A Critical Assessment of Records Management Capacity and Compliance Toolkits

Final project report, June 2006

Project funded by the Arts and Humanities Research Council (AHRC)
Grant No. AN112347

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ISBNs: (10 digit) 1 86135 335 9; (13 digit) 978-1-86135-335-1

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EXECUTIVE SUMMARY

This project critically evaluated four toolkits for assessing records management capacity and/or compliance, viz. (in alphabetical order):

- Information Governance Toolkit (IGT) developed by the United Kingdom National Health Service Information Authority http://nww.nhsia.nhs.uk/infogov/igt/ (only available via NHSnet)
- Information Management Capacity Check (IMCC) Tool and Methodology developed by the Library and Archives Canada http://www.collectionscanada.ca/information-management/002/007002-2003-e.html
- Records Management Capacity Assessment System (RMCAS) developed by the International Records Management Trust http://www.irmt.org/downloadlist/development.html and http://www.nationalarchives.gov.uk/rmcas
- RiskProfiler developed by ARMA International and NetDiligence http://www.arma.org/standards/eassessment.cfm

They have been developed in different countries and sectors within the context of the electronic environment and providing evidence of good corporate and information governance. The aim was to evaluate them from both the theoretical and practical aspects, using a virtual Delphi approach with both their developers and selected users, and to answer the following specific questions:

- Why were the toolkits developed? What was the rationale, what is their purpose and who are the intended users?
- What models, theoretical frameworks and/or principles underpin the toolkits? Why were these chosen and were any others considered and rejected?
- What is the underlying design and technology used and why was this chosen?
- Who is actually using the toolkits, how and why? How practical are they to implement? How effective are they? What value and benefits have been gained by deploying them?
- What are the strengths of the toolkits? What improvements are needed?
- How do the toolkits compare? What lessons can be adopted, adapted and/or transferred from one to another?

As a result of this evaluation, and within the context of a generic international standard for records management (ISO 15489, 2001), is there a need for generic, global toolkits for records management and, if so, what type of toolkits?

The project methodology was qualitative to recognise the differences between the toolkits and their users, making the results transferable rather than generalisable. A modified Delphi technique, a cognitive walkthrough and a modified heuristic review, involving different groups of key stakeholders and the researchers, were used. The project was informed by a literature review covering the named toolkits, and records management toolkits in general. Additionally, background information was collected on each toolkit and validated by the toolkit producers.

Evaluation criteria, developed with input from the toolkit developers and expert users, as well as the project team and best practice documented in the literature, were used to structure the cognitive walkthroughs and heuristic reviews.

The evaluation revealed that:

- the toolkits vary in their rationale and purpose, from mandatory auditing of performance to assessment of capability and/or capacity, and strategic planning. Their intended audiences are usually records professionals either in the public sector, private sector or both. The IGT has a clearly defined user group (UK National Health Service organisations). RMCAS is aimed at developing countries. Producers of the other toolkits have their own (confidential) information about their toolkit users. In some cases the users match their target audience and in others, such as those freely available on the Web, the users are broader than the target audience;
- all the toolkits implicitly or explicitly are based on the use of relevant national / international records management legislation, standards and good practice. Three of the toolkits are software tools for data input, analysis and report generation; the other consists of documentation describing the process to be undertaken. However, none explicitly caters for the needs of those with visual or mobility impairments;
- all the toolkits meet their stated objectives, and are practical to implement, albeit with the need for minor improvements. The real-life users found that the toolkits met their own particular objectives, were effective, and assisted in improving records management within their organization. They would use such toolkits again;
- the results from the use of any toolkit depend on the thoroughness and accuracy of the data 'input' by the user. This thoroughness and accuracy would clearly be improved by the involvement of records management and archives staff in the process; and
- all of the toolkits have their strengths. Because they each have a different purpose, audience and design, they 'complement' each other, rather than 'compete' with each other. As long as a toolkit clearly documents its purpose, audience and coverage then there would seem to be no need to force the development of one generic, global toolkit for records management.

A set of general recommendations has been produced for toolkit developers which would apply to any toolkit, not just those covered in the project. Individual organisations need to select the toolkit most appropriate for them depending on their own context and requirements. The evaluation criteria can be used to assist in this process.

The results highlight the similarities of the toolkits as well as their differences. They are varied, very powerful and flexible and of real potential value to organisations in managing their records. Their application is limited only by the imagination of those who use them. However, *awareness* of them could be much higher. They have yet to become well known and well established in the community. They need to be and deserve to be part of the records professional's total toolkit, given their careful and expert design, their valuable outputs and the producers' commitment to maintaining them at least in the short term.

Given this situation, this research project has been timely and valuable.

1. INTRODUCTION

1.1. Research Context

Managing records is a global issue - it is a requirement for all organisations and it affects all organisations. Records protect organisations, protect individual human rights, provide evidence, and expose and help prevent corruption. They support more effective and efficient business, of all kinds, underpin e-government and service delivery, help to demonstrate accountability, transparency and corporate governance, and are the source of information for citizens in the context of open government and freedom of information.

