, what preservation methods are best? People need advice and guidance for their specific contexts.

18 Data privacy and security in the e-environment

- Organisations lack understanding of the implications and requirements of data security/privacy in their organisational contexts, and how to achieve it. You cite many requirements for achieving data security/privacy, and most of these are organisational (culture, policies, etc.) and human (awareness raising, training etc.). Users have high expectations that organisations should keep their data safe and secure.

19 Access to records in the e-environment

- Societal issues and legislation such as Freedom of Information (FoI) has increased expectations of openness and easy access to information, particularly from the public sector. Users of systems expect access to be easy, intuitive, and flexible. IT systems have to meet these design criteria.

20 Risk and risk management

- The nature of the e-environment (ease with which information/records can be copied, downloaded, transferred) and the transfer of activities to IT systems with no hard copy backups (vulnerable to computer failures) leads to lack of control and higher risk of data loss. Methods to manage these risks are a mix of technology (e.g. firewalls) and human (e.g. policies and staff behaviour change). However, the benefits of the e-environment, such as ease of communication and data sharing, are so great that such risks can only be reduced: a completely risk-free set-up would lose all of these benefits.

E1 ERM systems have focused on managing standard office documents.

- However, information/records in line-of-business systems (e.g. finance, HR, case management) and data in large, often distributed systems (e.g. research, geo-spatial data) also needs to be managed. This data/information can be in multiple formats.

From your own perspective and experiences and also as a system user:

- How should we approach managing information in these systems?
- What strategies can we use?
- What processes do we need?

E2 Processes for new technologies.

- The information/records in Web 2.0 technologies/systems (social networking, blogs, wikis, mashups) and whatever comes next, needs to be managed

From your own perspective and experiences and also as a system user:

- How should we approach managing information in these systems?
- What organisational strategies and policies are needed and why?
- What expectations/requirements are there of users and service providers for managing the information in this domain?
- What new processes are needed? What existing processes can we adopt/adapt, if any, how and where?

E3 SaaS (software as a service) / cloud computing enables individuals and organisations to create and store information/records outside the organisational IT infrastructure.

- This needs to be managed.

From your own perspective and experiences and also as a system user:

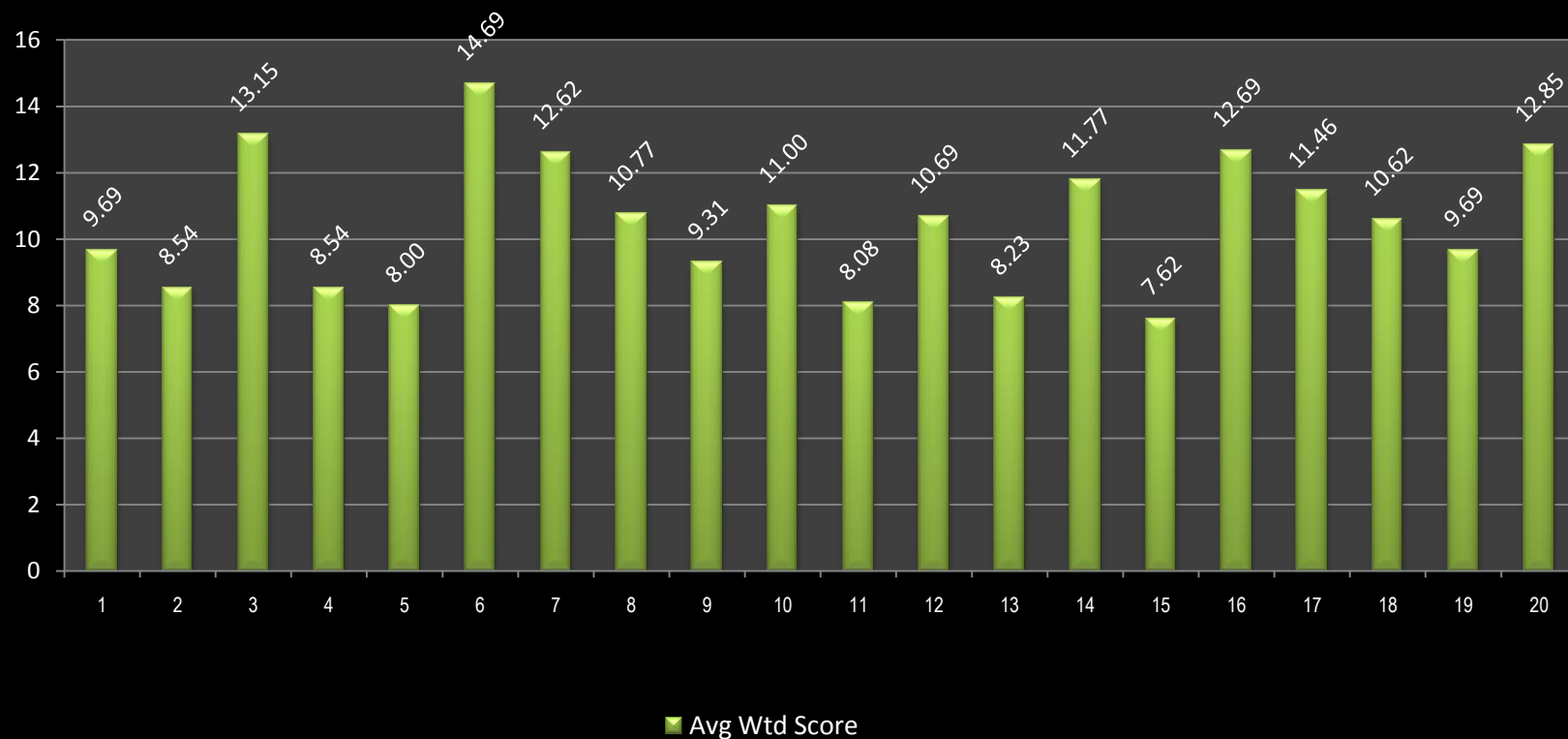
- What organisational strategies and policies are needed and why?
- What information management expectations/requirements should there be for you as a user of these services/systems?
- What expectations/requirements should there be for service providers in managing the information in this domain?

Designing an organisation-centred architecture for e-RM—The Process Issues

In Round 2 of the e-Delphi Study, participants were asked to rank the issues explored in Round 1 in order of urgency. The results are shown in the following tables and graphs.

	Issue for Ranking
1	IT is used to automate business processes
2	IT is used to re-engineer business processes
3	Processes other than IT processes are also needed to conduct business in the digital environment
4	National strategies for information management / records management
5	The plethora of standards
6	Organisation-level records management policies
7	Records management processes are poor or lacking
8	The e-environment has caused the breakdown of records management / recordkeeping
9	The e-environment creates new business processes / affects existing processes
10	The e-environment creates new records management processes / affects existing processes
11	The e-environment creates new legal processes / affects existing processes
12	Traditional principles and methods are appropriate to manage e-records
13	E-records management needs redefinition of principles and development of new methods
14	E-records management is integrated with business processes and systems
15	Business process analysis / re-engineering is needed before e-records management / e-records management systems
16	Development of the records management infrastructure is needed before e-records management / e-records
17	Preservation of e-records
18	Data privacy and security in the e-environment
19	Access to records in the e-environment
20	Risk and risk management

Ranking – Average Weighted Score (by Issue)



Ranking – Average Weighted Score (by score)

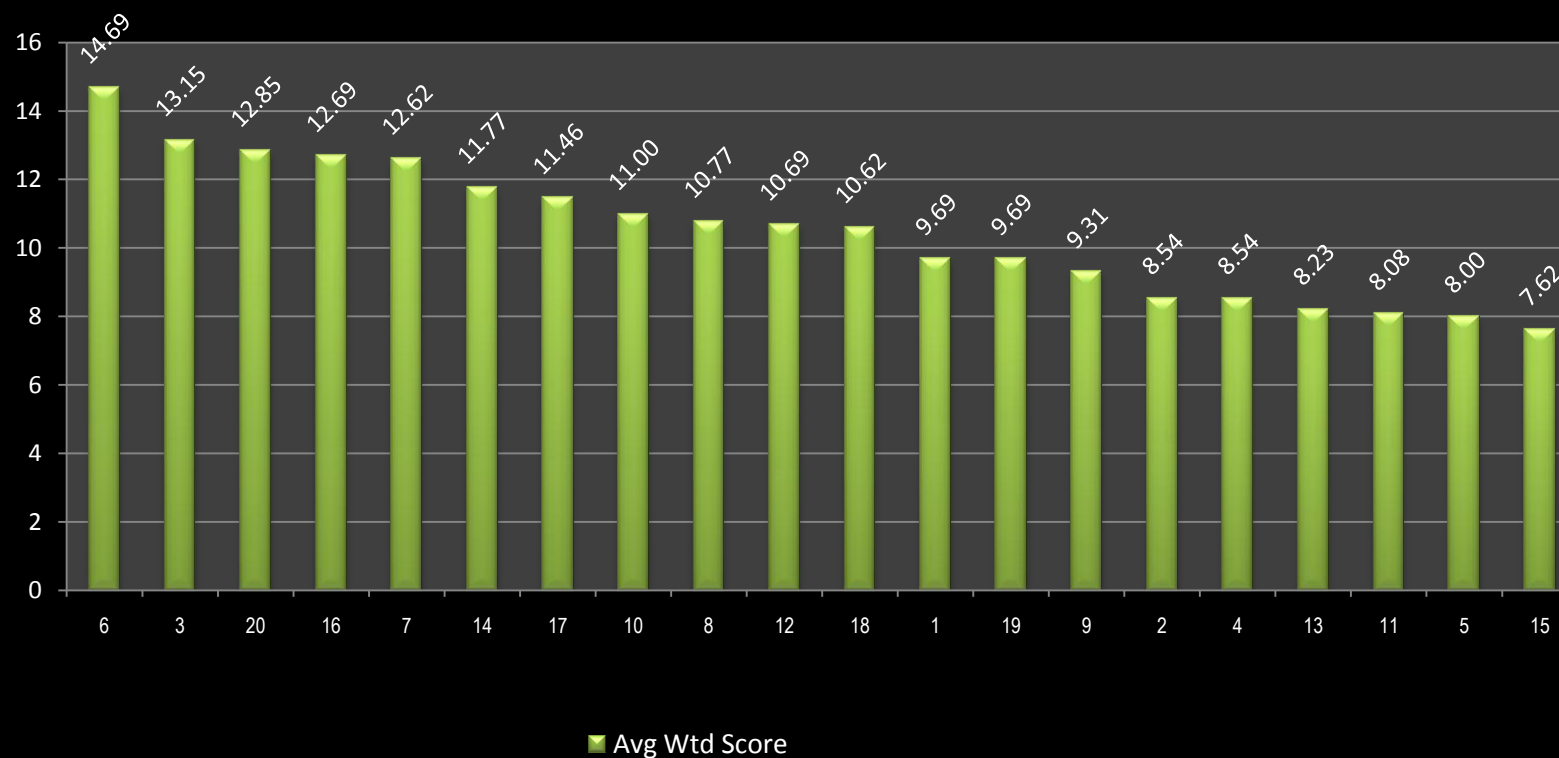


Chart Data - by Issue

Issue	Avge Score
1	9.69
2	8.54
3	13.15
4	8.54
5	8.00
6	14.69
7	12.62
8	10.77
9	9.31
10	11.00
11	8.08
12	10.69
13	8.23
14	11.77
15	7.62
16	12.69
17	11.46
18	10.62
19	9.69
20	12.85

Chart Data - by Score

Issue	Avge Score
6	14.69
3	13.15
20	12.85
16	12.69
7	12.62
14	11.77
17	11.46
10	11.00
8	10.77
12	10.69
18	10.62
1	9.69
19	9.69
9	9.31
2	8.54
4	8.54
13	8.23
11	8.08
5	8.00
15	7.62

A weighting from 20 to 1 in order of importance has been assigned to the selections made, then divided by the number of responses to arrive at the average weighted score.

Example:

No participant gave a ranking of 1 ('most urgent') to Issue (6), 5 gave a ranking of 2, and so on.

A weighting of 20 is applied to those ranked 1, 19 to those ranked 2, etc.

Weighted Score = $20 \times 0 + 19 \times 5 + 18 \times 0 + 17 \times 3 + \dots + 4 \times 0 + 3 \times 1 + 2 \times 0 + 1 \times 0$

Average Weighted Score = $\frac{\text{Weighted Score}}{12}$

Rank	Issues																			
1	1	0	1	2	0	0	2	0	1	0	0	0	0	2	0	1	0	1	0	2
2	0	0	1	0	1	5	0	0	0	1	0	0	2	0	0	2	0	0	0	1
3	0	1	0	0	1	0	1	3	0	1	0	1	1	2	1	0	1	0	0	0
4	0	1	1	0	0	3	1	1	0	0	0	2	0	1	1	0	0	1	1	0
5	2	0	1	0	1	1	0	0	0	1	1	0	1	0	0	2	1	0	1	1
6	0	0	1	0	0	0	3	0	0	0	2	1	0	0	1	0	3	0	0	2
7	0	0	1	0	0	1	0	2	1	1	0	2	0	0	0	2	1	2	0	0
8	0	0	2	0	1	0	1	1	1	2	0	1	0	0	0	0	0	2	1	1
9	0	1	0	2	0	0	0	0	3	1	0	1	0	0	0	1	1	1	1	1
10	1	2	2	2	1	0	1	0	0	0	0	0	0	0	0	1	1	2	0	0
11	3	0	1	0	0	0	1	0	1	0	2	0	0	2	0	0	0	0	3	0
12	2	1	0	1	0	0	0	1	0	1	0	0	0	2	1	0	0	0	2	2
13	0	1	1	0	0	0	0	0	1	1	1	0	1	1	1	1	3	0	1	0
14	1	1	0	0	0	1	0	0	0	1	1	1	1	1	3	0	0	1	0	1
15	0	1	0	0	2	0	0	2	0	1	2	0	0	1	0	2	0	0	0	2
16	1	0	0	2	0	1	1	0	2	1	0	0	2	0	1	0	1	0	1	0
17	0	1	1	0	2	0	1	1	2	0	0	1	1	0	0	1	1	0	1	0
18	0	2	0	1	0	1	0	0	0	1	4	2	0	0	0	0	0	1	1	0
19	1	1	0	0	3	0	0	1	1	0	0	1	2	0	2	0	0	1	0	0
20	1	0	0	3	1	0	1	1	0	0	0	0	2	1	2	0	0	1	0	0
All	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
Weighted Score	126	111	171	111	104	191	164	140	121	143	105	139	107	153	99	165	149	138	126	167
Avg Wt'd Score	9.69	8.54	13.15	8.54	8.00	14.69	12.62	10.77	9.31	11.00	8.08	10.69	8.23	11.77	7.62	12.69	11.46	10.62	9.69	12.85

AC⁺erm Output

Process Facet – Delphi Study – Round 3 – Proposed Solutions

Background In Round 3, the participants were provided with a list of the issues identified in the previous rounds, collated into 12 groups. The order in which the issues were listed was a reflection of the Round 2 rankings.

Participants were asked to suggest, from their own knowledge and experience, solutions either to try or to avoid, expanding on the contexts in which the solutions had worked, could have worked better, or had not worked. They were also invited to add solutions to any other relevant issues that they felt were not covered under the 12 sets presented in the questionnaire.

Nature of Output Summary of solutions proposed to the issues identified and prioritized in Rounds 1–3 (text).

This output consists of the questions put to the participants and the summary of their responses. While compiling the latter, it became clear that the solutions focused as much on the human as on the process aspects of electronic records management; the solutions are therefore split along these lines in the summary.

The questionnaires were sent to participants in November 2008 and the summary was compiled in January 2009.

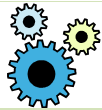
Process Facet Delphi Study – Round 1 – List of questions / issues presented to participants

- 1 Organisation-level RM policies and infrastructure need to be established for e-records management**
 - Organisation-level records management policies (Ranked 1)
 - Development of the records management infrastructure is needed before e-records management / e-records management systems implementation (Ranked 2)
- 2 The need for non-IT processes to conduct business in the e-environment should be recognised**
 - Processes other than IT processes are also needed to conduct business in the digital environment (Ranked 3)
- 3 e-Records management needs to be seen in the context of business risk and risk management**
 - Risk and risk management (Ranked 5)
- 4 e-Records are created in different business processes and maintained in multiple systems. Organisations need to manage this records environment in an integrated way**
 - e-Records management is integrated with business processes and systems (Ranked 6)
 - ERM systems have focused on managing standard office documents (Emergent issue)
- 5 How can we improve recordkeeping processes for e-records?**
 - Records management processes are poor or lacking (Ranked 4)
 - The e-environment has caused the breakdown of records management / recordkeeping (Ranked Joint 10)
- 6 Organisations need to develop and implement a preservation strategy for e-records**
 - Preservation of e-records (Ranked 9)
- 7 The relationship between privacy, security and access needs to be understood and managed**
 - Data privacy and security in the e-environment (Ranked 7)
 - Access to records in the e-environment (Ranked 13)
- 8 Organisations need to recognise where the e-environment creates new processes / affects existing processes and need to manage this**
 - The e-environment creates new business processes / affects existing processes (Ranked 14)
 - The e-environment creates new records management processes / affects existing processes (Ranked 8)
 - The e-environment creates new legal processes / affects existing processes (Ranked 16)
- 9 Which RM principles and / or methods need defining or developing for e-records management and how?**
 - Traditional principles and methods are appropriate to manage e-records (Ranked 11)
 - e-Records management needs redefinition of principles and development of new methods (Ranked 17)

- 10 Organisations need to recognise which business processes need analysing and / or re-engineering for e-records management and implement the outcome**
- IT is used to automate business processes (Ranked 12)
 - IT is used to re-engineer business processes (Ranked 15)
 - Business process analysis / re-engineering is needed before e-records management / e-records management systems implementation (Ranked Joint 18)
- 11 The nature, development and / or organisational use of standards and national strategies needs to be effective**
- National strategies for information management / records management (Ranked 19)
 - The plethora of standards (Ranked 20)
- 12 Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications**
- Processes for new technologies (Emergent issue)
 - SaaS (software as a service) / cloud computing enables individuals and organisations to create and store information/records outside the organisational IT infrastructure (Emergent issue)
- 13 Any other solution(s) that you think should be tried, or avoided, that does not fit in with the above issues but should be included at this stage**

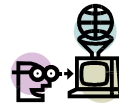


1. Organisation-level RM policies & infrastructure need to be established for e-records management



Process-focused solutions

- Develop a holistic vision & approach for RM/ERM across the enterprise
- Make specific staff representatives accountable for ERM policy implementation
- Assign lead responsibility to RM professionals
- Obtain organisational vision, support and commitment for needs of whole ERM life-cycle
- Do not depend on end users to carry out recordkeeping tasks
- Manage retention with less granularity ('big buckets'/ fewer categories)
- Manage information structure by use of a corporate file-plan (classification scheme)
- Do not use an EDRMS to carry out ERM
- Accept the need for change management
- Pilot ERM policy implementation



People-focused solutions

- ❖ Obtain organisational commitment
- ❖ Develop a clear, corporate vision
- ❖ Obtain corporate / senior management support to establish and implement policies
- ❖ Define clear roles and responsibilities
- ❖ Make staff representatives accountable for RM within business areas
- ❖ Involve users in establishing policies
- ❖ Avoid involvement of atypical users in establishing policies
- ❖ Create staff ownership
- ❖ Produce usable policies
- ❖ Avoid devolution of recordkeeping responsibilities to users
- ❖ Avoid dependence on staff actions for recordkeeping
- ❖ Obtain IT professionals' support of RM policies
- ❖ Involve users in implementing policies
- ❖ Use staff meetings and discussions for implementing policies/infrastructure
- ❖ Recognise people's finite capacity for change
- ❖ Create a no-blame culture
- ❖ Use a non -aggressive approach to implementing policies
- ❖ Train staff when implementing policies/infrastructure
- ❖ Increase staff understanding of RM principles
- ❖ Provide user guidance for implementing policies/infrastructure



2. The need for non-IT processes to conduct business in the e-environment should be recognised



Process-focused solutions

- Plan for non-IT processes at a strategic level

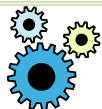


People-focused solutions

- ❖ Understand staff roles in the e-environment
- ❖ Integrate responsibilities between IT and RM professionals
- ❖ Establish mutual understanding between IT and RM professionals
- ❖ Train IT professionals on non-IT processes
- ❖ Use specialist staff expertise (e.g. business analysts, super users)
- ❖ Raise staff awareness of their business conduct responsibilities



3. E-records management needs to be seen in the context of business risk & risk management ↑



Process-focused solutions

- Identify the business benefits of RM/ERM
- Ascertain organisational appetite for risk
- Include RM in all business and risk management activities
- Assign lead responsibility to IT forensic specialists
- Link risk assessment to assessment of impact on working practices

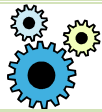


People-focused solutions

- ❖ Obtain senior management recognition of link between records and risk
- ❖ Train about risks
- ❖ Involve users in risk management



**4. E-records are created in different business processes and maintained in multiple systems.
Organisations need to manage this records environment in an integrated way**



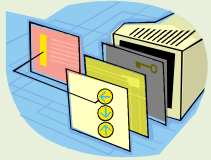
Process-focused solutions

- Embed RM in line-of-business and desktop systems
- Restrict use of new media/technology within the business environment
- Adopt centralised recordkeeping policies and procedures
- Use a sophisticated search engine across all different systems
- Adopt a centralised recordkeeping system
- Clarify record status of information within new technologies

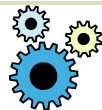


People-focused solutions

- ❖ Undertake planning and systems analysis by a person outside of the systems, but in close collaboration with stakeholder groups
- ❖ Involve fully all stakeholder groups
- ❖ Manage departmental politics and bias, and obtain departmental buy in
- ❖ Raise staff awareness about records in multiple formats

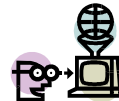


5. How can we improve recordkeeping processes for e-records?



Process-focused solutions

- Apply ERM methodology appropriate to the e-environment rather than processes developed for paper records
- Treat improvement as a continual rather than single activity
- Accept and work with IT rather than blaming it for problems
- Use robust systems from reputable vendors, with post-implementation back-up service
- Encourage greater formality in e-communications (particularly email)
- Manage information at the level of linked items (e.g. information threads) rather than folders to improve access and disposal processes
- Create clear rules and simple processes for managing email
- Treat formal (or important) and informal (or non-important) recordkeeping environments differently
- Automate records flow between staff
- Maintain quality of e-recordkeeping by audit trails and sign offs
- Use checklists and automated signals/flags to ensure that e-recordkeeping processes are carried out as required