The toolkits project reported here built on a previous project (McLeod, 2003, 2004a, 2004b, 2005) which assessed the impact of ISO 15489 (2001), the first international records management standard, in the UK. The toolkits project explored in detail four practical toolkits recently developed for the records management community, including a North American, a Canadian and an international toolkit. Results of the ISO 15489 project highlighted the need for practical tools which can help organisations to assess their compliance with the ISO standard since the standard, in its current form, does not lend itself to an easy assessment. Three of the toolkits explored in the toolkits project have specifically incorporated the requirements of ISO 15489 into their design. The other toolkit has not, but does encompass the spirit of what the standard seeks to ensure, "that appropriate attention and protection is given to all records, and that the evidence and information they contain can be retrieved more efficiently and effectively, using standard practices and procedures" (ISO 15489, 2001).

It is important to objectively assess the rigour of toolkits which can be used to make a statement about an organisation's (a) compliance with an international standard representing global best practice, and/or (b) information governance, and/or (c) capacity or readiness for managing its records. An objective assessment provides a quality indicator, can encourage the appropriate selection and use of toolkits, and can add weight to the results they provide.

The project findings will help to raise awareness of existing toolkits and provide new knowledge and understanding of their relevance and practical application for anyone in the discipline, anywhere in the world. They will enable potential users of the toolkits to make informed decisions about how, why and when to use which type of toolkit. They provide practical case examples of toolkits in action, something which is still not commonplace in the records management discipline. This research project and its findings should be of interest to records and information management academics, practitioners and consultants worldwide.

1.2. Research Questions

Since the publication of ISO 15489 (2001) a range of toolkits has been developed for different yet related purposes within the broad context of measuring records management capacity, compliance and/or readiness in the electronic environment. They have been developed by different organisations in different countries and sectors to enable organisations to provide and protect evidence of corporate governance and/or demonstrate or assess their information management.

This project investigated the development and application of these toolkits and, in particular, critically evaluated four toolkits for assessing records management capacity and/or compliance from both the theoretical and practical aspects. In particular, it sought to answer the following questions:

- Why were the toolkits developed? What was the rationale, what is their purpose and who are the intended users?
- What models, theoretical frameworks and/or principles underpin the toolkits? Why were these chosen and were any others considered and rejected?
- What is the underlying design and technology used and why was this chosen?
- Who is actually using the toolkits, how and why? How practical are they to implement? How effective are they? What value and benefits have been gained by deploying them?
- What are the strengths of the toolkits? What improvements are needed?
- How do the toolkits compare? What lessons can be adopted, adapted and/or transferred from one to another?

As a result of this evaluation, and within the context of a generic international standard for records management (ISO 15489, 2001), is there a need for generic, global toolkits for records management and, if so, what type of toolkits?

1.3. Aims and Objectives

The aim was to critically evaluate four toolkits for assessing records management capacity and/or compliance from both the theoretical and practical aspects. This was achieved by considering:

- the context and purpose(s) of each tool
- the underlying principles and models of their design, and
- their utilisation and the benefits realised together with their strengths and areas for improvement from the stakeholders' perspectives.

The objectives were to:

- produce four case examples of utilising the toolkits in practice
- draw conclusions about the value and benefits of the toolkits by assessing their robustness and fitness-for-purpose
- produce a guide to records management toolkits and recommendations on their practical use
- identify best practice models and approaches to designing toolkits for records management
- feed into further development of the toolkits and/or new toolkits
- inform the work of the national and international standards bodies on records management and the future development of ISO 15489.

The four toolkits selected for the study were (in alphabetical order):

- Information Governance Toolkit (IGT) developed by the United Kingdom National Health Service Information Authority http://nww.nhsia.nhs.uk/infogov/igt/ (only available via NHSnet)

- Information Management Capacity Check (IMCC) Tool and Methodology developed by the Library and Archives Canada http://www.collectionscanada.ca/information-management/002/007002-2003-e.html
- Records Management Capacity Assessment System (RMCAS) developed by the International Records Management Trust http://www.irmt.org/downloadlist/development.html and http://www.nationalarchives.gov.uk/rmcas
- RiskProfiler developed by ARMA International and NetDiligence http://www.arma.org/standards/eassessment.cfm

2. RESEARCH METHODS

The project methodology was qualitative to recognise the differences between the toolkits and their users. The results are therefore transferable rather than generalisable. The research involved using a modified Delphi technique, a cognitive walkthrough and a modified heuristic review involving different groups of key stakeholders and the researchers.

The project was informed by a literature review covering the named toolkits, and records management toolkits in general. Additionally, background information was collected on each toolkit and validated by the toolkit producers.

The project used a modified Delphi technique. Developed in the 1950s at the Rand Corporation, a Delphi gathers a consensus of 'expert' opinion. Its purpose is to provide a study which "elicits, refines, and draws upon the collective opinion and expertise of a panel of experts" (Gupta & Clarke, 1996). The modification used in this project was to contact the participants, and receive their comments, via email, i.e. an electronic Delphi (e-Delphi).

The first stage of the e-Delphi study included stakeholders involved in the development of the toolkits and experts in evaluation generally. It collected expert opinion on toolkit design and development and developed consensus on a set of evaluation criteria, based on these expert stakeholders' aims. The evaluation criteria were then used to structure the cognitive walkthroughs and heuristic reviews.

Two of the project researchers (who were information management experts, but not records management experts) independently conducted a cognitive walkthrough of each of the toolkits with the aim of producing an objective assessment. The cognitive walkthrough approach to evaluation has its origins in software engineering and involves a "detailed review of a sequence of actions" (Abowd, 1995). The researchers used their own organisation (i.e. their school within Northumbria University) as the context for using and assessing each toolkit, commenting on each task of the walk through. In addition, two people conducted independent heuristic reviews of each toolkit. The project director (a records management expert, but unfamiliar with the toolkit contents) conducted a heuristic review of all four toolkits, whilst for each toolkit a user (a records management expert with practical experience of using the specific toolkit) conducted a heuristic review. "Heuristic review is a type of expert evaluation, where experts review a product's usability. It is an easy to learn method that can be quickly applied … to roughly determine the usability of … software products" (OCLC). In contrast to a cognitive walkthrough which provides an evaluation of the user interface and ease-of-use of a toolkit, a heuristic review also provides an evaluation of the usability of the toolkit's results and analysis, and the tangible and intangible value and benefits of the process and outputs within the context of everyday activities. Combining the results from the two cognitive walkthroughs and two heuristic reviews provided a 360^{o} evaluation of each toolkit. Additionally, scrutiny of the evaluation results enabled a final refinement of the evaluation criteria.

Analysis of the evaluation findings resulted in detailed feedback on each toolkit and the development of generic recommendations for good practice in developing and revising records management toolkits. The feedback was sent separately, in confidence, to each toolkit producer for comment and validation. The second stage of the e-Delphi asked for

comments on the generic recommendations, evaluation of the project itself (performance, process and impact) and evaluation of the project's outcomes (synthesis).

3. RESULTS

3.1. Literature Review

A literature review was conducted at the start of the project to identify literature on the four toolkits specifically selected for this project, on records management 'toolkits' generally and finally on 'evaluating toolkits'. The principles of *Systematic Literature Review* methodology (http://www.york.ac.uk/inst/crd/report4.htm) was drawn upon, where applicable.

In the first stage a broad search of all available databases (subscribed to by Northumbria University) in the general topic area was conducted and findings recorded. Most of these databases returned nil or a very few hits, none of which was relevant. Therefore limitations were placed on the second stage of the search in that only specified databases were chosen for their relevance to the subject area. These included Emerald (management, library information science journals), LISA (Library and Information Science Abstracts) and ZETOC (electronic journal contents).

The four toolkits selected for this project
Using the full and any abbreviated names of each of the toolkits within the study, a thorough search of the three databases (above) revealed only one article on one toolkit – RMCAS (Griffin, 2004). In this article the author, who worked for the toolkit producer, the International Records Management Trust (IRMT), describes the context for the toolkit's development and explains its purpose and design.

In light of these limited results, the search was extended to the Web using Google and the exact match search technique. This retrieved:

- ~106 sites for the Records Management Capacity Assessment System, including reference to an article by Demb (2004);
- ~137 sites for the ARMA RIM e-assessment toolkit (its original name) and ~66 for "Risk Profiler Self Assessment" (its new name);
- ~384 sites for the Information Management Capacity Check; and
- ~23,700 sites for the Information Governance Toolkit.

The majority of these were news and press releases or information and presentations about the toolkits. The ICA 2004 Congress paper by Carlisle (2004) was not found even though it does include coverage of the ARMA toolkit, so the lack of results in the Web search cannot be interpreted as indicating no relevant literature.

Records management toolkits
Focusing on toolkits for records management in the same three databases returned 130 references. All articles were checked for their relevance through their full title and/or the abstract and 10 articles were selected. Closer inspection provided three articles of interest to this study, although none directly concerned with its specific scope.

In the first, Harries (2001) refers to 'workflow and object-orientated toolkits', in the context of software packages that address electronic document and records management (Harries, 2001, p36). In the second, Barata and Cain (2003) discuss a wide range of records management 'toolkits' which include methodologies, standards and

codes of practice (e.g. the National Archives of Australia's Designing and Implementing Record-keeping Systems (DIRKS); AS ISO 15489-2002; the Code of Practice on the Management of Records, issued by the Lord Chancellor's Department in the United Kingdom (http://www.dca.gov.uk/foi/reference/imprep/codemanrec.htm) and the central government model action plan for its implementation (http://www.nationalarchives.gov.uk/policy/foi/pdf/central_government.rtf); and The National Archives' (UK) guidance which includes toolkits for electronic records management.) Finally, Bailey (2003, p.27) refers to the development of an Electronic Records Management Training Package as a tool for raising awareness and promoting best practice in records management where there is none. (This tool was in fact developed by Northumbria University (Hare, 2003)).

Evaluating toolkits

Close scrutiny of many results of a search for evaluating toolkits identified three articles, one of which led to two additional articles.