People-focused solutions

- ❖ Raise CEO awareness of their ultimate responsibility for the state of recordkeeping across the organisation
- ❖ Obtain senior managers' recognition of the importance of RM to successful business practices
- ❖ Raise staff awareness of their recordkeeping responsibilities
- ❖ Produce usable e-recordkeeping processes
- ❖ Produce easy to follow e-recordkeeping processes
- ❖ Monitor and assess staff's recordkeeping activities



6. Organisations need to develop and implement a preservation strategy for e-records



Process-focused solutions

- Include preservation in the RM strategy
- Use lead government agencies and systems vendors to help
- Follow national/international preservation strategies, don't draw up your own
- Develop global not local preservation policies
- Storage management needs to include management, integrity, and usability over time
- Use VERS-compliant recordkeeping systems
- Provide mechanisms and tools to implement preservation strategies
- Embed seamlessly preservation processes in working practices
- Capture and maintain preservation-based metadata, with the record, and for the life of the record
- Restrict saving records to designated locations where they can be easily backed up and preserved

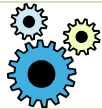


People-focused solutions

- ❖ Designate a staff member with responsibility for carrying out preservation processes at the end of a project/task



7. The relationship between privacy, security and access needs to be understood and managed



Process-focused solutions

- Take a holistic rather than a silo-based approach
- Recognise that privacy and security are not the same thing
- Address human behaviour which causes the main failings
- Do not use a 'big stick' approach, as it will result in only grudging compliance
- Develop solutions to suit needs of business users not the IT department
- Apply access controls only where really necessary (e.g. to personal and sensitive information)
- Use IT-based access restrictions including inheritance of security settings
- Prohibit the copying of information & removal of files from the workplace; provide direct access through good network connectivity and technology
- Identify sensitive / personal information via a data audit

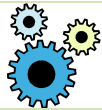


People-focused solutions

- ❖ Recognise that the main weakness in systems is human
- ❖ Establish partnership working between RM and information security professionals
- ❖ Train staff on records/information issues
- ❖ Train staff on Data Protection legislation
- ❖ Establish staff understanding of the need for retention

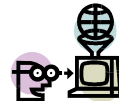


8. Organisations need to recognise where the e-environment creates new processes / affects existing processes and need to manage this



Process-focused solutions

- Incorporate/Include RM analysis at design/development phase
- Educate staff calmly rather than being alarmist about impacts on processes

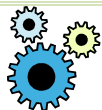


People-focused solutions

- ❖ Establish partnership working between RM, IT and business professionals in process analysis
- ❖ Involve staff in process analysis
- ❖ Educate staff calmly, rather than being alarmist about impacts on processes



9. RM principles and/or methods need defining or developing for e-records management



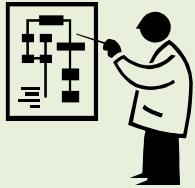
Process-focused solutions

- Review effectiveness of RM methods by staff member with both RM and IT expertise
- Review the need to revise traditional RM principles
- Continue using traditional RM methods
- Review the need to revise traditional RM methods
- Use new techniques/tools (not methods) {e.g. managing information at the level of linked items rather than files/folders}
- Raise awareness about new ideas on RM principles/RM methods with records professionals

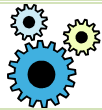


People-focused solutions

- ❖ Review effectiveness of RM methods by staff member with both RM and IT expertise
- ❖ Review effectiveness of RM methods by partnership working between RM and IT professionals
- ❖ Involve users in reviewing effectiveness of RM methods
- ❖ Undertake change management for RM professionals
- ❖ Raise RM professionals' awareness of new ideas on ERM



10. Organisations need to recognise which business processes need analysing and/or re-engineering for e-records management and implement the outcome



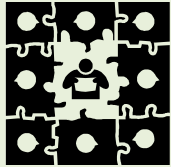
Process-focused solutions

- Examine business processes to identify need for re-engineering using information governance as the starting point
- Examine business processes to identify need for re-engineering using information applications audit
- Assess business processes before ERMS/systems implementation
- Avoid just automating existing processes
- Design file-plan to be practical and user focussed

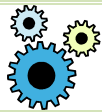


People-focused solutions

- ❖ Establish partnership working between RM, IT and business professionals in business process analysis
- ❖ Consult with staff on business process re-engineering at all phases (analysis, piloting, testing)
- ❖ Raise staff awareness about the need for new processes
- ❖ Train staff on the new processes when implementing re-engineered business processes
- ❖ Consider the human element in business processes - be realistic



11. The nature, development and/or organisational use of standards and national strategies needs to be effective



Process-focused solutions

- Implement standards selectively / in simplified form
- Align organisational standards with jurisdictional standards
- Align organisational standards with national standards
- Align organisational standards with international standards
- Link RM standards with national RM strategies, and analyse their use
- Consider if a new standard is really necessary or encompassed in existing standards
- Understand the link between national RM strategies and ERM within organisations

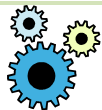


People-focused solutions

- ❖ Obtain and incorporate end-user views when developing standards
- ❖ Develop usable standards

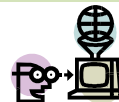


12. Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications



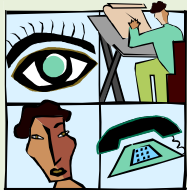
Process-focused solutions

- Pressurise vendors to develop practical solutions
- Use risk management to align RM with business context/strategies
- Develop the RM strategy to incorporate new technologies
- Develop policies on use of new technology based on research evidence
- Build RM requirements into the implementation life-cycle of new technologies

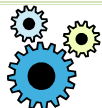


People-focused solutions

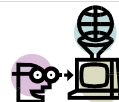
- ❖ Communicate with staff (top down to all levels) when implementing policies on new technology
- ❖ Regularly assess staff use of policies on new technology



13. Any other solution(s) that you think should be tried, or avoided, that does not fit in with the above issues but should be included at this stage



Process-focused solutions

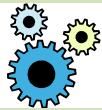


People-focused solutions

- ❖ Recognise staff willingness/unwillingness to use procedures

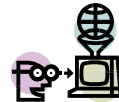


14. Cross-cutting solutions applicable to many different issues



Process-focused solutions

- Build RM/ERM strategies, policies and frameworks to serve and integrate with business needs
- Invest in and exploit the e-environment and existing technology for ERM purposes
- Allocate sufficient and formally identified resources (finance and time) for needs of whole ERM life-cycle
- Design frameworks, policies and rules that are usable and pragmatic
- Policies and procedures should be clear, explicit and enforceable
- Responsibilities and accountability should be clear, explicit and enforceable
- Ensure all policies, processes and procedures, and all changes to same, are documented and published
- Consult and involve users when analysing and implementing RM strategies, policies, frameworks and systems
- Make compliance with RM policies mandatory
- Monitor and audit recordkeeping activities
- Focus ERM on important and valued information/records



People-focused solutions

- ❖ Undertake change management
- ❖ Train staff on recordkeeping processes
- ❖ Produce user manuals for recordkeeping processes

AC⁺erm Output

Process Facet Delphi Study – Round 4 – Exploration of Solutions

Background In Round 4, participants were asked to explore the ‘bigger picture’ by looking at five avenues that had emerged from the previous rounds on issues and solutions.

Nature of Output This output consists of the questions put to the participants. The responses to Round 4 fed into the final (survey) round, and into the phenomenological analyses provided in a separate publication.
The questionnaires were sent to the participants in November 2008.

Process Facet Delphi Study – Round 4 – List of questions presented to participants

1 The human angle – solving the process issues means solving the people issues

- Can we separate out people from processes? Many of the ERM process issues and their potential solutions highlight the need to consider the human element. We mustn't forget people, their interests and motivators. We need to be realistic. We need to invest in change management, but recognise the finite capacity of humans to want to change. So, to tackle the process issues in managing electronic information and records do we need to start with people? Can we? Is this the only way to make progress?

2 'Big buckets' vs structured cyberspace – search vs classify

- We can manage e-records by storing them in 'big buckets' in cyberspace, tagging them and using sophisticated search software to find and interpret them in context. We don't need processes to structure and organise them in cyberspace.... or do we?

3 Control vs freedom – herding cats

- RM processes and procedures are based on the philosophy of control, reflecting how records managers work and how they want people to work (not how they actually work). Is this appropriate? Should we restrict the use of new technologies in the business context to ensure control or is this approach doomed to failure when individuals and organisations have, and expect, new ways of working? Do we need a strategic approach to their use or do we allow their use to emerge? How can we manage behaviour and balance control with freedom, and the need to grasp opportunities quickly?

4 Driven by business, not by IT or RM – in search of a business-centred approach

- ERM policies and processes should be business-driven and pragmatic. They should be aligned with, and integrated into, the overall business strategy; not IT- or RM-driven. The development of new methods, and possibly the redefinition of principles, for managing records should start with new thinking driven by business needs. How can we make this happen?

5 Taking a risk management approach

- Yesterday's world wasn't perfect so why should tomorrow's be perfect? We need to develop solutions that are fit-for-purpose, not perfect, taking account of the bigger picture. The pace of change and the information explosion demand we make choices and take risks. We can manage risks to seize new opportunities (e.g. ideas) *and* to mitigate adverse effects (e.g. data storage & loss). To what extent can we – should we – adopt a risk management mentality to managing e-records? What does this mean for developing suitable processes to ensure records are appropriately managed?

AC⁺erm Output

Process Facet Delphi Study – Round 5 – Survey to evaluate proposed solutions

Background In Round 5, participants were asked to complete an online survey to evaluate the solutions proposed in the previous two rounds. They were asked to consider whether the solutions to the issues were highly desirable, definitely feasible, would have a high impact, or would need immediate action.

The questions were split between two surveys, one dealing with the purely process aspects of the issues and solutions, the second, with the human aspects.

The list of solutions for each issue was prefaced in each case with the following text:

“Assuming an ideal world—disregarding all constraints—and from your experience and perspective, please rank all of the solutions against each aspect on the scale ('Strongly agree' to 'Strongly disagree') as per the drop-down menus.”

The surveys were carried out in November 2008.

Nature of Output Survey results (tables and charts).

This output consists of the collated results of the survey. This was originally compiled in January 2009.

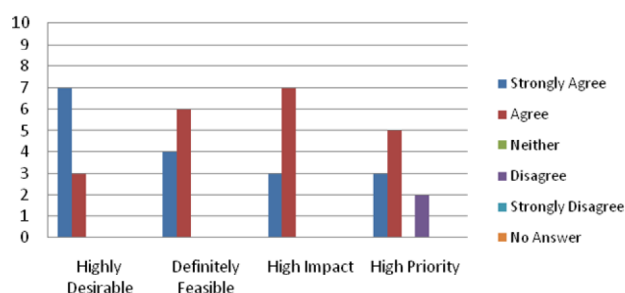
Process Facet Delphi Study – Round 5 – Evaluation of Solutions – Process Aspects**Issue 1: Organisation-level RM policies and infrastructure need to be established for e-records management**

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
1.01	Develop a holistic vision & approach for RM/ERM across the enterprise	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	30%	70%	0%	0%	0%	0%	100%
		High Priority	30%	50%	0%	20%	0%	0%	100%
1.02	Make specific staff representatives accountable for ERM policy implementation	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	60%	40%	0%	0%	0%	0%	100%
		High Impact	10%	80%	0%	10%	0%	0%	100%
		High Priority	40%	50%	0%	10%	0%	0%	100%
1.03	Assign lead responsibility to RM professionals	Highly Desirable	30%	30%	30%	10%	0%	0%	100%
		Definitely Feasible	20%	70%	10%	0%	0%	0%	100%
		High Impact	10%	40%	40%	10%	0%	0%	100%
		High Priority	20%	50%	20%	10%	0%	0%	100%
1.04	Obtain organisational vision, support and commitment for needs of whole ERM life-cycle	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	40%	10%	10%	0%	0%	100%
		High Impact	20%	60%	10%	10%	0%	0%	100%
		High Priority	30%	70%	0%	0%	0%	0%	100%
1.05	Do not depend on end users to carry out recordkeeping tasks	Highly Desirable	40%	0%	10%	50%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	20%	30%	40%	10%	0%	0%	100%
		High Priority	20%	10%	40%	30%	0%	0%	100%
1.06	Manage retention with less granularity ('big buckets'/ fewer categories)	Highly Desirable	40%	30%	20%	10%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	30%	40%	20%	10%	0%	0%	100%
		High Priority	20%	40%	20%	20%	0%	0%	100%

Issue 1: Organisation-level RM policies & infrastructure need to be established for e-records management

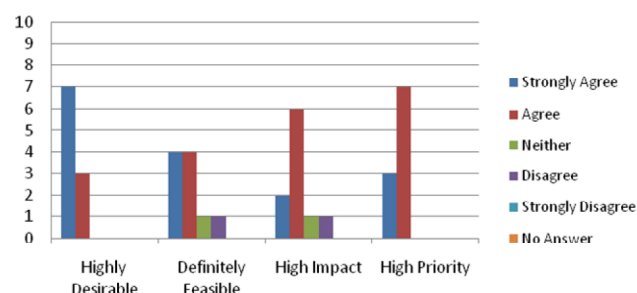
Issue 1.01

Develop a holistic vision & approach for RM/ERM across the enterprise



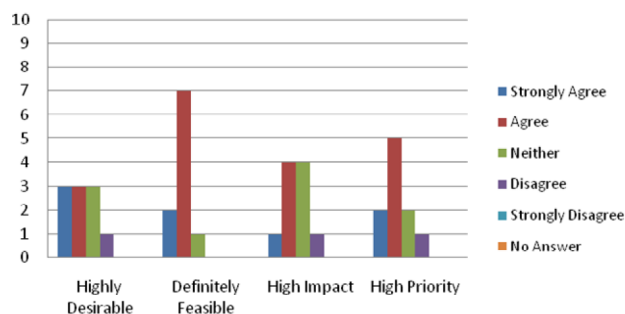
Issue 1.04

Obtain organisational vision, support and commitment for needs of whole ERM life-cycle



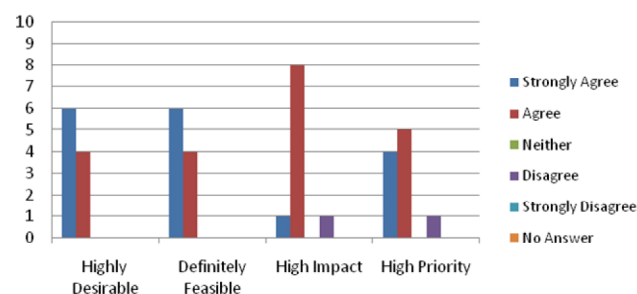
Issue 1.03

Assign lead responsibility to RM professionals



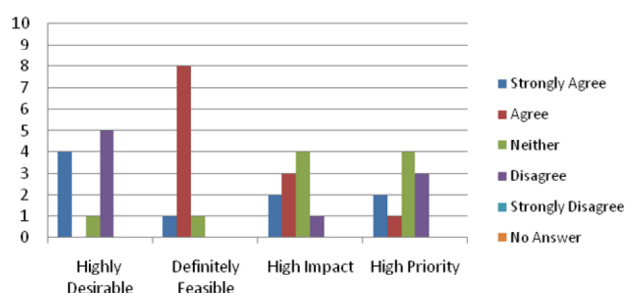
Issue 1.02

Make specific staff representatives accountable for ERM policy implementation



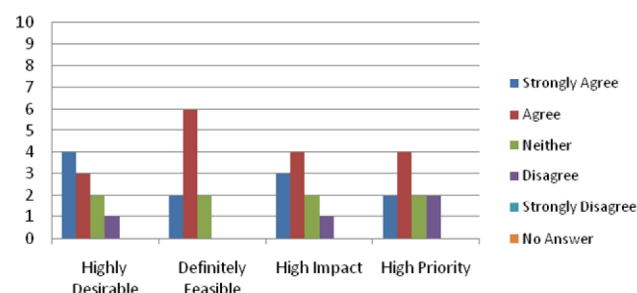
Issue 1.05

Do not depend on end users to carry out recordkeeping tasks



Issue 1.06

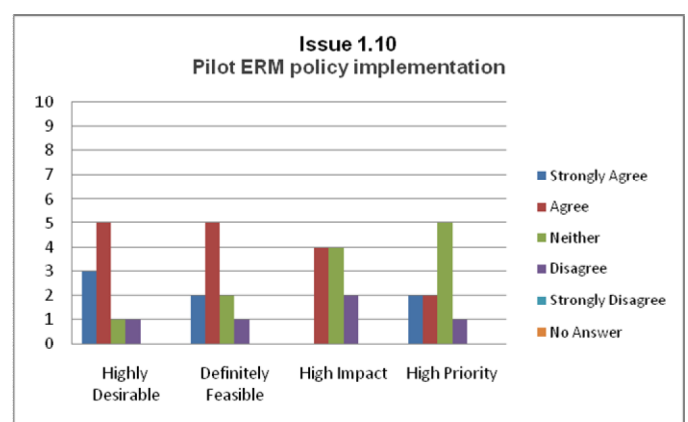
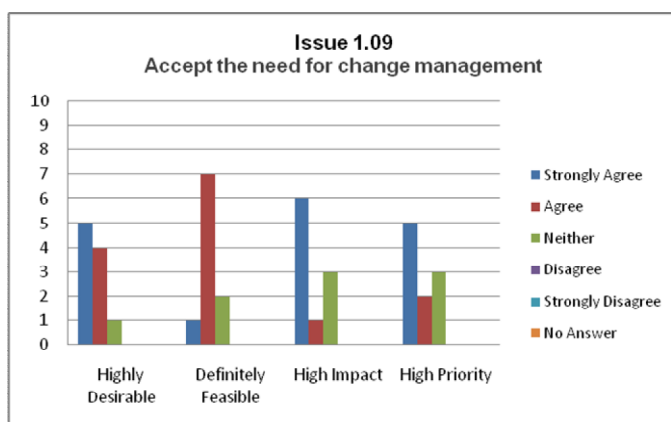
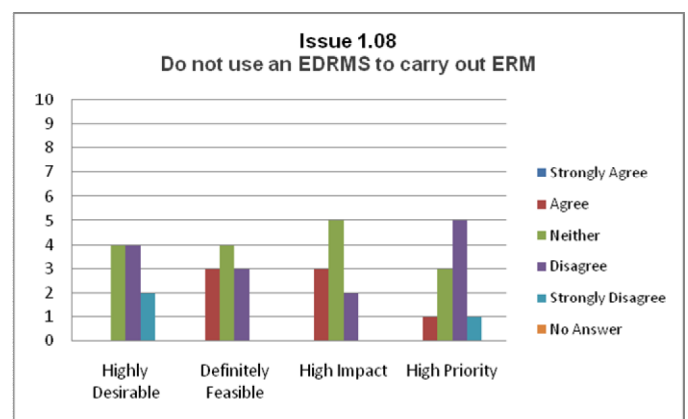
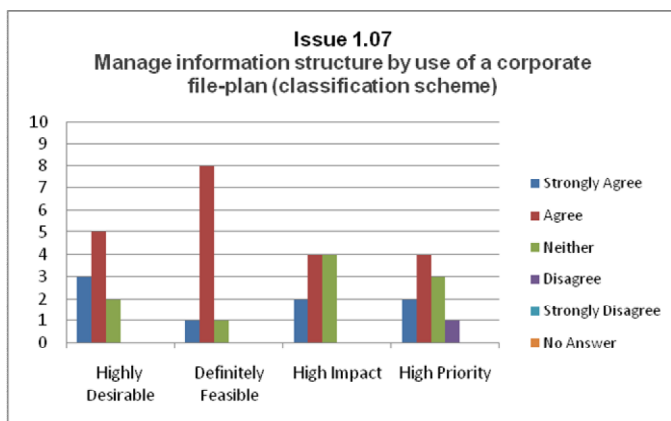
Manage retention with less granularity ('big buckets'/ fewer categories)



Issue 1 (cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
1.07	Manage information structure by use of a corporate file-plan (classification scheme)	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	30%	70%	0%	0%	0%	0%	100%
		High Priority	30%	50%	0%	20%	0%	0%	100%
1.08	Do not use an EDRMS to carry out ERM	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	60%	40%	0%	0%	0%	0%	100%
		High Impact	10%	80%	0%	10%	0%	0%	100%
		High Priority	40%	50%	0%	10%	0%	0%	100%
1.09	Accept the need for change management	Highly Desirable	30%	30%	30%	10%	0%	0%	100%
		Definitely Feasible	20%	70%	10%	0%	0%	0%	100%
		High Impact	10%	40%	40%	10%	0%	0%	100%
		High Priority	20%	50%	20%	10%	0%	0%	100%
1.10	Pilot ERM policy implementation	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	40%	10%	10%	0%	0%	100%
		High Impact	20%	60%	10%	10%	0%	0%	100%
		High Priority	30%	70%	0%	0%	0%	0%	100%

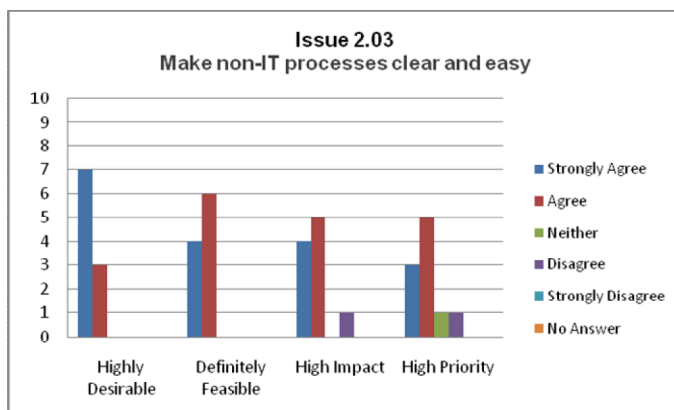
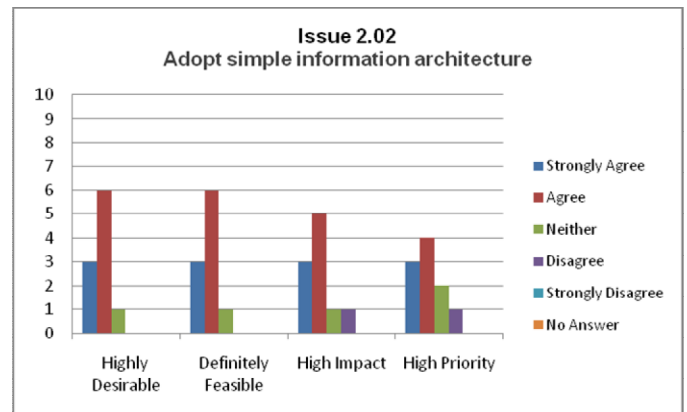
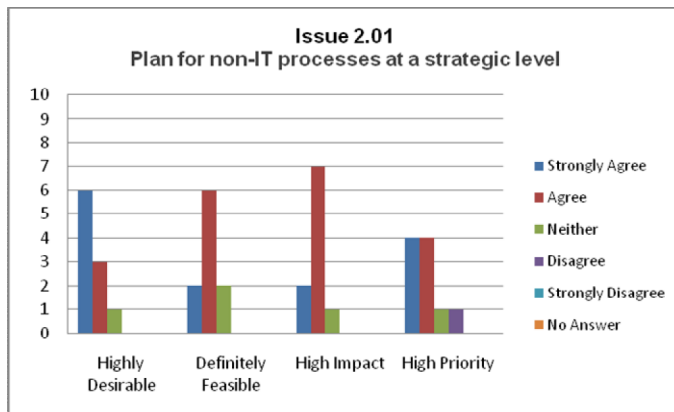
Issue 1 (Cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management