Haswell and Banwell (2004) report on an investigation into existing toolkits for ICT evaluation but do not explain how to evaluate a toolkit. Thebridge (2004) and Greenwood and Davies (2004) discuss toolkits in library contexts. The latter provides interesting and relevant background from the toolkit developer's perspective. They describe designing a toolkit for evaluating a project as a "formidable task" where affordability was key for both the funders and project co-ordinators and concluded that the toolkit development process "demonstrated the importance of properly framed evaluation in achieving excellence and in advocacy" (Greenwood and Davies, 2004, p 110 and p112). Their experience is relevant to both the evaluation process undertaken in this research project and the understanding of the outcomes from the perspectives of different stakeholders, viz. users and developers.

Two articles referred to by Haswell and Banwell (2004) were useful in exploring definitions of 'evaluation' and 'toolkits' (Banwell, 2000; Oliver and Conole, 2000).

Banwell (2000, p173) describes 'evaluation' as a complex field, associated with a range of other concepts and offers a description including "performance measurement and benchmarking, quality, validity, effectiveness, value for money, best value and audit".

The definition of the word 'toolkit' can vary from discipline to discipline, and the types of tool can vary too. Oliver and Conole (2000, p32) define toolkits as "decision making systems based on expert models". They expand on this definition later in their article: "all toolkits include an expert model of a process derived from recognised theory and best practice ... [they] produce documentary evidence of assumptions, process and outputs ... for quality assurance and assessment purposes ... bringing best practice within the reach of all practitioners in a usable format" Oliver and Conole (2000, p35).

In summary, the literature on records management toolkits in general is not huge and on the four toolkits in particular is very limited, other than press releases on the Web. This confirmed the uniqueness of the research project and the potential value of its contribution to knowledge, understanding and experience in this field.

3.2. Results from the Evaluation of the Toolkits

The analysis of the results of the cognitive walkthroughs and heuristic reviews is presented in the form of answers to the initial research questions posed by the project.

Why were the toolkits developed? What was the rationale, what is their purpose and who are the intended users?

- The toolkits varied in their rationale, purpose and intended audience:
    - Use of the IGT is internal to NHS organizations as a mandatory requirement for auditing and benchmarking information governance performance, including records management. It is targeted to the information governance team.
    - The IMCC is aimed at Canadian federal departments and agencies to assess their IM capabilities, including records management, and to develop a strategic plan to improve their IM capacity and practice. It is particularly aimed at senior managers. However, it is accessible to any organisation to use.
    - RMCAS is aimed at the public sector, particularly in developing countries, and aims to help assess records and information systems capacity. It is particularly aimed at records managers and archivists. However, it is accessible to any organisation to use.
    - RiskProfiler assesses an organisation's records and information management against the need for compliance with regulations and laws. Use is open to any organisation on payment of the registration fee.

What models, theoretical frameworks and/or principles underpin the toolkits? Why were these chosen and were any others considered and rejected?

- All the toolkits implicitly or explicitly are based on the use of relevant national / international records management legislation, standards, e.g. ISO 15489 (2001), and good practice. In some of the toolkits the evaluation criteria are clearly traceable to specific statements in such legislation/standards/good practice and links to good practice guidance is provided to enable change and improvement.

What is the underlying design and technology used and why was this chosen?

- Three of the toolkits (IGT, RMCAS, RiskProfiler) are software tools for data input, analysis and report generation. The IMCC consists of documentation describing the process to be undertaken. This process, as well as assessing IM capabilities, engages staff with records management and encourages change.

Who is actually using the toolkits, how and why? How practical are they to implement? How effective are they? What value and benefits have been gained by deploying them?

- The IGT has a clearly defined user group since its use is mandatory for UK National Health Service organisations. Producers of the other toolkits have their own (confidential) information about their toolkit users. In some cases the users match their target audience and in others, such as those freely available on the Web, the users are broader than the target audience.

- All the toolkits met their stated objectives, and were practical to implement, albeit with the need for minor improvements.

- The real-life users found that the toolkits met their own particular objectives, were effective, and assisted in improving records management within their organization. They would use such toolkits again.

- However, the results from the use of any toolkit depend on the thoroughness and accuracy of the data 'input' by the user. This thoroughness and accuracy would clearly be improved by the involvement of records management and archives staff in the process.

What are the strengths of the toolkits? What improvements are needed? How do the toolkits compare? What lessons can be adopted, adapted and/or transferred from one to another?

- All of the toolkits have their strengths. Because they each have a different purpose, audience and design, they 'complement' each other, rather than 'compete' with each other.

- Improvements identified for the toolkits were of a minor nature and have been sent, in confidence, to the toolkit producers individually.

- A set of general recommendations has been produced for toolkit developers which would apply to any toolkit, not just the four covered in this project. Similarly, the evaluation criteria developed and validated during the project can be used by individuals for guidance on selecting the most appropriate toolkit for their particular requirements which would also apply to any toolkit. These evaluation criteria cover the topics of:
    - provenance of toolkit
    - toolkit audience
    - toolkit coverage
    - toolkit content based on legislation/standards/good practice
    - toolkit process/format
    - resource requirements to use the toolkit
    - accessibility/compatibility of the toolkit
    - usability of the toolkit; and
    - evaluation approach.

Within the context of a generic international standard for records management (ISO 15489, 2001), is there a need for generic, global toolkits for records management and, if so, what type of toolkits?

- All the toolkits covered have different purposes, audiences and coverage. Individual organisations need to select the toolkit most appropriate for them depending on their own context and requirements. As long as a toolkit clearly documents its purpose, audience and coverage then there would seem to be no need to force the development of one generic, global toolkit for records management.

The results of the evaluation and have been shared with and validated by the toolkit producers to feed into potential further development of the toolkits and/or new toolkits. They will be disseminated to inform the work of the national and international standards bodies on records management.

3.3. Project Outputs

The key outputs from the project are:

- a set of evaluation criteria which can be used for evaluating any records management toolkit and might possibly be adapted for other information management toolkits (Appendix A)
- a guide to records management capacity and compliance toolkits, including real case examples and recommendations for their practical use (McLeod, Childs & Heaford, 2006); and
- a series of generic recommendations for users wishing to select a records management toolkit for use in a specific organisation/context (Appendix B)

3.4 Project Evaluation

The second stage of the e-Delphi asked for comments on the project itself. The responses, ranked on a scale of 1 to 5, where 1 = strongly agree and 5 = strongly disagree, were as follows:

- Performance - The project carried out the agreed activities
  1 (strongly agree) = 3 responses; 2 (agree) = 1 response
- Process - The project was properly conducted
  1 (strongly agree) = 1 response; 2 (agree) = 2 responses; 3 (neutral) = 1 response
- Impact - The project has influenced or informed me
  2 (agree) = 3 responses; 4 (disagree) = 1 response
- Impact - The project has influenced or informed my organisation
  2 (agree) = 2 responses; 4 (disagree) = 1 response; 5 (strongly disagree) = 1 response.

Overall, whilst participants felt the project had done what it set out to do, had been conducted properly and had influenced or informed them as individuals, it had not influenced or informed their organisations. This is perhaps not surprising at such an early stage and before the final outputs were available for circulation.

Qualitative evaluation sought comments on two questions. First, 'what are the broad and more speculative outcomes that you can draw from your involvement in the project?' elicited the following responses:

> *"The opportunity to think critically about the toolkit evaluation criteria was not only informative but also intellectually challenging."*
>
> *"Helps us to see [the toolkit] from the outside and user perspective, although we aren't sure we can dedicate [...] limited development resources to the non-records manager user. However, project comments broadly follow the user feedback we have received ... so this is very helpful."*
>
> *"I would have appreciated more feedback or direction on what is the most suitable format & structure for a RM evaluation toolkit. I would have like to have seen a rough baseline of best practice for RM Evaluation."*
>
> *"It is clear that overall the reviewers wanted more explanation of the tool. Much of what they wanted is already in the tool so we may need to address how we present it. We will use this knowledge in the development of other tools."*

The second question was 'are you planning to act upon the results of your toolkit evaluations and / or the generic recommendations?' One response was simply 'yes' and the others were:

> *"Am able to derive some information that could be incorporated in my teaching."*
>
> *"We will certainly take on board as many recommendations as we can during the further development of ... The main challenges lie in the programming/development/budget constraints that affect the extent to which some of the more complex changes can be made ..."*

Further comments made about the project showed that it had been *"very informative"* and a hope was expressed that *"the results will be widely disseminated through publication or other means."*

4. CONCLUSIONS

The aim of the project was to critically evaluate four specifically selected toolkits for assessing records management capacity and/or compliance from both theoretical and practical aspects. This was achieved by examining (a) the context and purpose(s) of each tool; (b) the underlying principles and models of their design, and (c) their utilisation and the benefits realised, together with their strengths and areas for improvement from different stakeholder perspectives.

In addition to the outputs produced from the project (see 3.3), the following conclusions can be drawn about the value and benefits of the toolkits, their robustness and fitness-for-purpose:

- all four toolkits are relatively easy to use, some more detailed than others and requiring more subject expertise to gain maximum benefit and ensure reliable and accurate results
- all four toolkits are extremely valuable for records management professionals offering the potential to assess compliance and/or capacity, benchmark against standards (and in some cases benchmark against other organisations), identify strengths/weaknesses and areas for improving the management of records
- the real case examples illustrate how such toolkits can be used for different purposes and at different levels i.e. in a 'quick and dirty' manner or in detail, and
- *at the same time* the toolkits can be used to work with others during the data collection and/or analysis stages to raise awareness, communicate and build partnerships for managing records effectively.

Best practice models and approaches to designing toolkits for records management identified include:

- use of external standards (e.g. ISO 15489, 2001) against which to make assessments and to provide statements of best practice/suggestions for improvement
- use of internal standards and policies against which to make assessments
- use of expert records practitioners in the development of toolkit content (e.g. to translate best practice statements into assessment questions)
- explicit links between assessment questions and best practice (e.g. cross-referencing clauses in ISO 15489)
- use of powerful graphical outputs to summarise assessment results (e.g. traffic lights, 3-d models, percentage scores and averages, tables and charts)
- help and guidance
- highlighting the importance of gathering information to ensure accurate data entry/assessment to ensure validity of results (e.g. truthfulness statement).