Issue 2: The need for non-IT processes to conduct business in the e-environment should be recognised

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
2.01	Plan for non-IT processes at a strategic level	Highly Desirable	60%	30%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	20%	70%	10%	0%	0%	0%	100%
		High Priority	40%	40%	10%	10%	0%	0%	100%
2.02	Adopt simple information architecture	Highly Desirable	30%	60%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	30%	50%	10%	10%	0%	0%	100%
		High Priority	30%	40%	20%	10%	0%	0%	100%
2.03	Make non-IT processes clear and easy	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	40%	50%	0%	10%	0%	0%	100%
		High Priority	30%	50%	10%	10%	0%	0%	100%

Issue 2: The need for non-IT processes to conduct business in the e-environment should be recognised

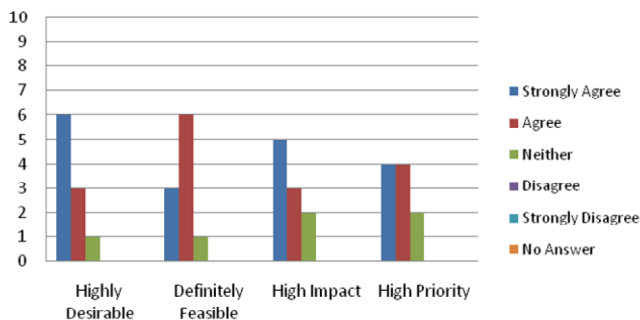


Issue 3: e-Records management needs to be seen in the context of business risk and risk management

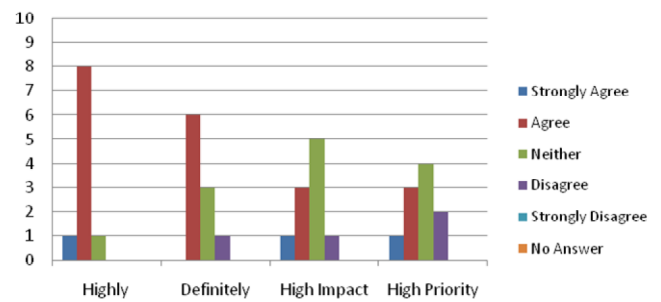
Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
3.01	Identify the business benefits of RM/ERM	Highly Desirable	60%	30%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	50%	30%	20%	0%	0%	0%	100%
		High Priority	40%	40%	20%	0%	0%	0%	100%
3.02	Ascertain organisational appetite for risk	Highly Desirable	10%	80%	10%	0%	0%	0%	100%
		Definitely Feasible	0%	60%	30%	10%	0%	0%	100%
		High Impact	10%	30%	50%	10%	0%	0%	100%
		High Priority	10%	30%	40%	20%	0%	0%	100%
3.03	Include RM in all business and risk management activities	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	50%	0%	20%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	10%	60%	30%	0%	0%	0%	100%
3.04	Assign lead responsibility to IT forensic specialists	Highly Desirable	0%	30%	40%	20%	10%	0%	100%
		Definitely Feasible	0%	30%	60%	10%	0%	0%	100%
		High Impact	0%	20%	70%	10%	0%	0%	100%
		High Priority	0%	20%	70%	10%	0%	0%	100%
3.05	Link risk assessment to assessment of impact on working practices	Highly Desirable	20%	80%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	10%	40%	50%	0%	0%	0%	100%

Issue 3: e-Records management needs to be seen in the context of business risk and risk management

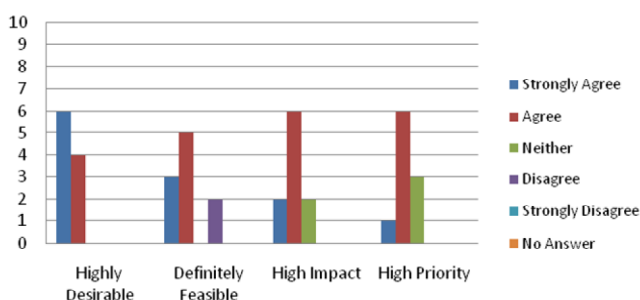
Issue 3.01
Identify the business benefits of RM/ERM



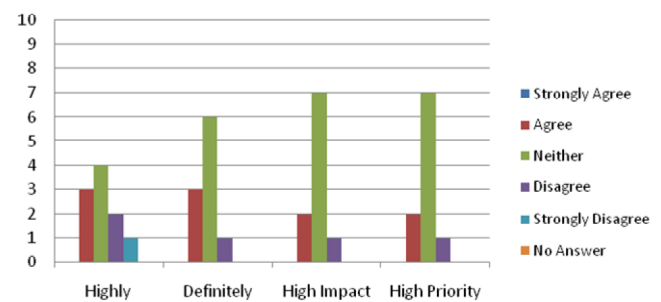
Issue 3.02
Ascertain organisational appetite for risk



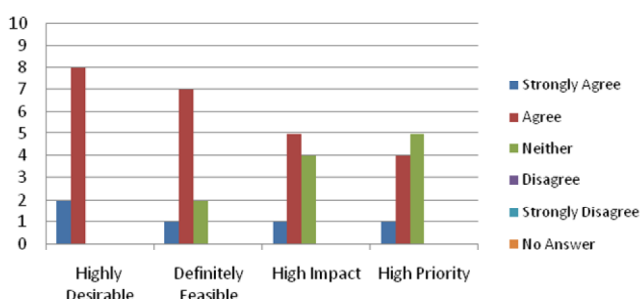
Issue 3.03
Include RM in all business and risk management activities



Issue 3.04
Assign lead responsibility to IT forensic specialists



Issue 3.05
Link risk assessment to assessment of impact on working practices

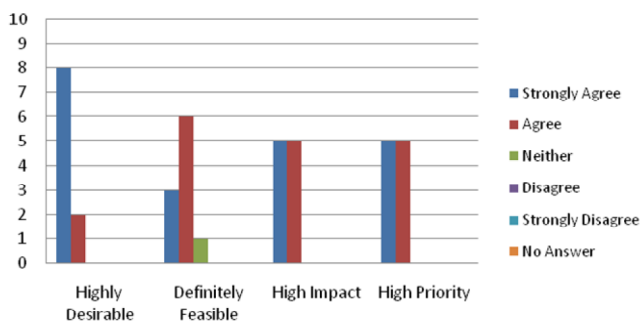


Issue 4: e-Records are created in different business processes and maintained in multiple systems. Organisations need to manage this records environment in an integrated way

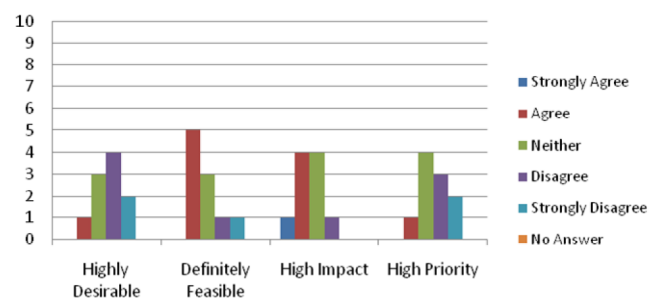
Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
4.01	Embed RM in line-of-business and desktop systems	Highly Desirable	80%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	50%	50%	0%	0%	0%	0%	100%
		High Priority	50%	50%	0%	0%	0%	0%	100%
4.02	Restrict use of new media/technology within the business environment	Highly Desirable	0%	10%	30%	40%	20%	0%	100%
		Definitely Feasible	0%	50%	30%	10%	10%	0%	100%
		High Impact	10%	40%	40%	10%	0%	0%	100%
		High Priority	0%	10%	40%	30%	20%	0%	100%
4.03	Adopt centralised recordkeeping policies and procedures	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	70%	0%	10%	0%	0%	100%
		High Impact	10%	70%	20%	0%	0%	0%	100%
		High Priority	20%	50%	20%	10%	0%	0%	100%
4.04	Use a sophisticated search engine across all different systems	Highly Desirable	40%	20%	10%	30%	0%	0%	100%
		Definitely Feasible	0%	50%	40%	10%	0%	0%	100%
		High Impact	10%	30%	30%	30%	0%	0%	100%
		High Priority	10%	40%	20%	30%	0%	0%	100%
4.05	Adopt a centralised recordkeeping system	Highly Desirable	40%	20%	30%	10%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	100%
		High Impact	30%	20%	50%	0%	0%	0%	100%
		High Priority	30%	20%	40%	10%	0%	0%	100%
4.06	Clarify record status of information within new technologies	Highly Desirable	40%	40%	20%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	10%	40%	50%	0%	0%	0%	100%
		High Priority	20%	40%	40%	0%	0%	0%	100%

Issue 4: e-Records are created in different business processes and maintained in multiple systems. Organisations need to manage this records environment in an integrated way

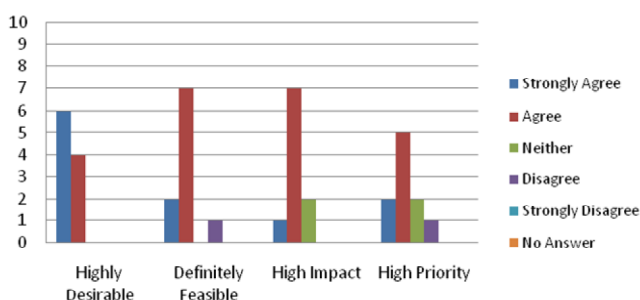
Issue 4.01
Embed RM in line-of-business and desktop systems



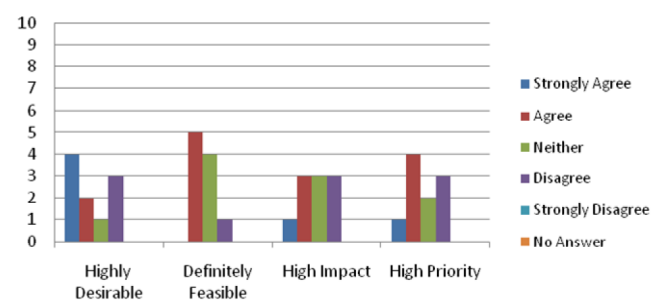
Issue 4.02
Restrict use of new media/technology within the business environment



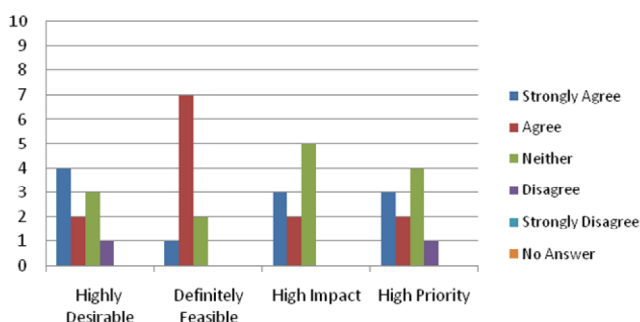
Issue 4.03
Adopt centralised recordkeeping policies and procedures



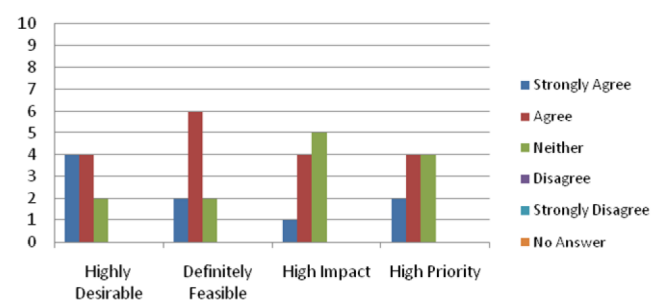
Issue 4.04
Use a sophisticated search engine across all different systems



Issue 4.05
Adopt a centralised recordkeeping system



Issue 4.06
Clarify record status of information within new technologies

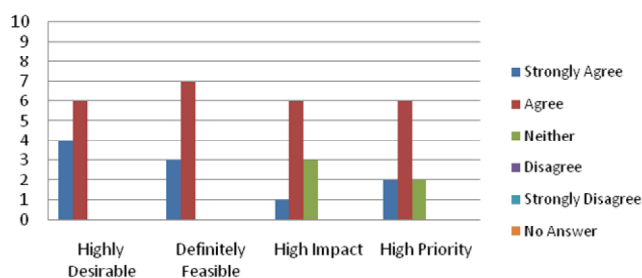


Issue 5: How can we improve recordkeeping processes for e-records?

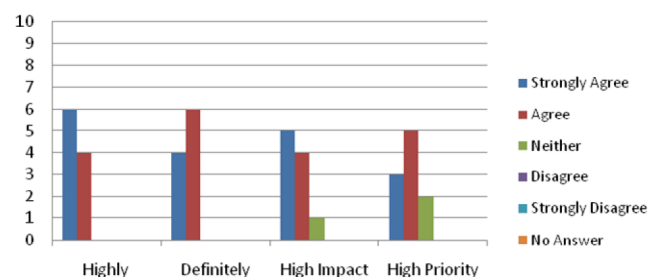
Response break-down Number of participants polled: 19 Number of responses: 10 (9 for 5.03)			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
5.01	Apply ERM methodology appropriate to the e-environment rather than processes developed for paper records	Highly Desirable	40%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	20%	60%	20%	0%	0%	0%	100%
5.02	Treat improvement as a continual rather than single activity	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	50%	40%	10%	0%	0%	0%	100%
		High Priority	30%	50%	20%	0%	0%	0%	100%
5.03	Accept and work with IT rather than blaming it for problems	Highly Desirable	67%	33%	0%	0%	0%	0%	100%
		Definitely Feasible	44%	56%	0%	0%	0%	0%	100%
		High Impact	22%	56%	22%	0%	0%	0%	100%
		High Priority	67%	11%	11%	11%	0%	0%	100%
5.04	Use robust systems from reputable vendors, with post-implementation back-up service	Highly Desirable	60%	20%	20%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	40%	50%	10%	0%	0%	0%	100%

Issue 5: How can we improve recordkeeping processes for e-records?

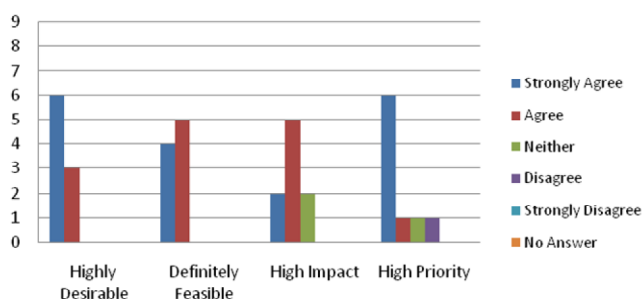
Issue 5.01
Apply ERM methodology appropriate to the e-environment rather than processes developed for paper records



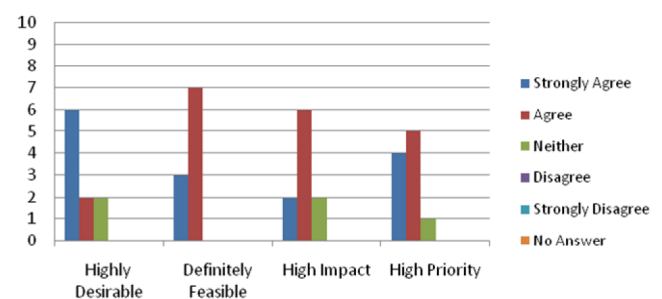
Issue 5.02
Treat improvement as a continual rather than single activity



Issue 5.03
Accept and work with IT rather than blaming it for problems



Issue 5.04
Use robust systems from reputable vendors, with post-implementation back-up service

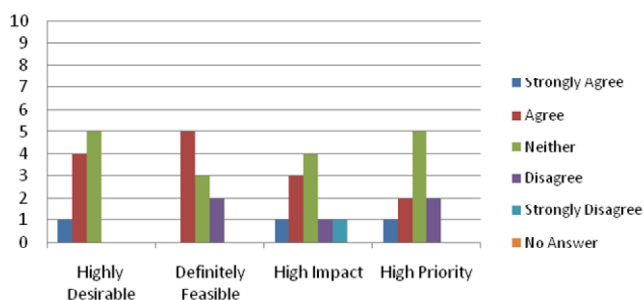


Issue 5 (Cont'd): How can we improve recordkeeping processes for e-records?

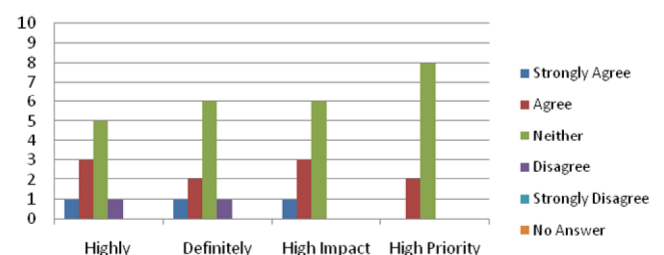
Response break-down Number of participants polled: 19 Number of responses: 10 (9 for 5.03)			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
5.05	Encourage greater formality in e-communications (particularly email)	Highly Desirable	10%	40%	50%	0%	0%	0%	100%
		Definitely Feasible	0%	50%	30%	20%	0%	0%	100%
		High Impact	10%	30%	40%	10%	10%	0%	100%
		High Priority	10%	20%	50%	20%	0%	0%	100%
5.06	Manage information at the level of linked items (e.g. information threads) rather than folders to improve access and disposal processes	Highly Desirable	10%	30%	50%	10%	0%	0%	100%
		Definitely Feasible	10%	20%	60%	10%	0%	0%	100%
		High Impact	10%	30%	60%	0%	0%	0%	100%
		High Priority	0%	20%	80%	0%	0%	0%	100%
5.07	Create clear rules and simple processes for managing email	Highly Desirable	70%	20%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	50%	30%	10%	10%	0%	0%	100%
		High Priority	20%	40%	20%	20%	0%	0%	100%
5.08	Treat formal (or important) and informal (or non-important) recordkeeping environments differently	Highly Desirable	0%	50%	40%	10%	0%	0%	100%
		Definitely Feasible	10%	50%	30%	10%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	0%	40%	60%	0%	0%	0%	100%

Issue 5 (Cont'd): How can we improve recordkeeping processes for e-records?

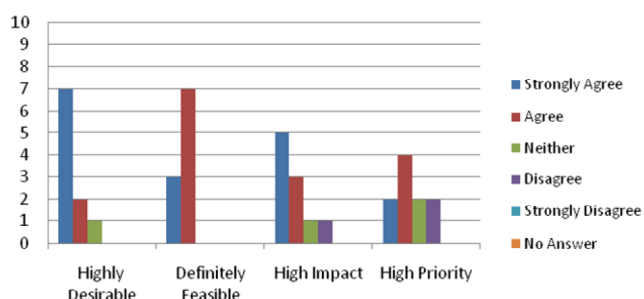
Issue 5.05
Encourage greater formality in e-communications
(particularly email)



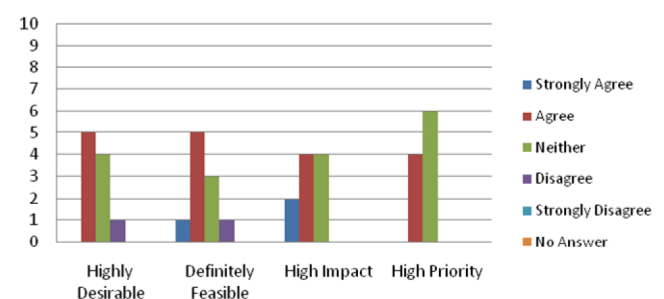
Issue 5.06
Manage information at the level of linked items (e.g.
information threads) rather than folders to improve
access and disposal processes



Issue 5.07
Create clear rules and simple processes for managing
email



Issue 5.08
Treat formal (or important) and informal (or non-
important) recordkeeping environments differently

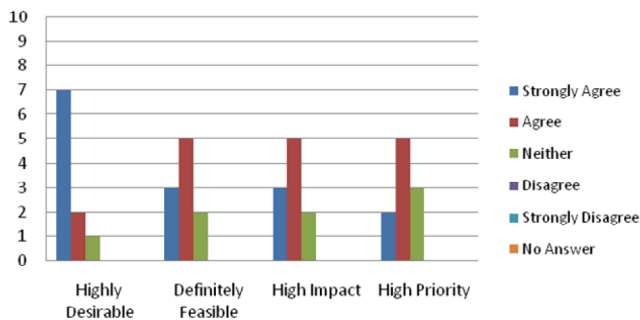


Issue 6: Organisations need to develop and implement a preservation strategy for e-records

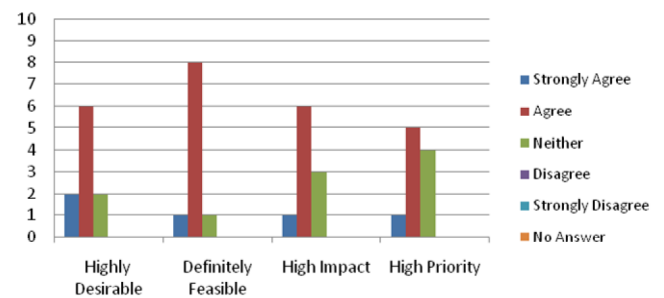
Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
6.01	Include preservation in the RM strategy	Highly Desirable	70%	20%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	50%	20%	0%	0%	0%	100%
		High Impact	30%	50%	20%	0%	0%	0%	100%
		High Priority	20%	50%	30%	0%	0%	0%	100%
6.02	Use lead government agencies and systems vendors to help	Highly Desirable	20%	60%	20%	0%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%
6.03	Follow national/international preservation strategies, don't draw up your own	Highly Desirable	30%	50%	20%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	20%	20%	50%	10%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%
6.04	Develop global not local preservation policies	Highly Desirable	20%	40%	40%	0%	0%	0%	100%
		Definitely Feasible	20%	40%	30%	10%	0%	0%	100%
		High Impact	20%	20%	60%	0%	0%	0%	100%
		High Priority	10%	40%	50%	0%	0%	0%	100%
6.05	Storage management needs to include management, integrity, and usability over time	Highly Desirable	80%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	10%	70%	10%	10%	0%	0%	100%
6.06	VERS-compliant recordkeeping systems	Highly Desirable	10%	30%	50%	10%	0%	0%	100%
		Definitely Feasible	10%	20%	60%	10%	0%	0%	100%
		High Impact	10%	20%	60%	10%	0%	0%	100%
		High Priority	10%	20%	60%	10%	0%	0%	100%