However, none of the toolkits had explicitly catered for the needs of those with impairments (e.g. visual or mobility) by, for example, following WC3 guidelines (http://www.w3.org/WAI/intro/accessibility.php).

The results highlight the similarities of the toolkits (e.g. their design based on best practice and internal/external standards) as well as their differences (e.g. format and

intended audience). They demonstrate the variety offered by just a small number of toolkits and consequently their combined potential value for many organisations.

Toolkits such as the four evaluated here are clearly potentially very powerful and flexible and of real value to organisations in managing their records. Their application is limited only by the imagination of those who use them.

However, judging by the very limited literature on them, and ad hoc discussions between the research project team and records professionals, *awareness* of these tools could be much higher. The toolkits have yet to become well known and well established in the community in terms of being automatically considered and commonplace. They need to be and deserve to be part of the records professional's total toolkit, given their careful and expert design, their valuable outputs and the producers' commitment to maintaining them at least in the short term. Non-records professionals *may* also use them; this caused concern to some of the developers where a toolkit was *"based on the 'industry standard'* [ISO 15489] *and must presuppose some familiarity with records management. We recommend … that interviews are conducted by records managers/staff, not just because the tool is easier to understand by that group, but because the questions they ask and the interpretation of the answers given are directly related to records management."* This is a potential problem which could result in the inappropriate conduct and/or interpretation of assessing records management. But, until records management capacity has increased significantly there are likely to be many non-records professionals looking to use these tools. Prominent 'health warnings' will at least highlight the issue to users.

Given this situation, this research project has been timely and valuable. It provides an independent theoretical and practical assessment of four toolkits hitherto not very widely known and used in the UK. It also provides a guide for potential users of these toolkits as well as evaluation criteria for assessing them, and potential future toolkits, together with recommendations for their practical use.

However, one participant, in their response to the project evaluation questions, raised an interesting aspect of records management evaluation:

> *"I would like to have seen more analysis of the problem of evaluating records management specifically (i.e. RM is deeply integrated with business functions and ICT, how do you best address that in a RM evaluation? which viewpoint, direction do you take? How do you weigh the value of variable results?) … I would have liked to have seen a rough baseline of best practice for RM Evaluation."*

The problem of evaluating records management per se, rather than toolkits for doing so, was outside the scope of such a small project. However, it is indeed an important issue which brings in value, performance measurement, quality etc. It would be an interesting topic to research.

Further dissemination activities from this project, in the form of published articles, will contribute to raising awareness and the results have already been incorporated into teaching and learning programmes at Northumbria University.

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APPENDIX A: EVALUATION CRITERIA FOR RECORDS MANAGEMENT TOOLKITS

1. Provenance of Toolkit

1.1. Producer's name

1.2. Producer's category
(i.e. public sector / commercial, private sector / professional body / other)

1.3. Producer's track record in the RM field
(i.e. level of expertise, and length of existence)

1.4. Sustainability of toolkit
(i.e. the producer of the toolkit has overtly committed to (or is a stable organisation with a commitment to the RM field and therefore a covert commitment to the toolkit) to maintain the toolkit in existence and use for the medium term)

1.5. Process of development of toolkit
(e.g. collaborative with input from community and knowledge workers)

1.6. Date of current version

1.7. Toolkit kept up-to-date
(i.e. toolkit is revised in the light of user feedback and changes in the RM context)

1.8. Vendor support
(i.e. the producer provides: contact mechanisms, helplines, technical help etc.)

1.9. Acceptable use statements
(e.g. license agreements; guarantee / warranty; disclaimer; truthfulness declaration)

1.10. Fees/extra charges for various support functions

1.11. Any additional comments about provenance

2. Toolkit Audience

2.1. Toolkit targeted at different sectors
(e.g. all/any sectors; only public sector; only commercial/private sector; only voluntary sector, etc)

2.2. Toolkit targeted at different types of organisation within a particular sector
(e.g. all/any type of organisation; within the public sector- only universities; within the commercial sector - only financial institutions, etc.)

2.3. Toolkit targeted at different sizes of organisation
(e.g. by number of employees; by level of financial turnover)

2.4. Toolkit targeted at different staff categories within an organisation
(e.g. all/any staff category; only RM/archive staff; only senior managers, etc.)

2.5. Any additional comments about toolkit audience

3. Toolkit Coverage

3.1. Toolkit purpose
(e.g. it only covers one/a few aspects of RM; it covers all aspects of RM; it covers information management which includes within it RM aspects, etc.)