Issue 6: Organisations need to develop and implement a preservation strategy for e-records

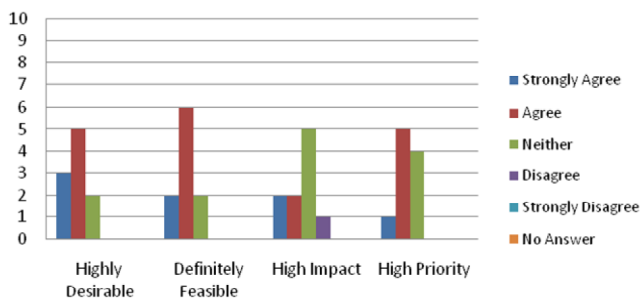
Issue 6.01
Include preservation in the RM strategy



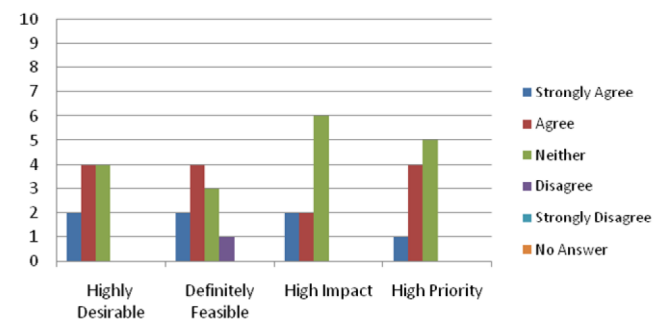
Issue 6.02
Use lead government agencies and systems vendors to help



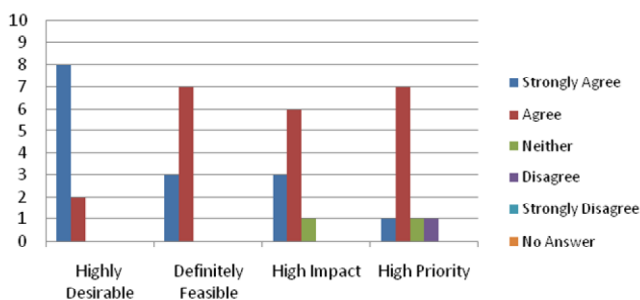
Issue 6.03
Follow national/international preservation strategies, don't draw up your own



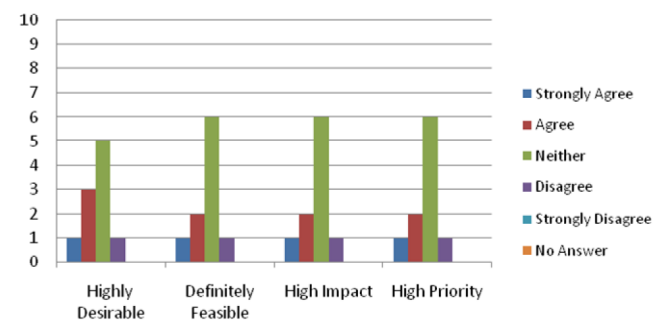
Issue 6.04
Develop global not local preservation policies



Issue 6.05
Storage management needs to include management, integrity, and usability over time



Issue 6.06
VERS-compliant recordkeeping systems

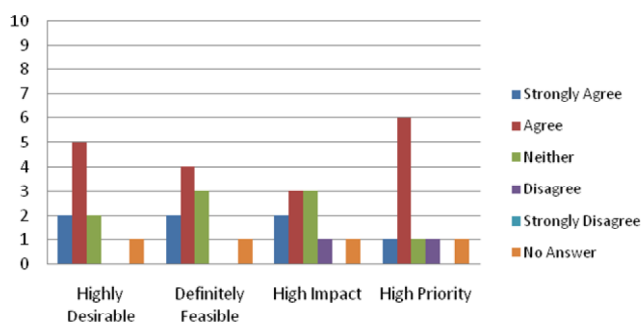


Issue 7: The relationship between privacy, security and access needs to be understood and managed

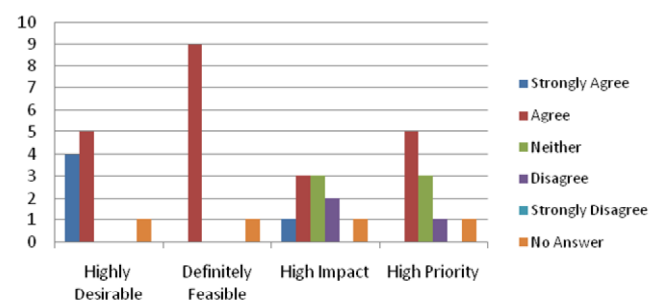
Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
7.01	Take a holistic rather than a silo-based approach	Highly Desirable	20%	50%	20%	0%	0%	10%	100%
		Definitely Feasible	20%	40%	30%	0%	0%	10%	100%
		High Impact	20%	30%	30%	10%	0%	10%	100%
		High Priority	10%	60%	10%	10%	0%	10%	100%
7.02	Recognise that privacy and security are not the same thing	Highly Desirable	40%	50%	0%	0%	0%	10%	100%
		Definitely Feasible	0%	90%	0%	0%	0%	10%	100%
		High Impact	10%	30%	30%	20%	0%	10%	100%
		High Priority	0%	50%	30%	10%	0%	10%	100%
7.03	Address human behaviour which causes the main failings	Highly Desirable	50%	30%	0%	10%	0%	10%	100%
		Definitely Feasible	0%	80%	10%	0%	0%	10%	100%
		High Impact	10%	60%	20%	0%	0%	10%	100%
		High Priority	20%	50%	20%	0%	0%	10%	100%
7.04	Do not use a 'big stick' approach, as it will result in only grudging compliance	Highly Desirable	40%	10%	20%	20%	0%	10%	100%
		Definitely Feasible	10%	50%	30%	0%	0%	10%	100%
		High Impact	20%	40%	20%	10%	0%	10%	100%
		High Priority	0%	50%	30%	10%	0%	10%	100%

Issue 7: The relationship between privacy, security and access needs to be understood and managed

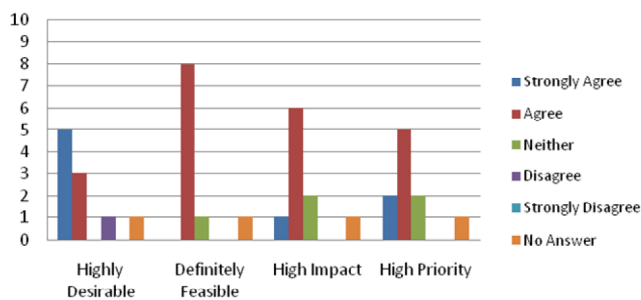
Issue 7.01
Take a holistic rather than a silo-based approach



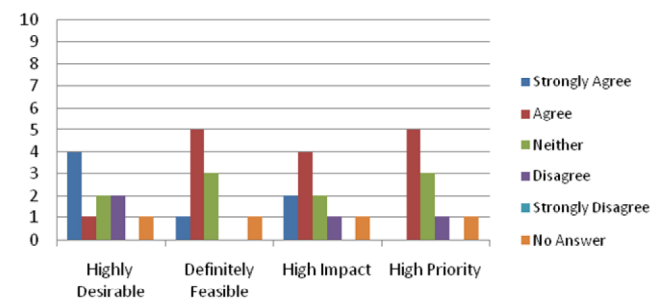
Issue 7.02
Recognise that privacy and security are not the same thing



Issue 7.03
Address human behaviour which causes the main failings



Issue 7.04
Do not use a 'big stick' approach, as it will result in only grudging compliance

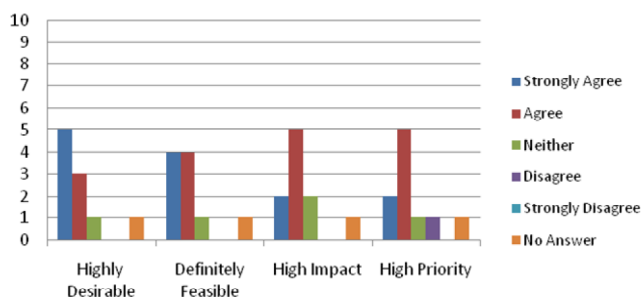


Issue 7 (Cont'd): The relationship between privacy, security and access needs to be understood and managed

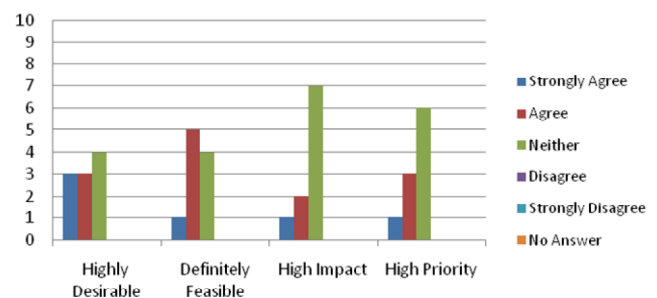
Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
7.05	Develop solutions to suit needs of business users not the IT department	Highly Desirable	50%	30%	10%	0%	0%	10%	100%
		Definitely Feasible	40%	40%	10%	0%	0%	10%	100%
		High Impact	20%	50%	20%	0%	0%	10%	100%
		High Priority	20%	50%	10%	10%	0%	10%	100%
7.06	Use IT-based access restrictions including inheritance of security settings	Highly Desirable	30%	30%	40%	0%	0%	0%	100%
		Definitely Feasible	10%	50%	40%	0%	0%	0%	100%
		High Impact	10%	20%	70%	0%	0%	0%	100%
		High Priority	10%	30%	60%	0%	0%	0%	100%
7.07	Prohibit the copying of information & removal of files from the workplace; provide direct access through good network connectivity and technology	Highly Desirable	20%	40%	40%	0%	0%	0%	100%
		Definitely Feasible	0%	50%	40%	10%	0%	0%	100%
		High Impact	20%	50%	30%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%
7.08	Identify sensitive / personal information via a data audit	Highly Desirable	40%	50%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	70%	10%	0%	0%	0%	100%
		High Impact	30%	40%	30%	0%	0%	0%	100%
		High Priority	40%	30%	30%	0%	0%	0%	100%
7.09	Apply access controls only where really necessary (e.g. to personal and sensitive information)	Highly Desirable	30%	40%	10%	20%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	10%	40%	50%	0%	0%	0%	100%

Issue 7 (Cont'd): The relationship between privacy, security and access needs to be understood and managed

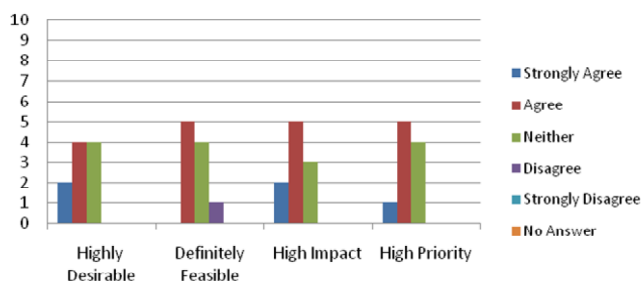
Issue 7.05
Develop solutions to suit needs of business users not the IT department



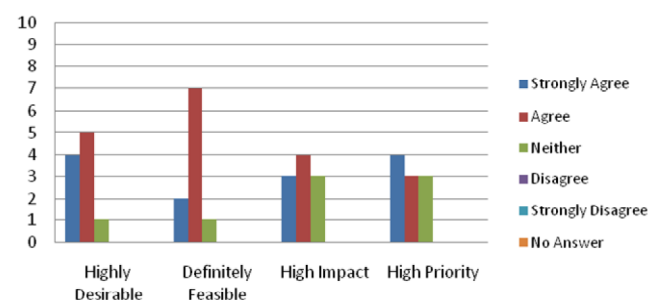
Issue 7.06
Use IT-based access restrictions including inheritance of security settings



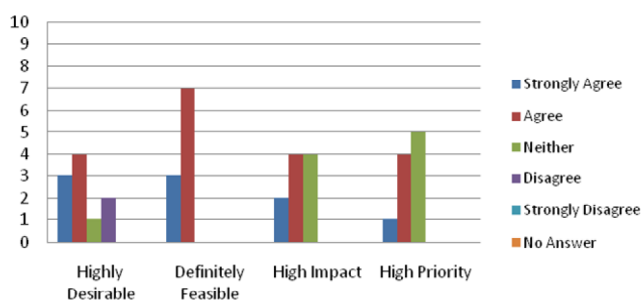
Issue 7.07
Prohibit the copying of information & removal of files from the workplace; provide direct access through good network connectivity and technology



Issue 7.08
Identify sensitive / personal information via a data audit



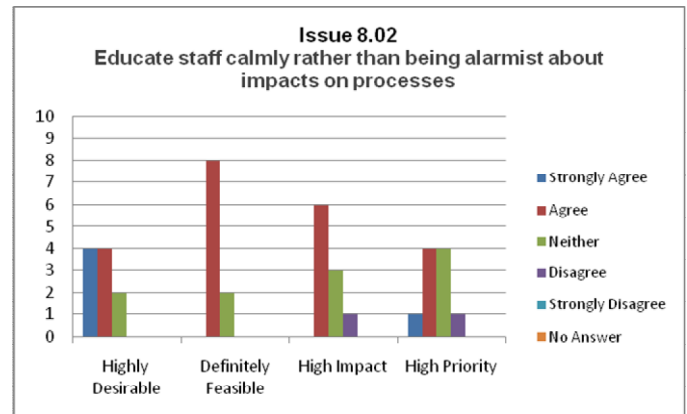
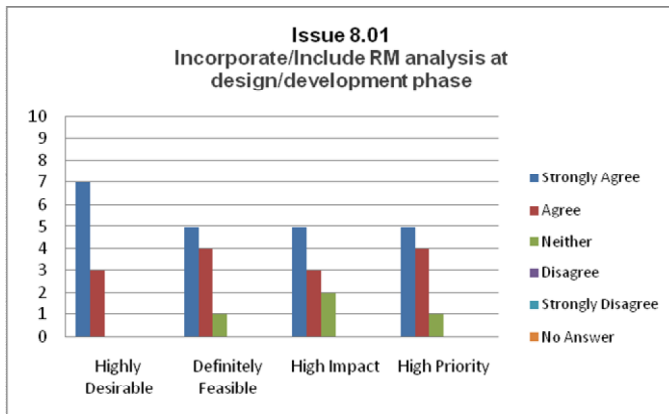
Issue 7.09
Apply access controls only where really necessary (e.g. to personal and sensitive information)



Issue 8: Organisations need to recognise where the e-environment creates new processes or affects existing processes and need to manage this

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
8.01	Incorporate/Include RM analysis at design/development phase	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	40%	10%	0%	0%	0%	100%
		High Impact	50%	30%	20%	0%	0%	0%	100%
		High Priority	50%	40%	10%	0%	0%	0%	100%
8.02	Educate staff calmly rather than being alarmist about impacts on processes	Highly Desirable	40%	40%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	80%	20%	0%	0%	0%	100%
		High Impact	0%	60%	30%	10%	0%	0%	100%
		High Priority	10%	40%	40%	10%	0%	0%	100%

Issue 8: Organisations need to recognise where the e-environment creates new processes or affects existing processes and need to manage this



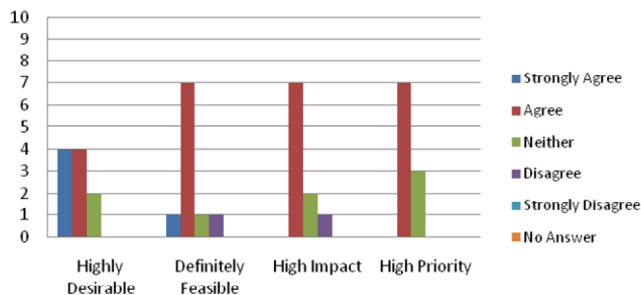
Issue 9: RM principles and / or methods need defining or developing for e-records management

Response break-down			Strongly Agree						Strongly Disagree	
Number of participants polled: 19			Agree						No Answer	
Number of responses: 10 (9 for 9.02 & 9.03)			Neither							
			Disagree							
9.01	Review effectiveness of RM methods by staff member with both RM and IT expertise	Highly Desirable	40%	40%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	10%	10%	0%	0%	0%	100%
		High Impact	0%	70%	20%	10%	0%	0%	0%	100%
		High Priority	0%	70%	30%	0%	0%	0%	0%	100%
9.02	Review the need to revise traditional RM principles	Highly Desirable	11%	78%	11%	0%	0%	0%	0%	100%
		Definitely Feasible	0%	89%	11%	0%	0%	0%	0%	100%
		High Impact	0%	67%	22%	11%	0%	0%	0%	100%
		High Priority	0%	44%	44%	11%	0%	0%	0%	100%
9.03	Continue using traditional RM methods	Highly Desirable	0%	11%	33%	56%	0%	0%	0%	100%
		Definitely Feasible	0%	33%	67%	0%	0%	0%	0%	100%
		High Impact	0%	11%	78%	11%	0%	0%	0%	100%
		High Priority	0%	0%	78%	22%	0%	0%	0%	100%
9.04	Review the need to revise traditional RM methods	Highly Desirable	30%	70%	0%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	80%	0%	0%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	0%	100%
		High Priority	20%	50%	20%	10%	0%	0%	0%	100%
9.05	Use new techniques/tools (not methods) {e.g. managing information at the level of linked items rather than files/folders}	Highly Desirable	10%	30%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	20%	60%	0%	0%	0%	0%	100%
		High Impact	10%	30%	60%	0%	0%	0%	0%	100%
		High Priority	10%	30%	60%	0%	0%	0%	0%	100%
9.06	Raise awareness about new ideas on RM principles/RM methods with records professionals	Highly Desirable	20%	60%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	0%	100%

Issue 9: RM principles and / or methods need defining or developing for e-records management

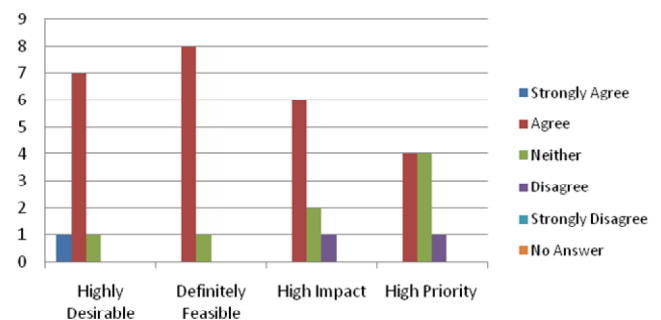
Issue 9.01

Review effectiveness of RM methods by staff member with both RM and IT expertise



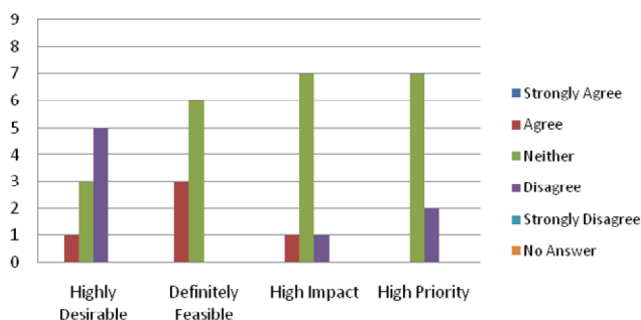
Issue 9.02

Review the need to revise traditional RM principles



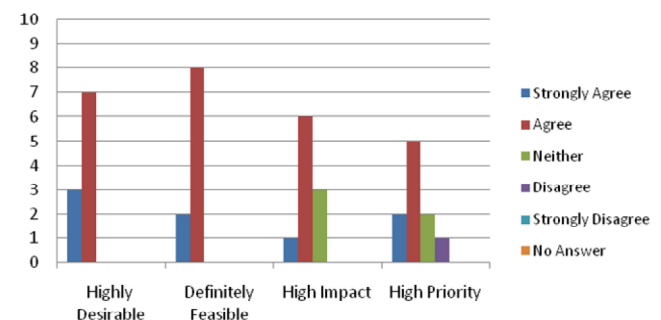
Issue 9.03

Continue using traditional RM methods



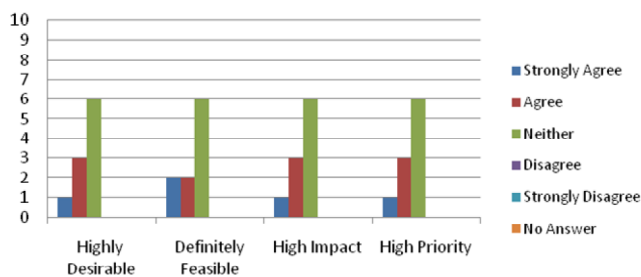
Issue 9.04

Review the need to revise traditional RM methods



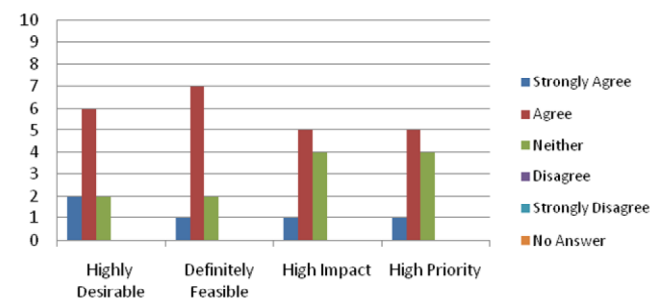
Issue 9.05

Use new techniques/tools (not methods) {e.g. managing information at the level of linked items rather than files/folders}



Issue 9.06

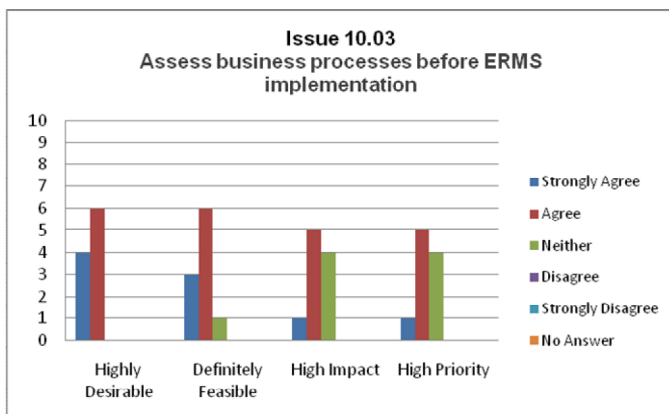
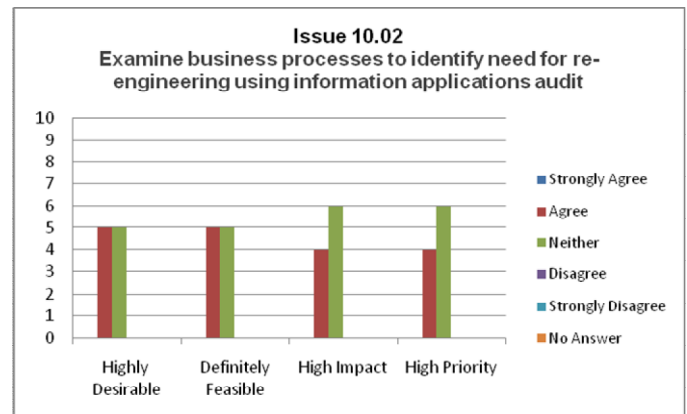
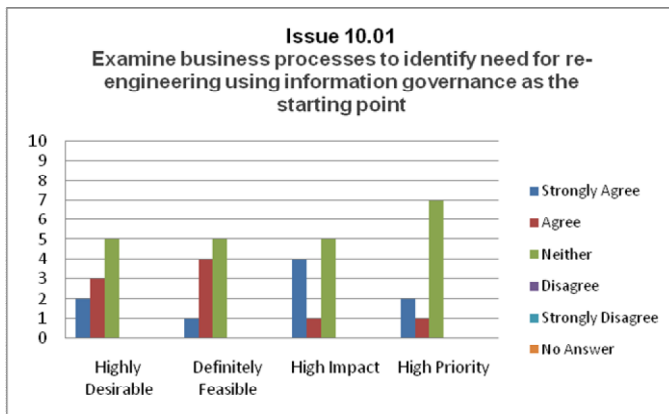
Raise awareness about new ideas on RM principles/RM methods with records professionals



Issue 10: Organisations need to recognise which business processes need analysing and/or re-engineering for e-records management and implement the outcome

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
10.01	Examine business processes to identify need for re-engineering using information governance as the starting point	Highly Desirable	20%	30%	50%	0%	0%	0%	100%
		Definitely Feasible	10%	40%	50%	0%	0%	0%	100%
		High Impact	40%	10%	50%	0%	0%	0%	100%
		High Priority	20%	10%	70%	0%	0%	0%	100%
10.02	Examine business processes to identify need for re-engineering using information applications audit	Highly Desirable	0%	50%	50%	0%	0%	0%	100%
		Definitely Feasible	0%	50%	50%	0%	0%	0%	100%
		High Impact	0%	40%	60%	0%	0%	0%	100%
		High Priority	0%	40%	60%	0%	0%	0%	100%
10.03	Assess business processes before ERMS implementation	Highly Desirable	40%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%

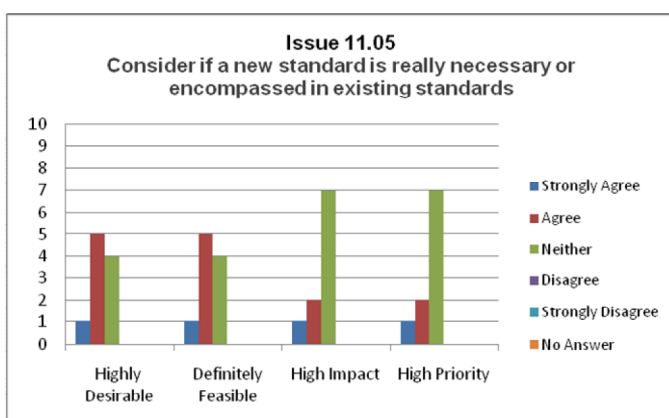
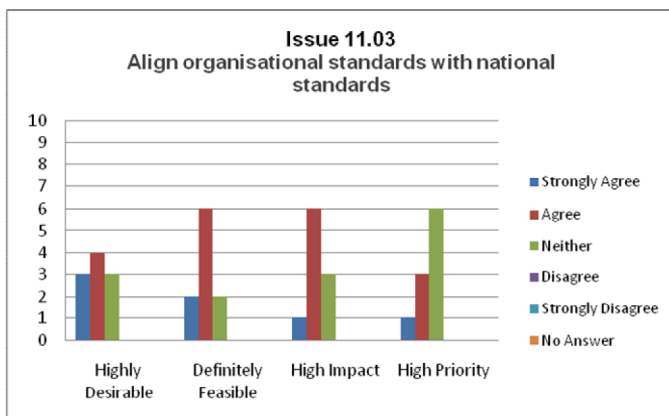
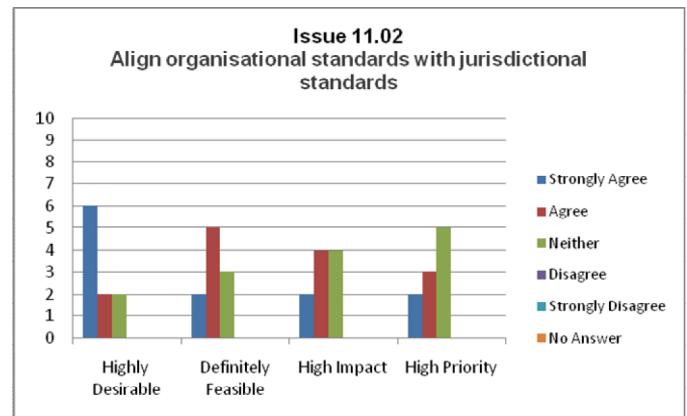
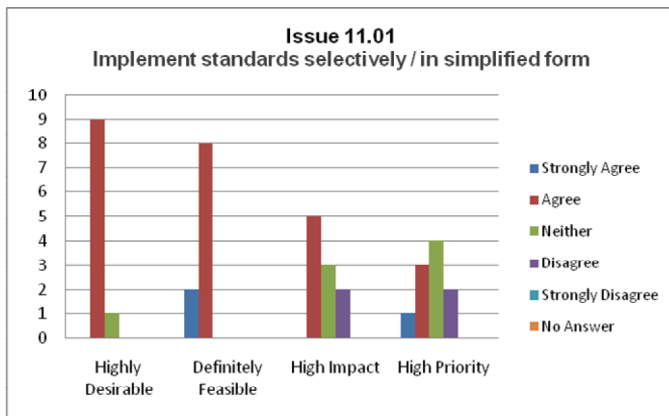
Issue 10: Organisations need to recognise which business processes need analysing and/or re-engineering for e-records management and implement the outcome



Issue 11: The nature, development and / or organisational use of standards and national strategies needs to be effective

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
11.01	Implement standards selectively / in simplified form	Highly Desirable	0%	90%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	80%	0%	0%	0%	0%	100%
		High Impact	0%	50%	30%	20%	0%	0%	100%
		High Priority	10%	30%	40%	20%	0%	0%	100%
11.02	Align organisational standards with jurisdictional standards	Highly Desirable	60%	20%	20%	0%	0%	0%	100%
		Definitely Feasible	20%	50%	30%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	20%	30%	50%	0%	0%	0%	100%
11.03	Align organisational standards with national standards	Highly Desirable	30%	40%	30%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	10%	30%	60%	0%	0%	0%	100%
11.04	Align organisational standards with international standards	Highly Desirable	10%	50%	40%	0%	0%	0%	100%
		Definitely Feasible	10%	60%	30%	0%	0%	0%	100%
		High Impact	10%	30%	60%	0%	0%	0%	100%
		High Priority	10%	20%	70%	0%	0%	0%	100%
11.05	Consider if a new standard is really necessary or encompassed in existing standards	Highly Desirable	10%	50%	40%	0%	0%	0%	100%
		Definitely Feasible	10%	50%	40%	0%	0%	0%	100%
		High Impact	10%	20%	70%	0%	0%	0%	100%
		High Priority	10%	20%	70%	0%	0%	0%	100%

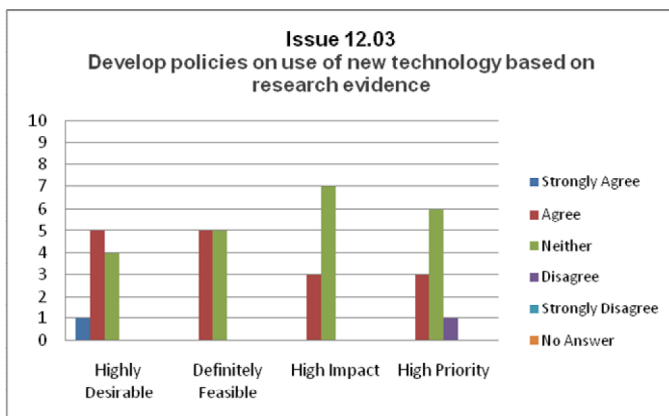
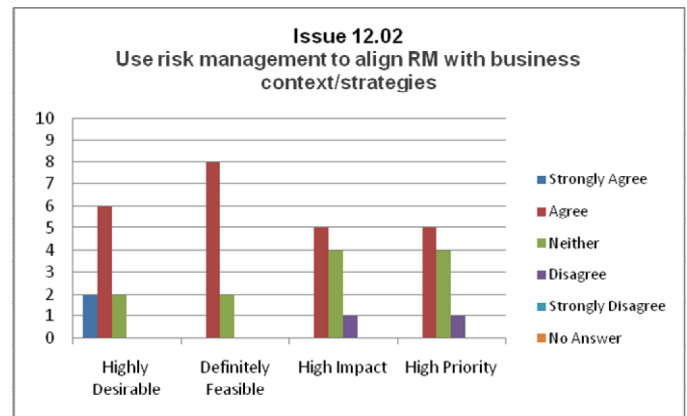
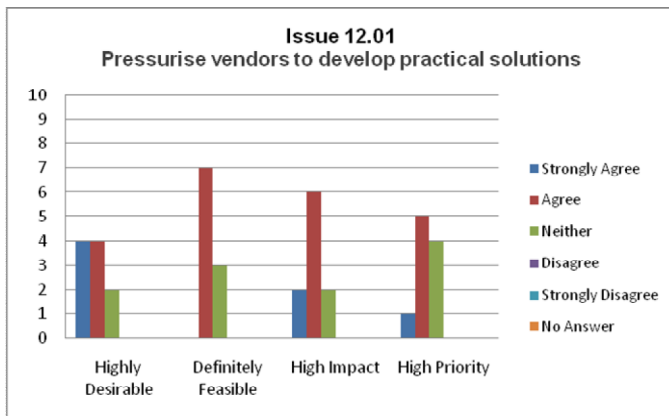
Issue 11: The nature, development and / or organisational use of standards and national strategies needs to be effective



Issue 12: Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
12.01	Pressurise vendors to develop practical solutions	Highly Desirable	40%	40%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	70%	30%	0%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%
12.02	Use risk management to align RM with business context/strategies	Highly Desirable	20%	60%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	80%	20%	0%	0%	0%	100%
		High Impact	0%	50%	40%	10%	0%	0%	100%
		High Priority	0%	50%	40%	10%	0%	0%	100%
12.03	Develop policies on use of new technology based on research evidence	Highly Desirable	10%	50%	40%	0%	0%	0%	100%
		Definitely Feasible	0%	50%	50%	0%	0%	0%	100%
		High Impact	0%	30%	70%	0%	0%	0%	100%
		High Priority	0%	30%	60%	10%	0%	0%	100%

Issue 12: Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications

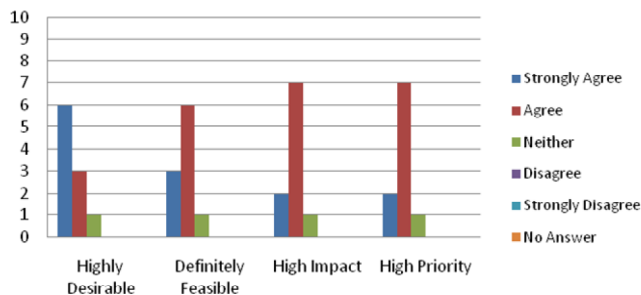


Issue 13: Cross-cutting solutions applicable to many different issues

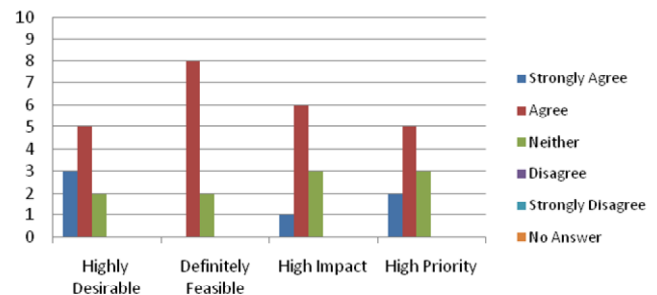
Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
13.01	Build RM/ERM strategies, policies and frameworks to serve and integrate with business needs	Highly Desirable	60%	30%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	20%	70%	10%	0%	0%	0%	100%
		High Priority	20%	70%	10%	0%	0%	0%	100%
13.02	Invest in and exploit the e-environment and existing technology for ERM purposes	Highly Desirable	30%	50%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	80%	20%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	20%	50%	30%	0%	0%	0%	100%
13.03	Allocate sufficient and formally identified resources (finance and time) for needs of whole ERM life-cycle	Highly Desirable	40%	50%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	40%	20%	40%	0%	0%	0%	100%
		High Priority	30%	30%	30%	10%	0%	0%	100%
13.04	Design frameworks, policies and rules that are usable and pragmatic	Highly Desirable	50%	50%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	80%	0%	0%	0%	0%	100%
		High Impact	0%	70%	20%	10%	0%	0%	100%
		High Priority	10%	80%	10%	0%	0%	0%	100%
13.05	Policies and procedures should be clear, explicit and enforceable	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	80%	0%	0%	0%	0%	100%
		High Impact	10%	80%	10%	0%	0%	0%	100%
		High Priority	30%	60%	10%	0%	0%	0%	100%
13.06	Responsibilities and accountability should be clear, explicit and enforceable	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	30%	70%	0%	0%	0%	0%	100%
		High Priority	40%	40%	20%	0%	0%	0%	100%

Issue 13: Cross-cutting solutions applicable to many different issues

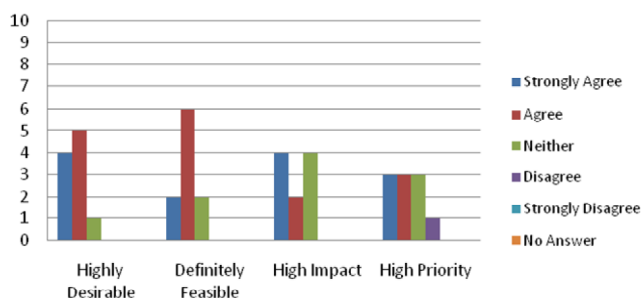
Issue 13.01
Build RM/ERM strategies, policies and frameworks to serve and integrate with business needs



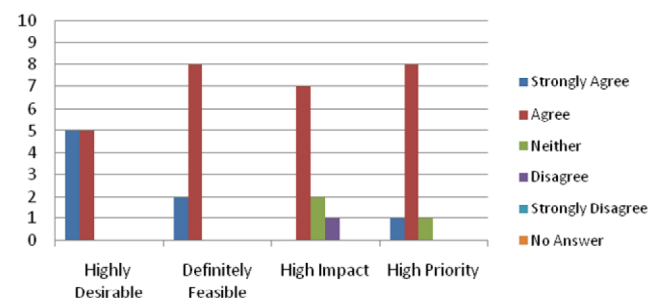
Issue 13.02
Invest in and exploit the e-environment and existing technology for ERM purposes



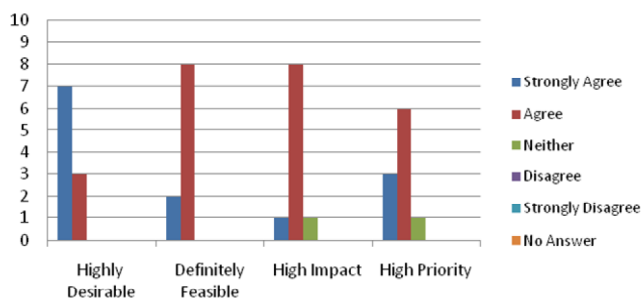
Issue 13.03
Allocate sufficient and formally identified resources (finance and time) for needs of whole ERM life-cycle



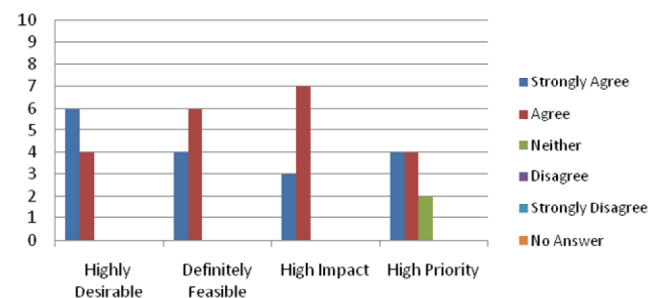
Issue 13.04
Design frameworks, policies and rules that are usable and pragmatic



Issue 13.05
Policies and procedures should be clear, explicit and enforceable



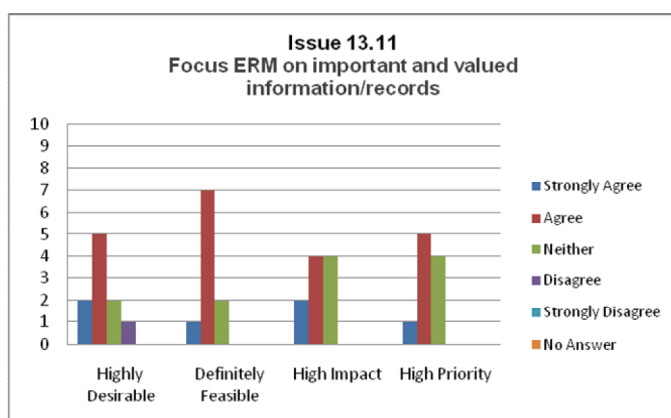
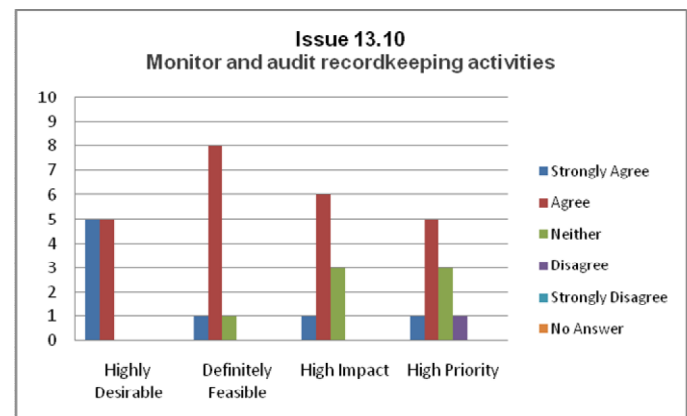
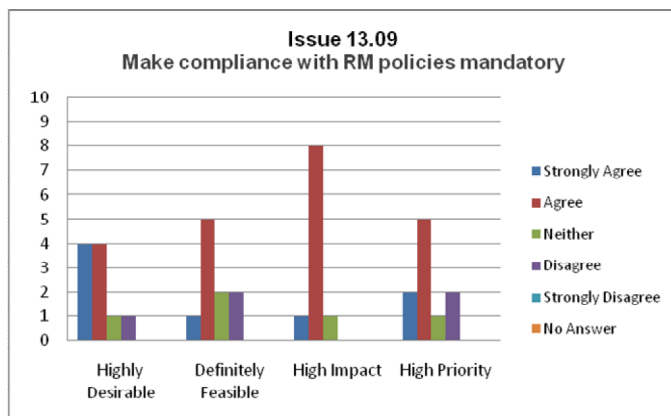
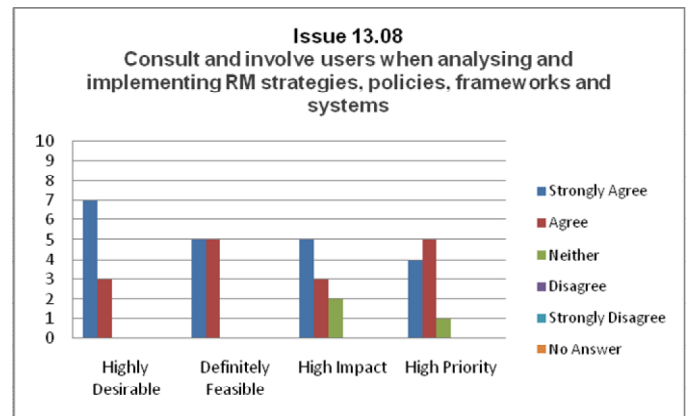
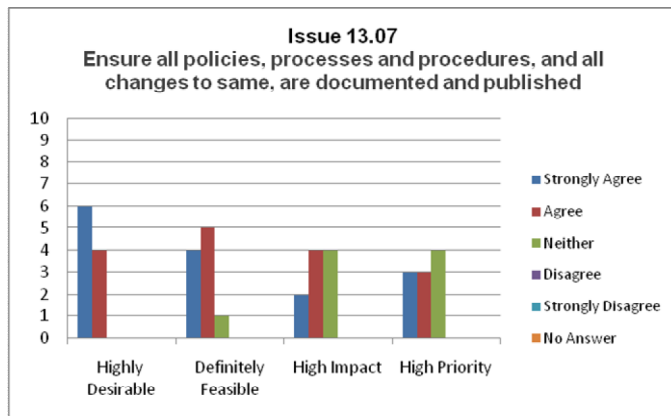
Issue 13.06
Responsibilities and accountability should be clear, explicit and enforceable



Issue 13 (Cont'd): Cross-cutting solutions applicable to many different issues

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
13.07	Ensure all policies, processes and procedures, and all changes to same, are documented and published	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	50%	10%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	30%	30%	40%	0%	0%	0%	100%
13.08	Consult and involve users when analysing and implementing RM strategies, policies, frameworks and systems	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	50%	0%	0%	0%	0%	100%
		High Impact	50%	30%	20%	0%	0%	0%	100%
		High Priority	40%	50%	10%	0%	0%	0%	100%
13.09	Make compliance with RM policies mandatory	Highly Desirable	40%	40%	10%	10%	0%	0%	100%
		Definitely Feasible	10%	50%	20%	20%	0%	0%	100%
		High Impact	10%	80%	10%	0%	0%	0%	100%
		High Priority	20%	50%	10%	20%	0%	0%	100%
13.10	Monitor and audit recordkeeping activities	Highly Desirable	50%	50%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	10%	50%	30%	10%	0%	0%	100%
13.11	Focus ERM on important and valued information/records	Highly Desirable	20%	50%	20%	10%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	10%	50%	40%	0%	0%	0%	100%