3.2. Type of records
(i.e. all types of records, paper records only, electronic records only)

3.3. Toolkit addresses the full life cycle or continuum of records management processes

3.4. Toolkit results accurately represent the state of the organisation's RM situation
(note: this depends on the thoroughness of the assessment process conducted by the organisation using the toolkit)

3.5. Toolkit results completely represent the state of the organisation's RM situation
(note: this depends on the thoroughness of the assessment process conducted by the organisation using the toolkit)

3.6. Any additional comments about toolkit coverage

4. Toolkit Content Based On Legislation / Standards / Best Practice

4.1. Legislation used to develop the toolkit
(e.g. Data Protection, Freedom of Information, etc.)
(note: is this legislation referred to explicitly or implicitly)

4.2. Standards used to develop the toolkit
(e.g. ISO 15489, etc.)
(note: are these standards referred to explicitly or implicitly)

4.3. Sector policy, guidelines and compliance requirements used to develop the toolkit
(e.g. Financial Services Authority (FSA) and the financial services sector, Healthcare Commission and the NHS)
(note: are these policies/guidelines/compliance requirements referred to explicitly or implicitly)

4.4. Best practice used to develop the toolkit
(e.g. Lord Chancellor's Code of Practice on the Management of Records, etc.)
(note: is this best practice referred to explicitly or implicitly)

4.5. Clear traceability of the tools evaluation criteria to specific statements in legislation / standards / policy, guidelines, compliance requirements / best practices, etc.

4.6. Any additional comments on toolkit content

5. Toolkit Process / Format

5.1. Information gathering process
(e.g. documentation gathering, interviews, focus groups, questionnaires, etc.)

5.2. User's own internal documentation to be consulted when using the toolkit
(e.g. standards, policies, best practices, etc.)

5.3. Toolkit is automated for data input and analysis
(i.e. a software tool)

5.4. Any additional comments about toolkit process / format

6. Resource Requirements to Use the Toolkit

6.1. Money
(i.e. cost of toolkit; additional payments for vendor support etc.)

6.2. People
(i.e. number and categories of staff that need to be involved in collecting data, data input, reviewing results, etc.)

6.3. Time taken for evaluation process to be completed
(i.e. the total time from starting the evaluation process to completing it)

6.4. Time commitment of staff
(i.e. commitment of each staff category to the process)
(e.g. RM staff one day a week each, record keepers one interview of one hour each, senior managers 1 day meeting of all to discuss findings etc.)

6.5. Any additional comments on resource requirements to use the toolkit

7. Accessibility / Compatibility of the Toolkit

7.1. Accessibility of the toolkit to disabled people or people with an impairment
(e.g. people with visual, motor or auditory impairments; a paper toolkit could be made available in large print, audio or Braille formats; a software tool could have the facility to change font sizes, or have audio descriptions, or keyboard short cuts etc.)

7.2. Accessibility of the software tool from a technology viewpoint
(e.g. downloadable from a Web site, short download speeds, uses common hardware and software etc.; available on different interfaces, such as CD-ROM, Web, text)

7.3. Compatibility of the software tool
(i.e. compatibility is the ability of different systems to work together and exchange data)
(e.g. different Web browsers can be used; able to download the software tool to a personal computer or laptop; able to run the software on a wide-variety of computer platforms, such as PC, Mac, etc.; can be used by open source office applications)

7.4. Any additional comments on accessibility / compatibility of the toolkit

8. Usability of the Toolkit
(i.e. the ease with which the user can employ the toolkit to achieve their goal)

8.1. Clearly articulated methodology
(i.e. the user understands how and why information is gathered and how the results are evaluated to arrive at the final assessment)

8.2. Background information provided
(i.e. who has produced the toolkit, their purpose, how the toolkit was developed etc.)

8.3. Training available for operators and users
(e.g. embedded in toolkit as tutorials or case examples; courses offered by producer)

8.4. Help files
(e.g. how easy they were to find, how comprehensive they were, etc.)

8.5. "How to guidance" to move through the toolkit from stage to stage

8.6. Easy to learn

8.7. Easy to remember

8.8. Clear language

8.9. Clear user instructions

8.10. Options for both new and experienced users

8.11. Visually pleasing

8.12. Enjoyable

8.13. Easy to recover from user errors
(e.g. back functions in a software tool)

8.14. Easy to understand and interpret the results of the evaluation

8.15. The software tool is accessible from many different locations
(e.g. it is only accessible through the organisation's computers; it is only accessible through the organisation's intranet; it can be downloaded to any computer; it can be downloaded to a laptop; it is only accessible via the Web to a link provided by the software developer; it is freely accessible on the Web)

8.16. The contents of a software tool can be printed out
(e.g. to see the questions that will be asked so the answers can be prepared in advance

8.17. The software tool can support large amounts of data

8.18. With a software tool, the user can save evaluation drafts and return to them at a later time

8.19. With a software tool, the results of the evaluation can be exported to other platforms
(e.g. to standard office software)

8.20. Any additional comments on usability of toolkit

9. Evaluation Approach

9.1. Who collects and inputs the data
(e.g. self-administration of the toolkit by the organisation using it; administration by a third party - such as a member of staff from toolkit vendor or external consultant - recommended or required)

9.2. Toolkit can be customised
(i.e. off the peg, tailored to suit, haute couture)
(e.g. according to type of organisation; according to size of organisation; according to staff category within organisation; according to department within an organisation, etc.)