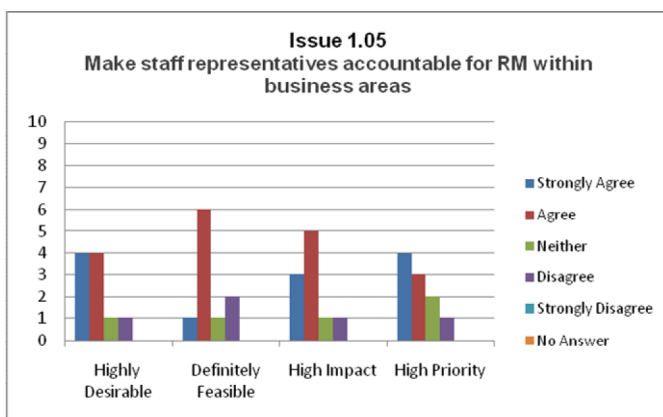
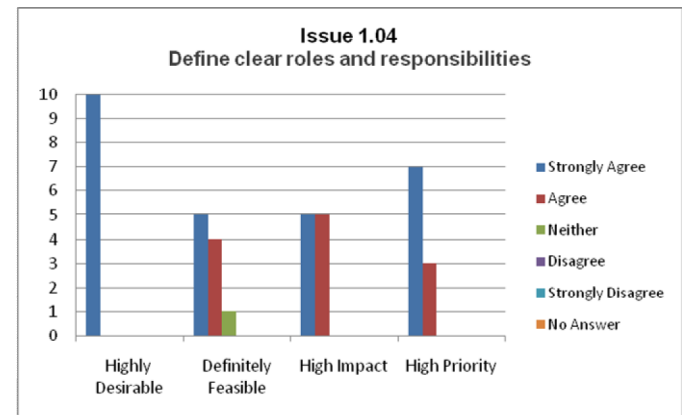
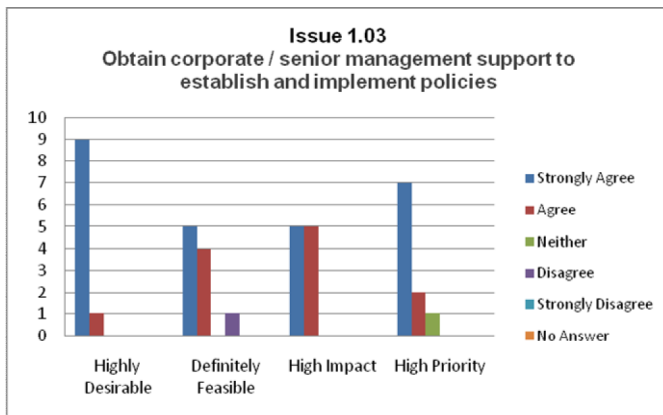
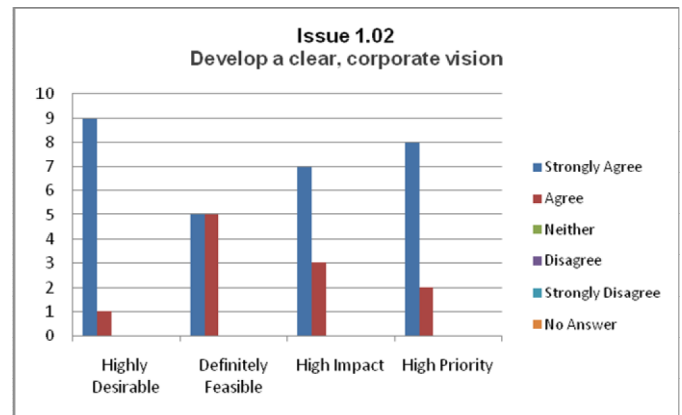
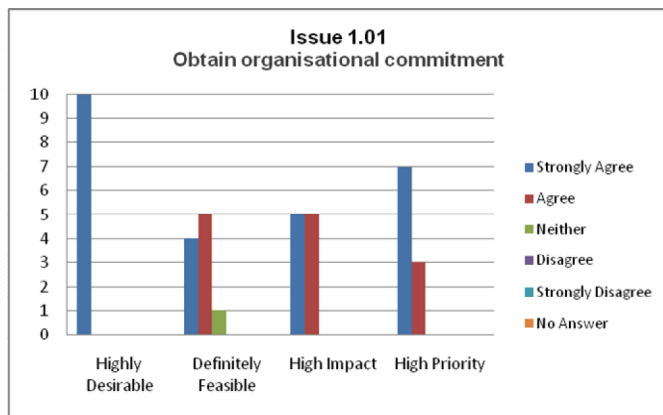
Issue 13 (Cont'd): Cross-cutting solutions applicable to many different issues



Process Facet Delphi Study – Round 5 – Evaluation of Solutions – Human Aspects**Issue 1: Organisation-level RM policies and infrastructure need to be established for e-records management**

Response break-down Number of participants polled: 19 Number of responses: 10			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
1.01	Obtain organisational commitment	Highly Desirable	100%	0%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	50%	10%	0%	0%	0%	100%
		High Impact	50%	50%	0%	0%	0%	0%	100%
		High Priority	70%	30%	0%	0%	0%	0%	100%
1.02	Develop a clear, corporate vision	Highly Desirable	90%	10%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	50%	0%	0%	0%	0%	100%
		High Impact	70%	30%	0%	0%	0%	0%	100%
		High Priority	80%	20%	0%	0%	0%	0%	100%
1.03	Obtain corporate / senior management support to establish and implement policies	Highly Desirable	90%	10%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	40%	0%	10%	0%	0%	100%
		High Impact	50%	50%	0%	0%	0%	0%	100%
		High Priority	70%	20%	10%	0%	0%	0%	100%
1.04	Define clear roles and responsibilities	Highly Desirable	100%	0%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	40%	10%	0%	0%	0%	100%
		High Impact	50%	50%	0%	0%	0%	0%	100%
		High Priority	70%	30%	0%	0%	0%	0%	100%
1.05	Make staff representatives accountable for RM within business areas	Highly Desirable	40%	40%	10%	10%	0%	0%	100%
		Definitely Feasible	10%	60%	10%	20%	0%	0%	100%
		High Impact	30%	50%	10%	10%	0%	0%	100%
		High Priority	40%	30%	20%	10%	0%	0%	100%

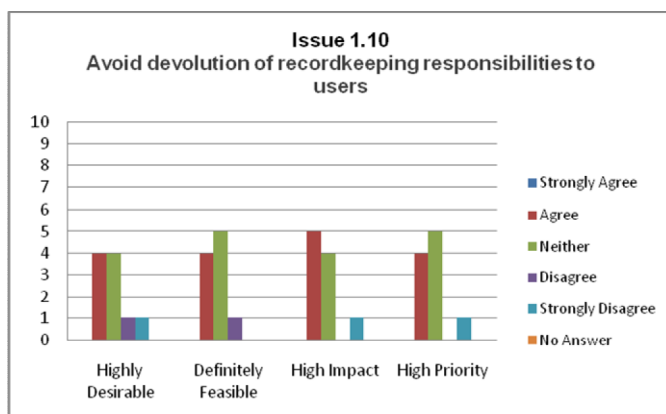
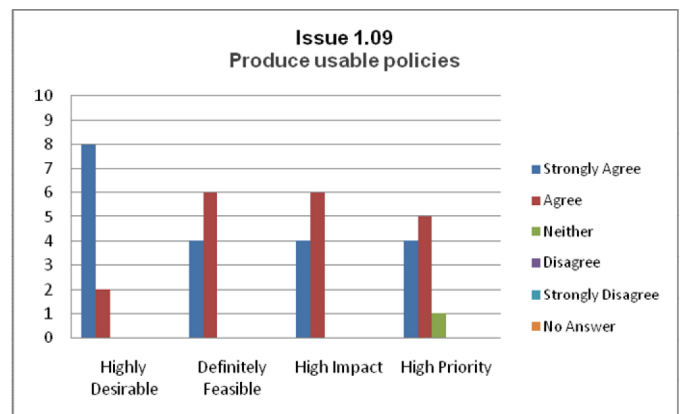
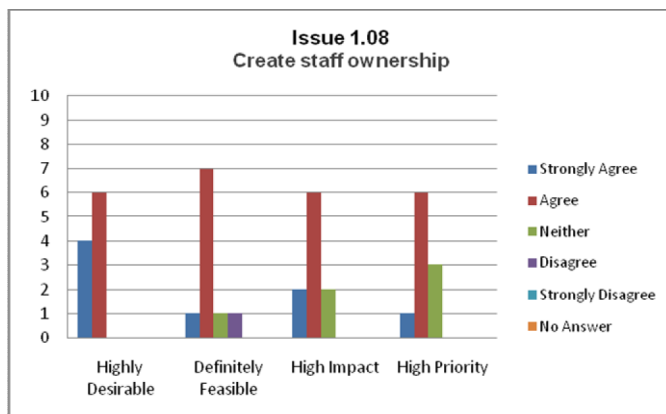
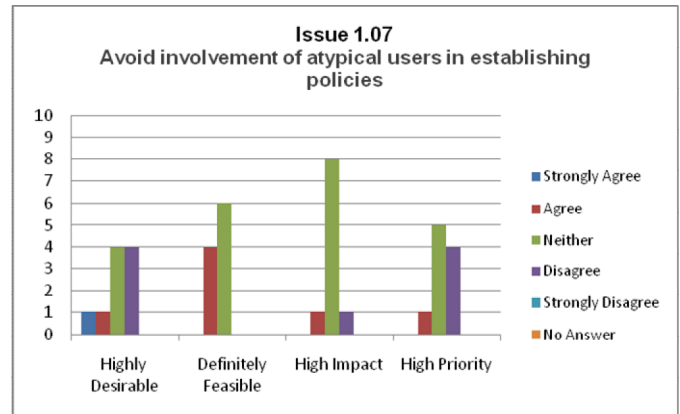
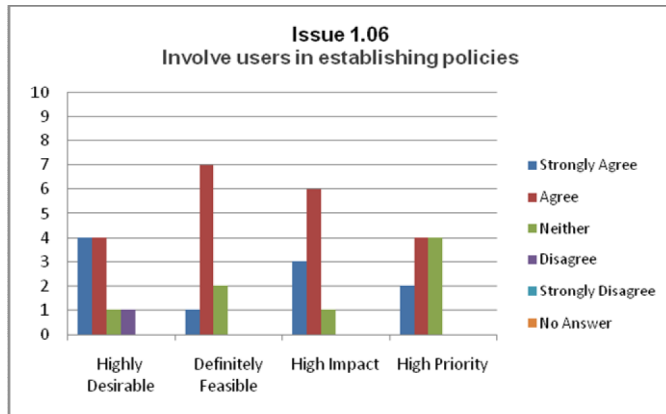
Issue 1: Organisation-level RM policies and infrastructure need to be established for e-records management



Issue 1 (cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
1.06	Involve users in establishing policies	Highly Desirable	40%	40%	10%	10%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	20%	40%	40%	0%	0%	0%	100%
1.07	Avoid involvement of atypical users in establishing policies	Highly Desirable	10%	10%	40%	40%	0%	0%	100%
		Definitely Feasible	0%	40%	60%	0%	0%	0%	100%
		High Impact	0%	10%	80%	10%	0%	0%	100%
		High Priority	0%	10%	50%	40%	0%	0%	100%
1.08	Create staff ownership	Highly Desirable	40%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	10%	10%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	10%	60%	30%	0%	0%	0%	100%
1.09	Produce usable policies	Highly Desirable	80%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	40%	60%	0%	0%	0%	0%	100%
		High Priority	40%	50%	10%	0%	0%	0%	100%
1.10	Avoid devolution of recordkeeping responsibilities to users	Highly Desirable	0%	40%	40%	10%	10%	0%	100%
		Definitely Feasible	0%	40%	50%	10%	0%	0%	100%
		High Impact	0%	50%	40%	0%	10%	0%	100%
		High Priority	0%	40%	50%	0%	10%	0%	100%

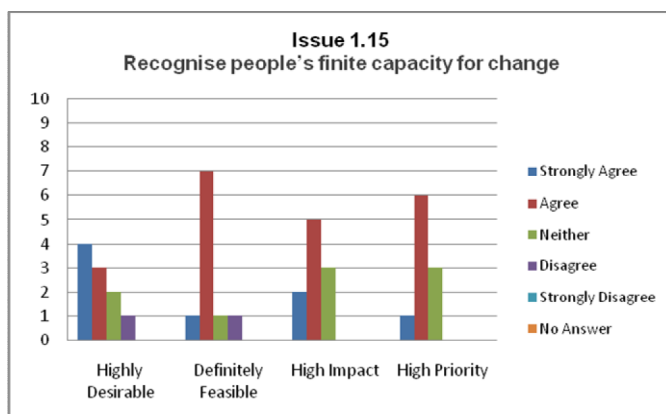
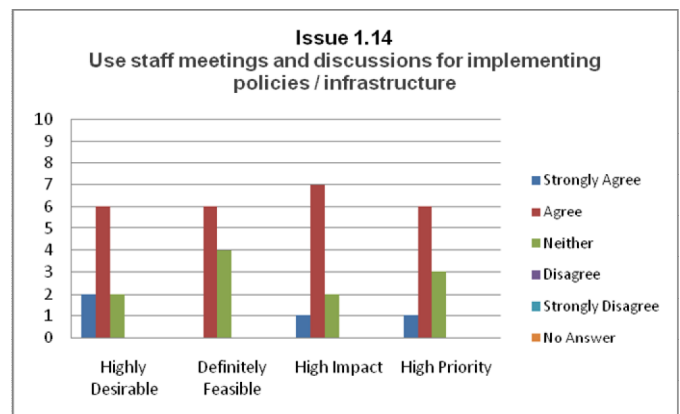
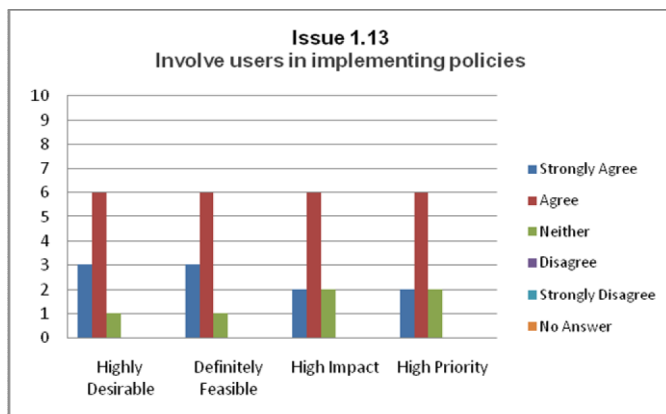
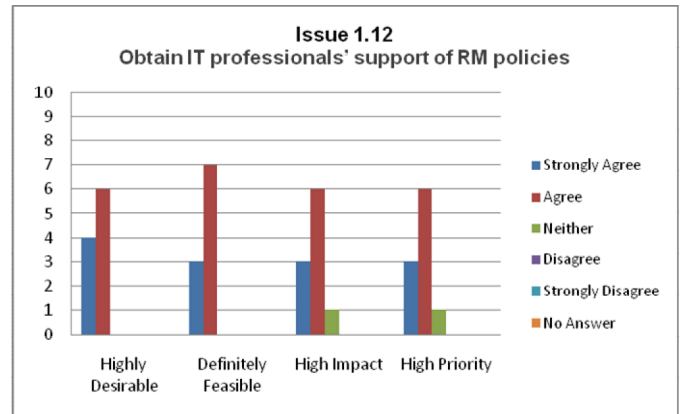
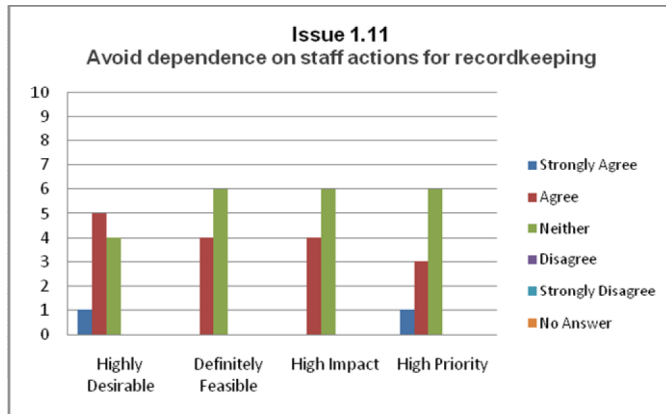
Issue 1 (Cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management



Issue 1 (cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
1.11	Avoid dependence on staff actions for recordkeeping	Highly Desirable	10%	50%	40%	0%	0%	0%	100%
		Definitely Feasible	0%	40%	60%	0%	0%	0%	100%
		High Impact	0%	40%	60%	0%	0%	0%	100%
		High Priority	10%	30%	60%	0%	0%	0%	100%
1.12	Obtain IT professionals' support of RM policies	Highly Desirable	40%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	30%	60%	10%	0%	0%	0%	100%
1.13	Involve users in implementing policies	Highly Desirable	30%	60%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	20%	60%	20%	0%	0%	0%	100%
1.14	Use staff meetings and discussions for implementing policies / infrastructure	Highly Desirable	20%	60%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	60%	40%	0%	0%	0%	100%
		High Impact	10%	70%	20%	0%	0%	0%	100%
		High Priority	10%	60%	30%	0%	0%	0%	100%
1.15	Recognise people's finite capacity for change	Highly Desirable	40%	30%	20%	10%	0%	0%	100%
		Definitely Feasible	10%	70%	10%	10%	0%	0%	100%
		High Impact	20%	50%	30%	0%	0%	0%	100%
		High Priority	10%	60%	30%	0%	0%	0%	100%

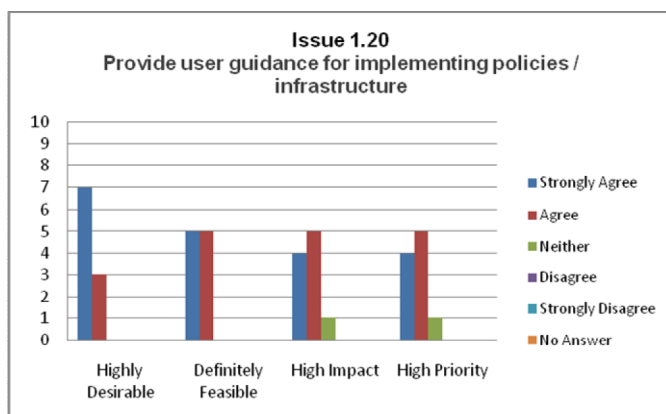
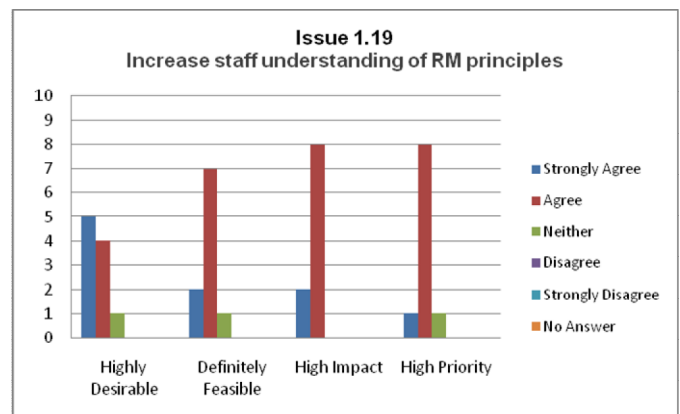
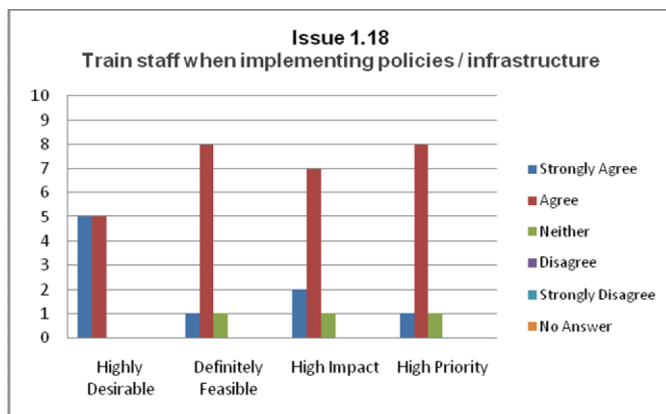
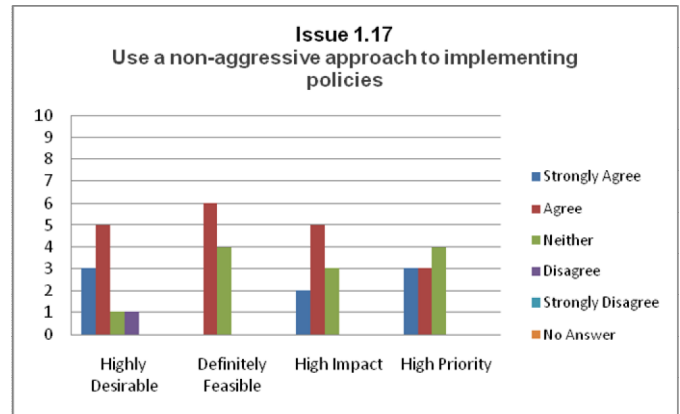
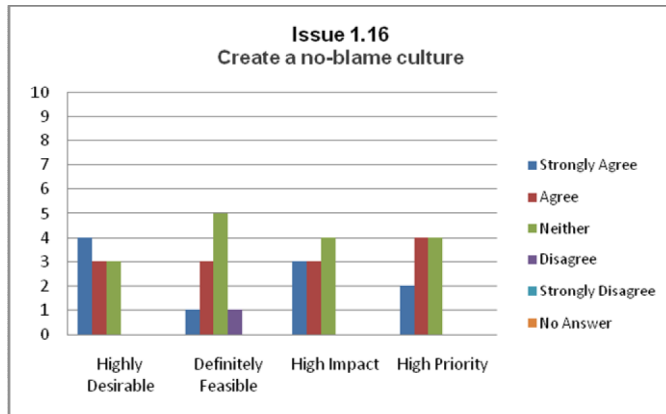
Issue 1 (Cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management



Issue 1 (cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
1.16	Create a no-blame culture	Highly Desirable	40%	30%	30%	0%	0%	0%	100%
		Definitely Feasible	10%	30%	50%	10%	0%	0%	100%
		High Impact	30%	30%	40%	0%	0%	0%	100%
		High Priority	20%	40%	40%	0%	0%	0%	100%
1.17	Use a non-aggressive approach to implementing policies	Highly Desirable	30%	50%	10%	10%	0%	0%	100%
		Definitely Feasible	0%	60%	40%	0%	0%	0%	100%
		High Impact	20%	50%	30%	0%	0%	0%	100%
		High Priority	30%	30%	40%	0%	0%	0%	100%
1.18	Train staff when implementing policies / infrastructure	Highly Desirable	50%	50%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	20%	70%	10%	0%	0%	0%	100%
		High Priority	10%	80%	10%	0%	0%	0%	100%
1.19	Increase staff understanding of RM principles	Highly Desirable	50%	40%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	70%	10%	0%	0%	0%	100%
		High Impact	20%	80%	0%	0%	0%	0%	100%
		High Priority	10%	80%	10%	0%	0%	0%	100%
1.20	Provide user guidance for implementing policies / infrastructure	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	50%	0%	0%	0%	0%	100%
		High Impact	40%	50%	10%	0%	0%	0%	100%
		High Priority	40%	50%	10%	0%	0%	0%	100%

Issue 1 (Cont'd): Organisation-level RM policies and infrastructure need to be established for e-records management

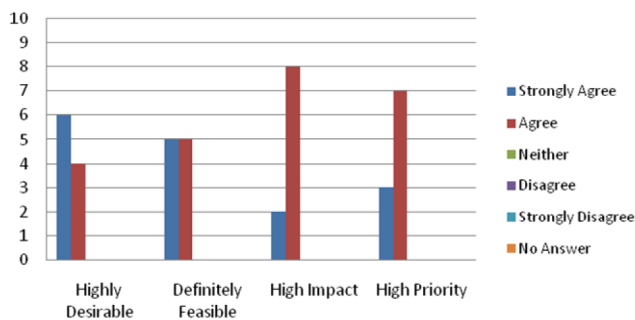


Issue 2: The need for non-IT processes to conduct business in the e-environment should be recognised

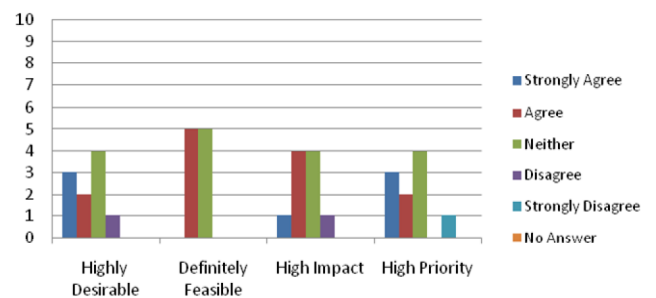
Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
2.01	Understand staff roles in the e-environment	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	50%	0%	0%	0%	0%	100%
		High Impact	20%	80%	0%	0%	0%	0%	100%
		High Priority	30%	70%	0%	0%	0%	0%	100%
2.02	Integrate responsibilities between IT and RM professionals	Highly Desirable	30%	20%	40%	10%	0%	0%	100%
		Definitely Feasible	0%	50%	50%	0%	0%	0%	100%
		High Impact	10%	40%	40%	10%	0%	0%	100%
		High Priority	30%	20%	40%	0%	10%	0%	100%
2.03	Establish mutual understanding between IT and RM professionals	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	50%	40%	10%	0%	0%	0%	100%
2.04	Train IT professionals on non-IT processes	Highly Desirable	20%	30%	40%	10%	0%	0%	100%
		Definitely Feasible	10%	50%	40%	0%	0%	0%	100%
		High Impact	20%	10%	60%	10%	0%	0%	100%
		High Priority	0%	30%	60%	10%	0%	0%	100%
2.05	Use specialist staff expertise (e.g. business analysts, super-users)	Highly Desirable	60%	20%	20%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	20%	50%	30%	0%	0%	0%	100%
		High Priority	10%	50%	30%	0%	0%	10%	100%
2.06	Raise staff awareness of their business conduct responsibilities	Highly Desirable	50%	40%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	20%	60%	20%	0%	0%	0%	100%
		High Priority	20%	40%	30%	0%	0%	10%	100%

Issue 2: The need for non-IT processes to conduct business in the e-environment should be recognised

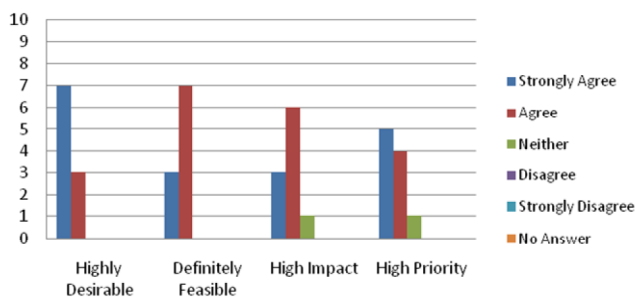
Issue 2.01
Understand staff roles in the e-environment



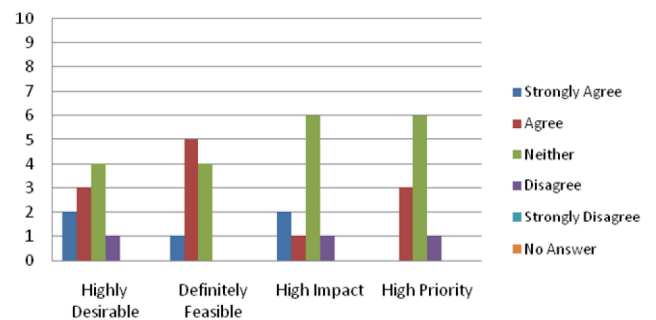
Issue 2.02
Integrate responsibilities between IT and RM professional



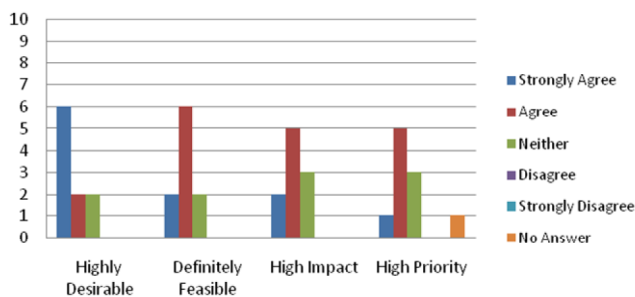
Issue 2.03
Establish mutual understanding between IT and RM professionals



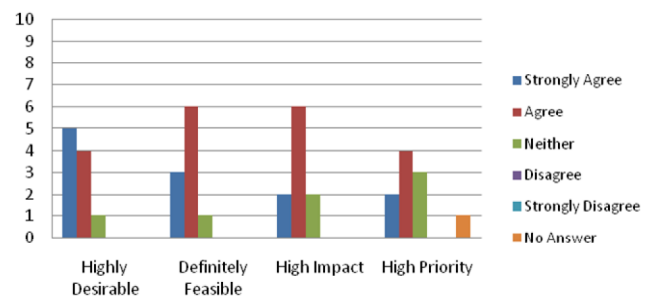
Issue 2.04
Train IT professionals on non-IT processes



Issue 2.05
Use specialist staff expertise (e.g. business analysts, super-users)



Issue 2.06
Raise staff awareness of their business conduct responsibilities



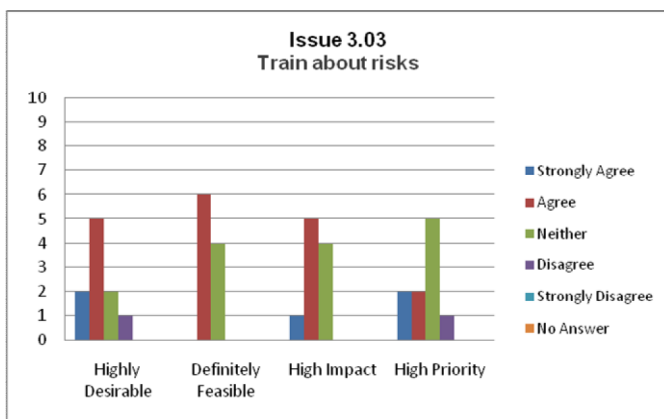
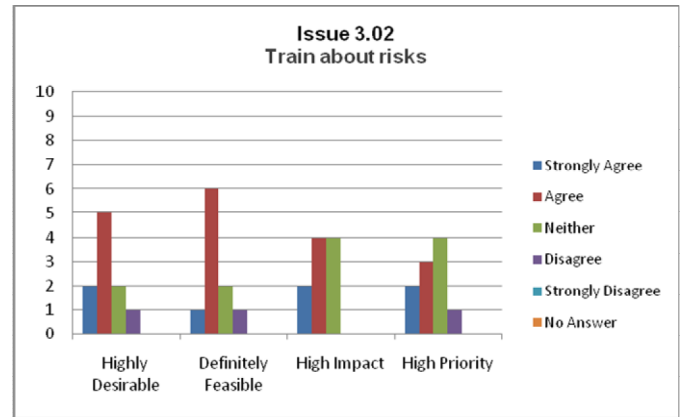
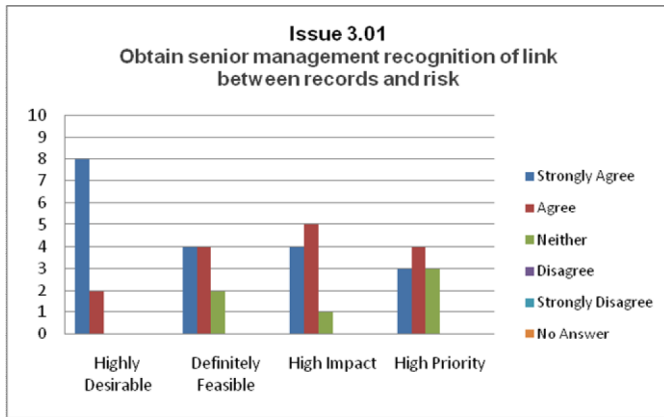
Issue 3: e-Records management needs to be seen in the context of business risk and risk management

Response break-down Number of participants polled: 19 Number of responses: 10			<div><div>Strongly Agree</div><div>Agree</div><div>Neither</div><div>Disagree</div><div>Strongly Disagree</div><div>No Answer</div></div>						
3.01	Obtain senior management recognition of link between records and risk	Highly Desirable	80%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	40%	20%	0%	0%	0%	100%
		High Impact	40%	50%	10%	0%	0%	0%	100%
		High Priority	30%	40%	30%	0%	0%	0%	100%
3.02	Train about risks	Highly Desirable	20%	50%	20%	10%	0%	0%	100%
		Definitely Feasible	10%	60%	20%	10%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	20%	30%	40%	10%	0%	0%	100%
3.03	Involve users in risk management	Highly Desirable	20%	50%	20%	10%	0%	0%	100%
		Definitely Feasible	0%	60%	40%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	20%	20%	50%	10%	0%	0%	100%

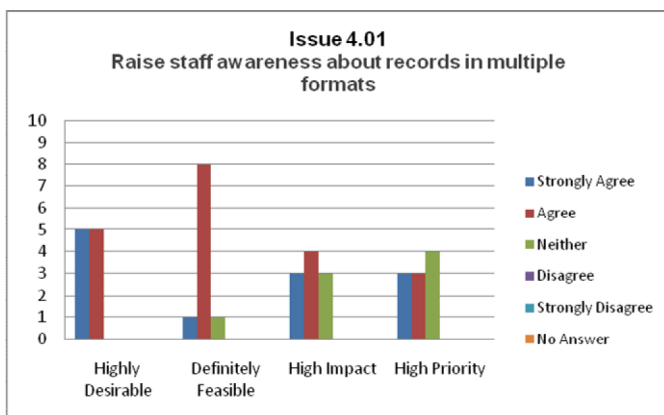
Issue 4: e-Records are created in different business processes and maintained in multiple systems. Organisations need to manage this records environment in an integrated way

4.01	Raise staff awareness about records in multiple formats	Highly Desirable	50%	50%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	30%	40%	30%	0%	0%	0%	100%
		High Priority	30%	30%	40%	0%	0%	0%	100%

Issue 3: e-Records management needs to be seen in the context of business risk and risk management



Issue 4: e-Records are created in different business processes and maintained in multiple systems. Organisations need to manage this records environment in an integrated way



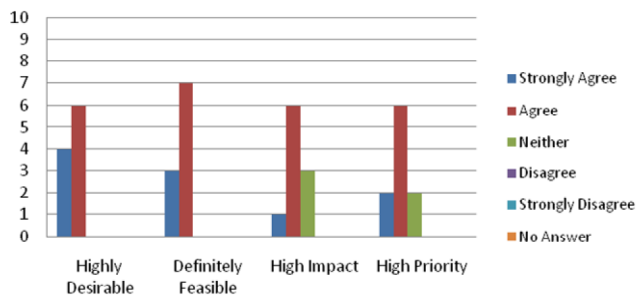
Issue 5: How can we improve recordkeeping processes for e-records?

Response break-down Number of participants polled: 19 Number of responses: 10 (9 for 5.03)			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
5.01	Raise CEO awareness of their ultimate responsibility for the state of recordkeeping across the organisation	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	10%	10%	0%	0%	100%
		High Impact	60%	30%	10%	0%	0%	0%	100%
		High Priority	50%	20%	30%	0%	0%	0%	100%
5.02	Obtain senior managers' recognition of the importance of RM to successful business practices	Highly Desirable	80%	10%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	10%	10%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	30%	50%	20%	0%	0%	0%	100%
5.03	Raise staff awareness of their recordkeeping responsibilities	Highly Desirable	80%	20%	0%	0%	0%	0%	100%
		Definitely Feasible	40%	60%	0%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	50%	40%	10%	0%	0%	0%	100%
5.04	Produce usable e-recordkeeping processes	Highly Desirable	60%	30%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	50%	30%	20%	0%	0%	0%	100%
		High Priority	50%	30%	20%	0%	0%	0%	100%
5.05	Produce easy to follow e-recordkeeping processes	Highly Desirable	50%	40%	0%	0%	0%	10%	100%
		Definitely Feasible	30%	70%	0%	0%	0%	0%	100%
		High Impact	30%	60%	10%	0%	0%	0%	100%
		High Priority	40%	50%	10%	0%	0%	0%	100%
5.06	Monitor and assess staff's recordkeeping activities	Highly Desirable	40%	60%	0%	0%	0%	0%	100%
		Definitely Feasible	20%	40%	40%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	20%	50%	30%	0%	0%	0%	100%

Issue 5: How can we improve recordkeeping processes for e-records?

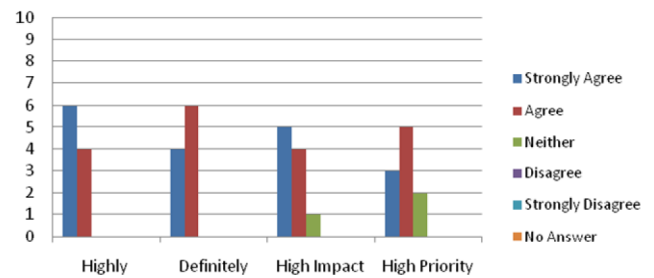
Issue 5.01

Raise CEO awareness of their ultimate responsibility for the state of recordkeeping across the organisation



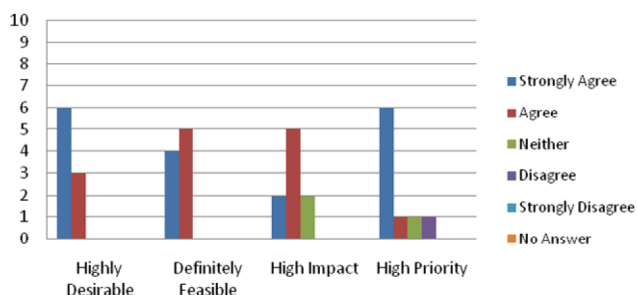
Issue 5.02

Obtain senior managers' recognition of the importance of RM to successful business practices



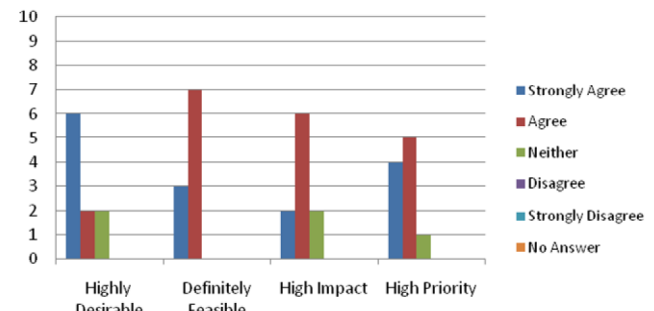
Issue 5.03

Raise staff awareness of their recordkeeping responsibilities



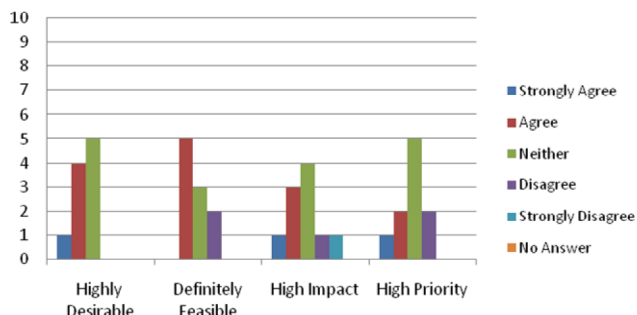
Issue 5.04

Produce usable e-recordkeeping processes



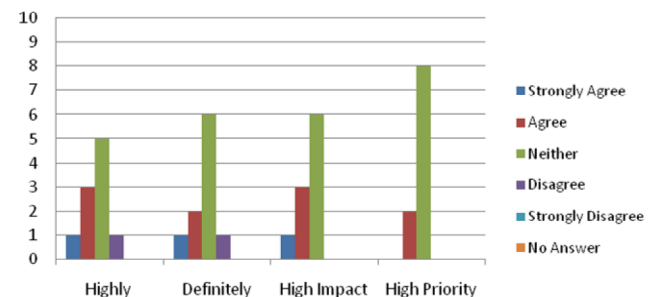
Issue 5.05

Produce easy to follow e-recordkeeping processes



Issue 5.06

Monitor and assess staff's recordkeeping activities



Issue 6: Organisations need to develop and implement a preservation strategy for e-records

None of the solutions proposed for Issue 6 related primarily to human aspects.

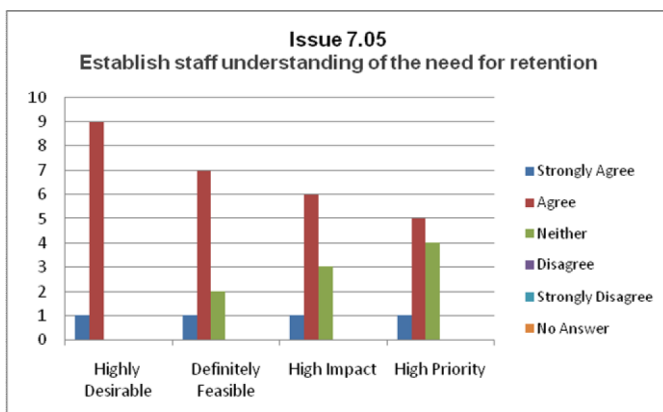
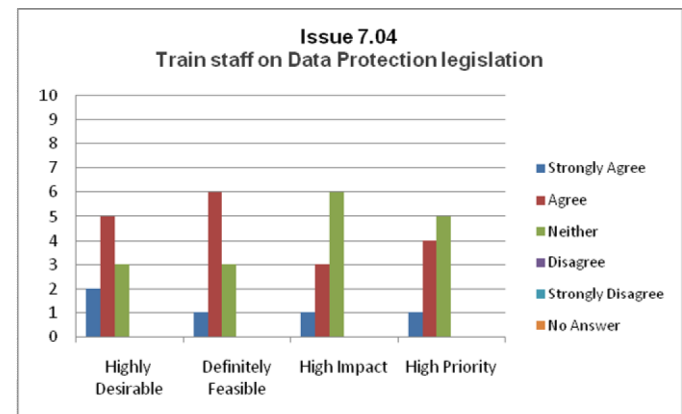
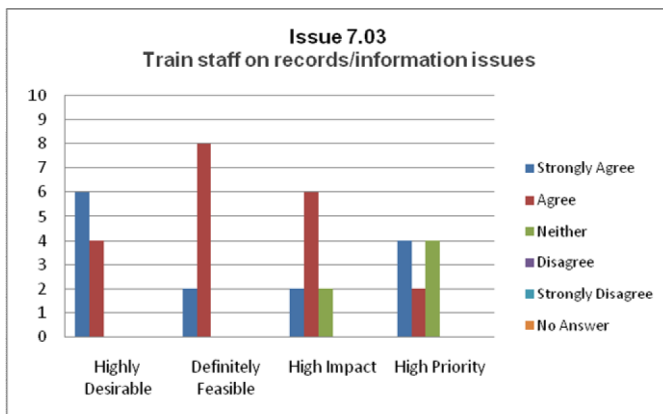
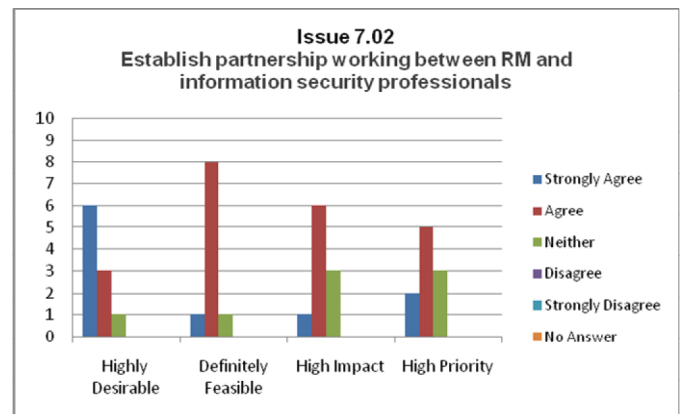
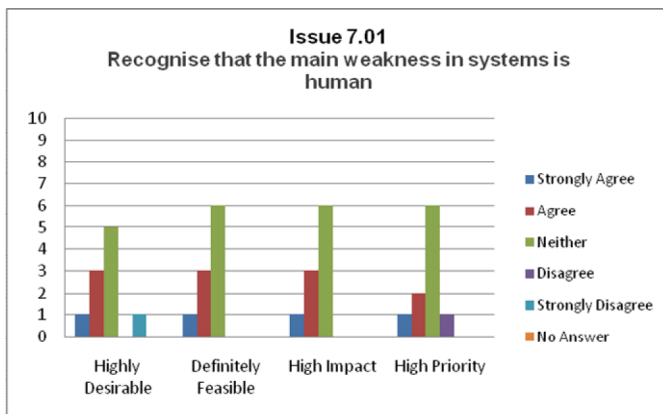
Issue 7: The relationship between privacy, security and access needs to be understood and managed

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
7.01	Recognise that the main weakness in systems is human	Highly Desirable	10%	30%	50%	0%	10%	0%	7.01
		Definitely Feasible	10%	30%	60%	0%	0%	0%	
		High Impact	10%	30%	60%	0%	0%	0%	
		High Priority	10%	20%	60%	10%	0%	0%	
7.02	Establish partnership working between RM and information security professionals	Highly Desirable	60%	30%	10%	0%	0%	0%	7.02
		Definitely Feasible	10%	80%	10%	0%	0%	0%	
		High Impact	10%	60%	30%	0%	0%	0%	
		High Priority	20%	50%	30%	0%	0%	0%	
7.03	Train staff on records/information issues	Highly Desirable	60%	40%	0%	0%	0%	0%	7.03
		Definitely Feasible	20%	80%	0%	0%	0%	0%	
		High Impact	20%	60%	20%	0%	0%	0%	
		High Priority	40%	20%	40%	0%	0%	0%	
7.04	Train staff on Data Protection legislation	Highly Desirable	20%	50%	30%	0%	0%	0%	7.04
		Definitely Feasible	10%	60%	30%	0%	0%	0%	
		High Impact	10%	30%	60%	0%	0%	0%	
		High Priority	10%	40%	50%	0%	0%	0%	
7.05	Establish staff understanding of the need for retention	Highly Desirable	10%	90%	0%	0%	0%	0%	7.05
		Definitely Feasible	10%	70%	20%	0%	0%	0%	
		High Impact	10%	60%	30%	0%	0%	0%	
		High Priority	10%	50%	40%	0%	0%	0%	

Issue 6: Organisations need to develop and implement a preservation strategy for e-records

None of the solutions proposed for Issue 6 related primarily to human aspects.