9.3. Depth of the toolkit's evaluation criteria
(i.e. the level of detail and flexibility of the questions)

9.4. Consensus is required on answers to the toolkit's evaluation criteria before data input

9.5. Methods for providing answers to evaluation questions and criteria
(i.e. yes/no, 'picklist' of options, descriptive input, etc.)

9.6. Data can be **input** over a period of time, on a stop - restart basis

9.7. Process for analysing the data
(e.g. by internal discussion and consensus; by a third party; produced by software tool, but methods of analysis are transparent; produced by software tool acting as a 'black box')

9.8. Ability of the software tool to accommodate conflicting information during the evaluation phase
(e.g. different opinions from different members of staff)

9.9. Data can be **analysed** over a period of time, on a stop - restart basis

9.10. How the results are presented
(e.g. traffic lights: green = good, yellow = average, red = poor; graphical; summary and detailed reports, etc.; one general set of results are produced; several sets of results are produced each targeted at a specific staff category, etc.)

9.11. "How to guidance" to respond to the results of the evaluation to improve practices and enable change

9.12. The toolkit can be reused any number of times under the same license *(i.e. the license is not a one-use only)*

9.13. Any additional comments on evaluation approach

APPENDIX B: GENERIC RECOMMENDATIONS FOR GOOD PRACTICE IN DEVELOPING AND REVISING RECORDS MANAGEMENT TOOLKITS

As a result of individual analyses, from three different perspectives (by information management but not records management experts; by a records management expert but not a user of the toolkit; and by a records management expert who was a user of the toolkit), the following set of generic recommendations was extracted. Toolkit developers can use these for the initial development of a toolkit or for revising an existing toolkit. They are listed under each category of evaluation criteria, which were developed specifically in the project.

Provenance of toolkit

Recommendations that:

- Development details, sustainability, method of keeping up to date should be covered in the toolkit
- The involvement of other partners, particularly commercial ones, should be made clear and what rights, e.g. IPR, they have over the toolkit.
- Vendor support should be made clear
- Warranties / license agreements / disclaimers should be made clear
- An automated toolkit should have a 'menu tab' where all 'provenance' information can be found in one place, as well as being placed, in one place, on the Web site and in any separate user guide (if available).

Toolkit audience

Recommendations to:

- Make clear who the toolkit is targeted at, i.e. sector, organisation type and size, staff category.
- Make clear what the implications are if the toolkit is used outside its intended audience, e.g. a 'user beware' statement.

Toolkit coverage

Recommendations to:

- Make clear what parts of the RM lifecycle are covered and how.
- Make clear the toolkit's purpose, focus, coverage and uses.
- Outline the philosophy / principles / theory / methodology / standards / good practice underlying the toolkit.
- Include a 'Truthfulness' (or equivalent) statement in the disclaimer.
- Market the toolkit – by indicating the toolkits' strengths and its selling points. Also indicate the other ways it could be used, and the implications of these.
- Make clear the implications if the toolkit is used outside the way it is intended to be used.

Toolkit content based on

Recommendations:

- Traceability is needed to the standard(s) / good practice used to produce the toolkit.
- If compliance is required then this traceability must be linked to a specific page / section number in the standard / good practice document
- An automated toolkit could use an [i] icon that people can link on for further information. This could reduce the mass of information displayed on a screen, which may cause confusion, but still provide access to the detailed contextual information required.

Toolkit format

No generic recommendations extracted.

Resource requirements to use the toolkit

Recommendations that:

- Resource requirements for (a) preparing to use and (b) actually using the toolkit should be made clear.
- If RM expertise is required this should be made clear.
- Make clear to the user the information gathering process, what, who, how, when, why?

Accessibility of the software tool

Recommendations that:

- Toolkits should address the need to be accessible to the disabled, and this includes physical (i.e. use of mouse etc.) as well as visual accessibility.
- Web sites should follow the W3C accessibility guidelines.

Compatibility of the software tool

Recommendations to:

- Make clear the technology requirements, e.g. hardware, software, bandwidth.
- State what the toolkit is compatible with and what it is not compatible with, e.g. proprietary / non-proprietary software.
- State what facilities it provides / does not provide, e.g. output can be downloaded to standard office software.

Usability of the toolkit

Recommendations to:

- Provide the ability to print out / download blank questionnaires / toolkit content so preparatory work can be undertaken off line.
- Producers to put themselves in the position of a first time user when developing the required HELP option.
- Provide detailed, step-by-step help for new users. Use simple, clear language.
- Provide an [i] icon to offer help to the user that is relevant to each page rather than more generic assistance.
- Provide quick tours / online tutorials to give an initial overview of the toolkit and its use.
- Enable results to be saved to standard office software, so the user can prepare a range of outputs to disseminate the findings within their organisation or elsewhere as required.
- Make clear if the toolkit is customisable, and if so, in what way(s).

Evaluation approach / method

Recommendations to:

- Make clear how any differences or conflicting information is handled, e.g. (a) resolve discrepancy before use of toolkit by discussion / executive decision etc, or (b) use toolkit to capture and highlight discrepancies: this could be a benefit of the toolkit.
- Clearly state how the results are calculated / data is analysed, i.e. the methodology used.
- Explain the effect on results if questions are omitted.