Issue 7: The relationship between privacy, security and access needs to be understood and managed

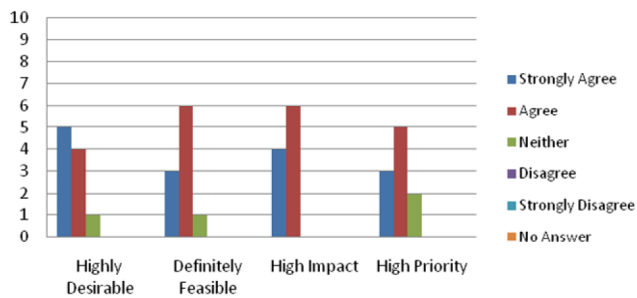


Issue 8: Organisations need to recognise where the e-environment creates new processes or affects existing processes and need to manage this

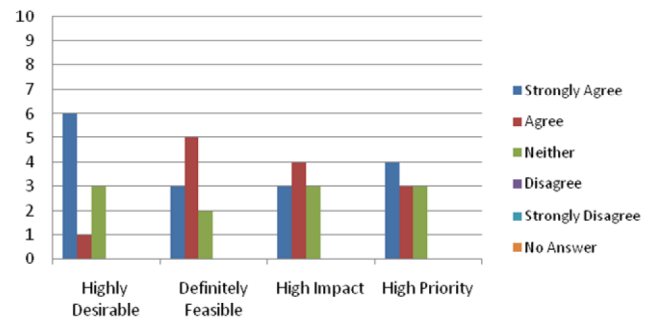
Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
8.01	Establish partnership working between RM, IT and business professionals in process analysis	Highly Desirable	50%	40%	10%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	40%	60%	0%	0%	0%	0%	100%
		High Priority	30%	50%	20%	0%	0%	0%	100%
8.02	Involve staff in process analysis	Highly Desirable	60%	10%	30%	0%	0%	0%	100%
		Definitely Feasible	30%	50%	20%	0%	0%	0%	100%
		High Impact	30%	40%	30%	0%	0%	0%	100%
		High Priority	40%	30%	30%	0%	0%	0%	100%
8.03	Educate staff calmly, rather than being alarmist about impacts on processes	Highly Desirable	30%	50%	20%	0%	0%	0%	100%
		Definitely Feasible	30%	60%	10%	0%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	20%	30%	50%	0%	0%	0%	100%

Issue 8: Organisations need to recognise where the e-environment creates new processes or affects existing processes and need to manage this

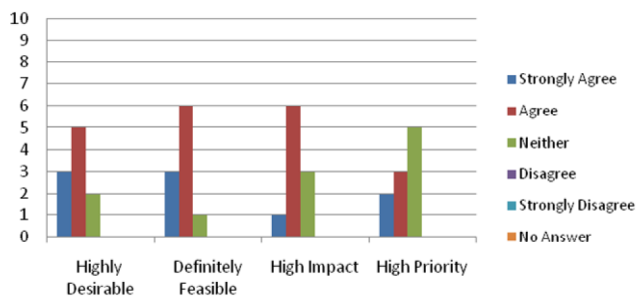
Issue 8.01
 Establish partnership working between RM, IT and business professionals in process analysis



Issue 8.02
 Involve staff in process analysis



Issue 8.03
 Educate staff calmly, rather than being alarmist about impacts on processes



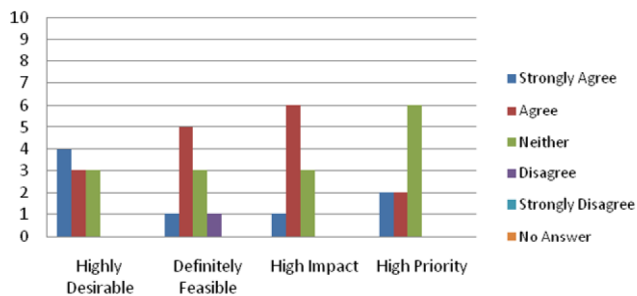
Issue 9: RM principles and/or methods need defining or developing for e-records management

Response break-down Number of participants polled: 19 Number of responses: 10			Strongly Agree Agree Neither Disagree Strongly Disagree No Answer						
9.01	Review effectiveness of RM methods by staff member with both RM and IT expertise	Highly Desirable	40%	30%	30%	0%	0%	0%	100%
		Definitely Feasible	10%	50%	30%	10%	0%	0%	100%
		High Impact	10%	60%	30%	0%	0%	0%	100%
		High Priority	20%	20%	60%	0%	0%	0%	100%
9.02	Review effectiveness of RM methods by partnership working between RM and IT professionals	Highly Desirable	40%	50%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	50%	30%	0%	0%	0%	100%
		High Impact	20%	30%	50%	0%	0%	0%	100%
		High Priority	20%	30%	50%	0%	0%	0%	100%
9.03	Involve users in reviewing effectiveness of RM methods	Highly Desirable	30%	40%	30%	0%	0%	0%	100%
		Definitely Feasible	10%	60%	30%	0%	0%	0%	100%
		High Impact	20%	10%	70%	0%	0%	0%	100%
		High Priority	20%	10%	70%	0%	0%	0%	100%
9.04	Undertake change management for RM professionals	Highly Desirable	30%	50%	10%	10%	0%	0%	100%
		Definitely Feasible	10%	60%	20%	10%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	20%	40%	40%	0%	0%	0%	100%
9.05	Raise RM professionals' awareness of new ideas on ERM	Highly Desirable	50%	40%	10%	0%	0%	0%	100%
		Definitely Feasible	10%	80%	10%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	20%	50%	30%	0%	0%	0%	100%

Issue 9: RM principles and/or methods need defining or developing for e-records management

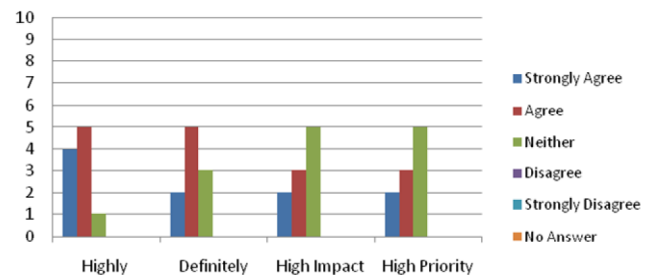
Issue 9.01

Review effectiveness of RM methods by staff member with both RM and IT expertise



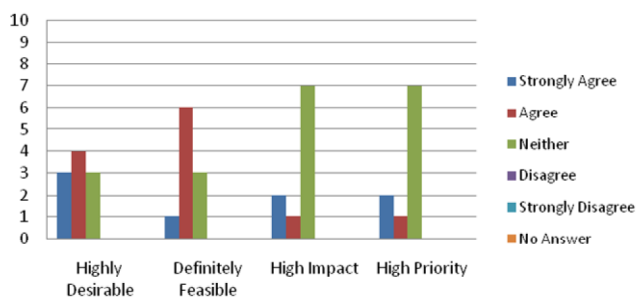
Issue 9.02

Review effectiveness of RM methods by partnership working between RM and IT professionals



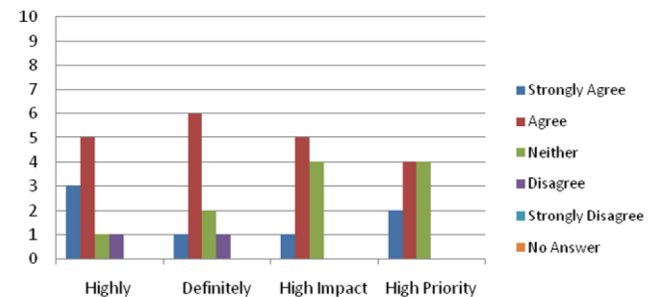
Issue 9.03

Involve users in reviewing effectiveness of RM methods



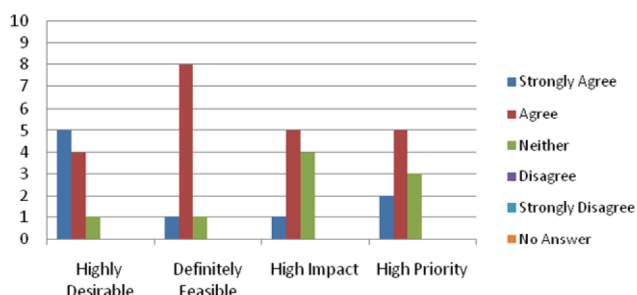
Issue 9.04

Undertake change management for RM professionals



Issue 9.05

Raise RM professionals' awareness of new ideas on ERM



Issue 10: Organisations need to recognise which business processes need analysing and / or re-engineering for e-records management and implement the outcome

Response break-down

Number of participants polled: 19

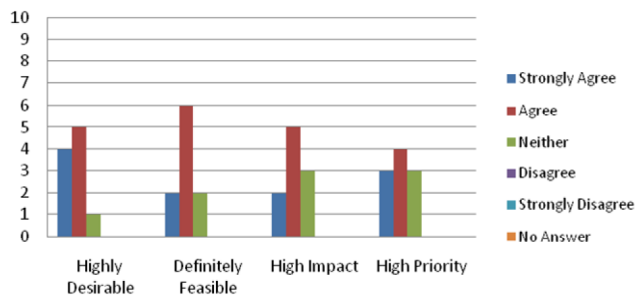
Number of responses: 10

			<div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div>						
10.01	Establish partnership working between RM, IT and business professionals in business process analysis	Highly Desirable	40%	50%	10%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	20%	50%	30%	0%	0%	0%	100%
		High Priority	30%	40%	30%	0%	0%	0%	100%
10.02	Consult with staff on business process re-engineering at all phases (analysis, piloting, testing)	Highly Desirable	50%	20%	30%	0%	0%	0%	100%
		Definitely Feasible	30%	10%	60%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	30%	20%	50%	0%	0%	0%	100%
10.03	Raise staff awareness about the need for new processes	Highly Desirable	40%	30%	30%	0%	0%	0%	100%
		Definitely Feasible	30%	40%	30%	0%	0%	0%	100%
		High Impact	30%	30%	40%	0%	0%	0%	100%
		High Priority	30%	30%	40%	0%	0%	0%	100%
10.04	Train staff on the new processes when implementing re-engineered business processes	Highly Desirable	60%	30%	10%	0%	0%	0%	100%
		Definitely Feasible	50%	40%	10%	0%	0%	0%	100%
		High Impact	40%	40%	20%	0%	0%	0%	100%
		High Priority	50%	30%	20%	0%	0%	0%	100%
10.05	Consider the human element in business processes - be realistic	Highly Desirable	70%	20%	10%	0%	0%	0%	100%
		Definitely Feasible	40%	40%	20%	0%	0%	0%	100%
		High Impact	40%	40%	20%	0%	0%	0%	100%
		High Priority	40%	40%	20%	0%	0%	0%	100%

Issue 10: Organisations need to recognise which business processes need analysing and / or re-engineering for e-records management and implement the outcome

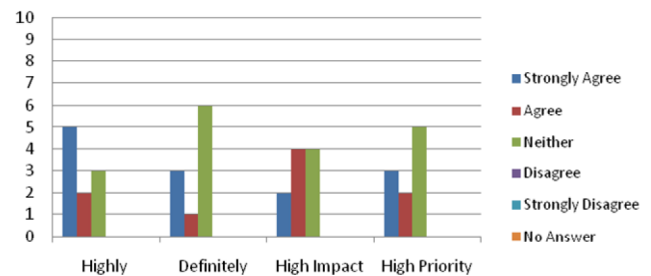
Issue 10.01

Establish partnership working between RM, IT and business professionals in business process analysis



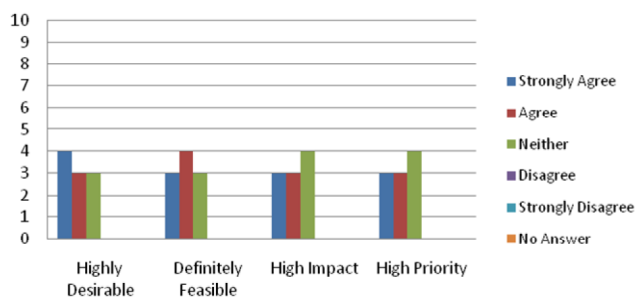
Issue 10.02

Consult with staff on business process re-engineering at all phases (analysis, piloting, testing)



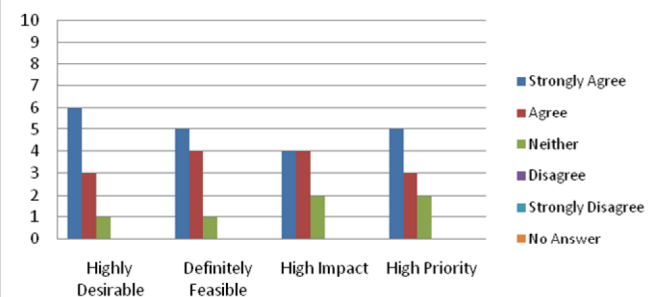
Issue 10.03

Raise staff awareness about the need for new processes



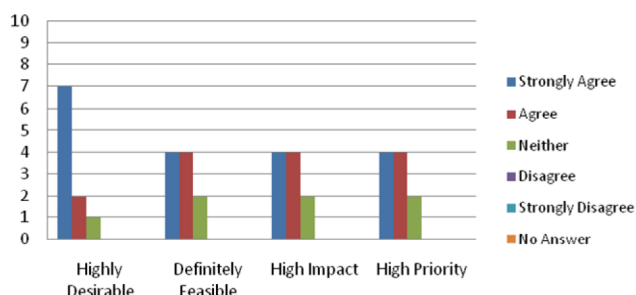
Issue 10.04

Train staff on the new processes when implementing re-engineered business processes



Issue 10.05

Consider the human element in business processes - be realistic



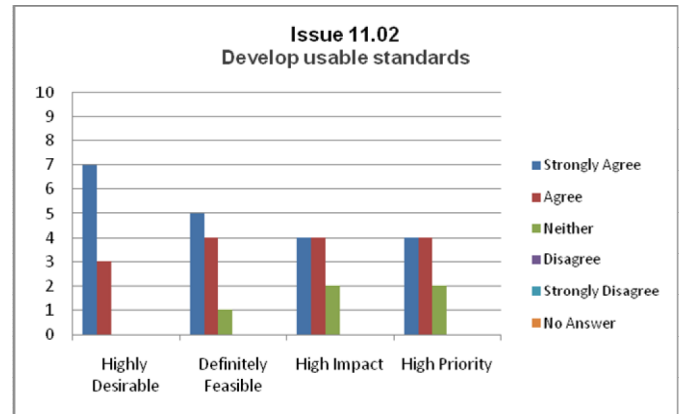
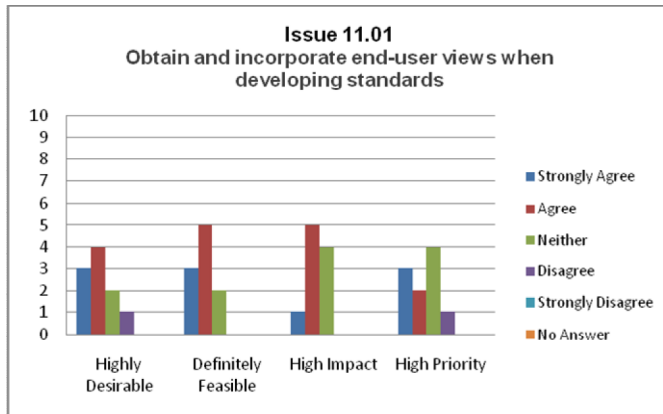
Issue 11: The nature, development and/or organisational use of standards and national strategies needs to be effective

Response break-down Number of participants polled: 19 Number of responses: 10			Response						Total
			Strongly Agree	Agree	Neither	Disagree	Strongly Disagree	No Answer	
11.01	Obtain and incorporate end-user views when developing standards	Highly Desirable	30%	40%	20%	10%	0%	0%	100%
		Definitely Feasible	30%	50%	20%	0%	0%	0%	100%
		High Impact	10%	50%	40%	0%	0%	0%	100%
		High Priority	30%	20%	40%	10%	0%	0%	100%
11.02	Develop usable standards	Highly Desirable	70%	30%	0%	0%	0%	0%	100%
		Definitely Feasible	50%	40%	10%	0%	0%	0%	100%
		High Impact	40%	40%	20%	0%	0%	0%	100%
		High Priority	40%	40%	20%	0%	0%	0%	100%

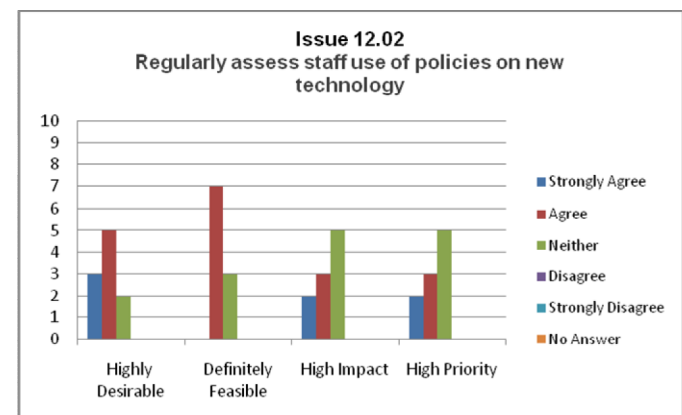
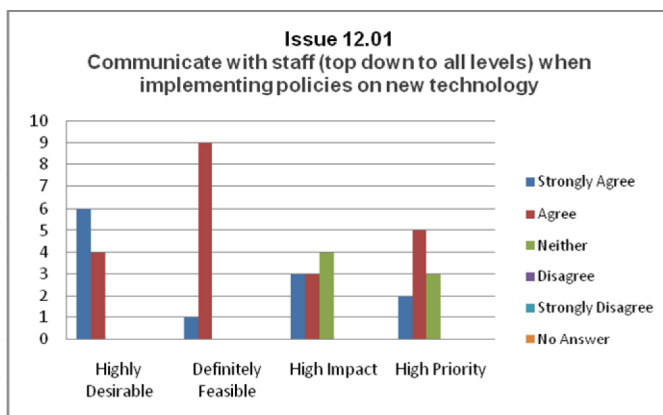
Issue 12: Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications

12.01	Communicate with staff (top down to all levels) when implementing policies on new technology	Highly Desirable	60%	40%	0%	0%	0%	0%	100%
		Definitely Feasible	10%	90%	0%	0%	0%	0%	100%
		High Impact	30%	30%	40%	0%	0%	0%	100%
		High Priority	20%	50%	30%	0%	0%	0%	100%
12.02	Regularly assess staff use of policies on new technology	Highly Desirable	30%	50%	20%	0%	0%	0%	100%
		Definitely Feasible	0%	70%	30%	0%	0%	0%	100%
		High Impact	20%	30%	50%	0%	0%	0%	100%
		High Priority	20%	30%	50%	0%	0%	0%	100%

Issue 11: The nature, development and/or organisational use of standards and national strategies needs to be effective



Issue 12: Organisations need a strategic approach to the use of new technologies and need to manage the associated recordkeeping implications



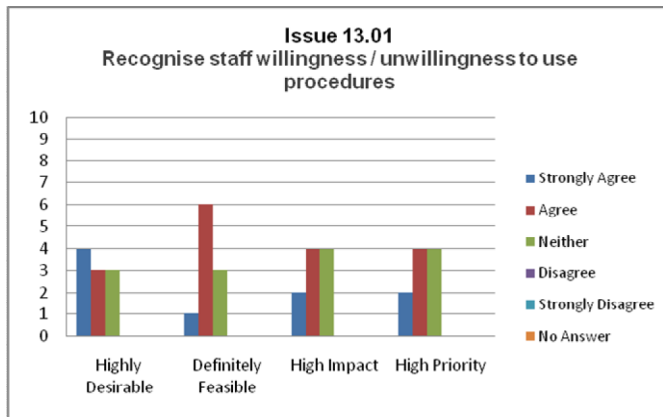
Issue 13: Any other solution(s) that you think should be tried, or avoided, that does not fit in with the above issues but should be included

Response break-down Number of participants polled: 19 Number of responses: 10			<div> <div>Strongly Agree</div> <div>Agree</div> <div>Neither</div> <div>Disagree</div> <div>Strongly Disagree</div> <div>No Answer</div> </div>						
13.01	Recognise staff willingness / unwillingness to use procedures	Highly Desirable	40%	30%	30%	0%	0%	0%	100%
		Definitely Feasible	10%	60%	30%	0%	0%	0%	100%
		High Impact	20%	40%	40%	0%	0%	0%	100%
		High Priority	20%	40%	40%	0%	0%	0%	100%

Issue 14: Cross-cutting solutions applicable to many different issues

14.01	Undertake change management	Highly Desirable	40%	40%	20%	0%	0%	0%	100%
		Definitely Feasible	10%	70%	20%	0%	0%	0%	100%
		High Impact	30%	50%	20%	0%	0%	0%	100%
		High Priority	30%	50%	20%	0%	0%	0%	100%
14.02	Train staff on recordkeeping processes	Highly Desirable	50%	50%	0%	0%	0%	0%	100%
		Definitely Feasible	30%	50%	20%	0%	0%	0%	100%
		High Impact	30%	30%	40%	0%	0%	0%	100%
		High Priority	40%	30%	30%	0%	0%	0%	100%
14.03	Produce user manuals for recordkeeping processes	Highly Desirable	40%	40%	20%	0%	0%	0%	100%
		Definitely Feasible	20%	60%	20%	0%	0%	0%	100%
		High Impact	10%	40%	40%	10%	0%	0%	100%
		High Priority	20%	20%	60%	0%	0%	0%	100%

Issue 13: Any other solution(s) that you think should be tried, or avoided, that does not fit in with the above issues but should be included



Issue 14: Cross-cutting solutions applicable to many different issues

