Aligning with the rapidly shifting technological goalposts: the review and update of the RIMPA technology survey

Devitt Larkin
Edith Cowan University

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ALIGNING WITH THE RAPIDLY SHIFTING TECHNOLOGICAL GOALPOSTS: THE REVIEW AND UPDATE OF THE RIMPA TECHNOLOGY SURVEY

by

Devitt Larkin

Master of Arts (Psychology)
Graduate Diploma in Information Services (Archives and Records)

This thesis is presented in fulfilment of the requirements for the degree of

Master of Information Services

Faculty of Computer and Security Science

Edith Cowan University

June 2012
THE USE OF THESIS

The Use of Thesis statement is not included in this version of the thesis.
Abstract

In 2008 the Records and Information Management Professionals Australasia (RIMPA) organisation (then known as the Records Management Association of Australasia – RMAA) launched its Technology Survey. The survey attempted to capture a snapshot, predominantly but not exclusively in Australia and New Zealand, and gain empirical evidence about the use of technology adoption trends, RIM capabilities in host organisations and the role of RIM personnel in technology selection and adoption. The survey had a particular focus on Records Management (RM) and Enterprise Content Management (ECM) systems and processes, but also featured questions on the demographics of the participants, organisational policies and processes around these technologies and peripheral devices.

In 2010 the survey was repeated. Consequently, the survey became more than a one-off cross-sectional snapshot and could lay claim to being a longitudinal study, however as a longitudinal study instrument the current survey is lacking validity and reliability. A consensus exists, however, that changes are required going forward if the survey is to continue. This consensus is based on issues that have emerged from analysis of the two iterations of the current instrument. The issues that need to be addressed are:

- Low participation rate
- The relatively high number of questions skipped
- The overall length of the survey
- Ensuring the survey has a clear and distinct aim
- Ensuring what is captured is core to the survey’s aim
- Ensuring what is captured is relevant to the RIM profession
- The ambiguity of questions
- Misunderstanding of questions
- Scope – expansion of the instrument to encompass technology learning, knowledge and skills of RIM professions

These issues were identified by Brogan and Roberts in their analyses of the 2008 and 2010 data (2009, 2011 and 2012).

This study is an examination and revision of the current technology survey instrument, aimed at ensuring that issues of relevancy, currency, usability, design and clarity of terms and definitions are all addressed, resulting in a valid and reliable longitudinal study instrument. The research design employed involved:

a) investigation of the peer reviewed literature on survey participation and instrument design;
b) investigation of peer reviewed and non-peer reviewed literature on technology in the RIM space;
c) Convening of a panel of experts (focus group) to provide feedback on the existing instrument;
d) Re-design of the existing instrument taking into account outcomes from a-c; and
e) Validation of the re-designed instrument via the Focus Group
The Focus Group review involved six highly regarded and knowledgeable participants pro-active in the RIM profession who trialled the instrument in a subsequent Pilot Test. The Focus Group provided additional feedback on scope and usability from a user perspective. The final survey produced will enable RIMPA to be informed on the technology education and training needs of its members, as well as continuing to track technology adoption and RIM program trends in the workplace.
Declaration

I certify that this thesis does not, to the best of my knowledge and belief:

i. incorporate without acknowledgment any material previously submitted for a degree or diploma in any institution of higher education;

ii. contain any material previously published or written by another person except where due reference is made in the text; or

iii. contain any defamatory material.

I also grant permission for the Library at Edith Cowan University to make duplicate copies of my thesis as required.

Devitt Larkin

Signature: .........................................................

8 June 2012
Date: .........................................................
Acknowledgement

There is no way that a work such as this is possible without the incredible support, patience and understanding of a number of significant people. First and foremost my gratitude and appreciation goes to my supervisor Dr Mark Brogan. There is no doubt that I would never have accomplished this without his guidance, feedback, advice and patience, especially when I faced the challenges inherent in being well out of my comfort zone.

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Thanks must also go to my work colleagues for being so overwhelmingly supportive, sympathetic and accommodating over the past eighteen months. Kruger, Cracker and Amanda - big thanks.

Rodney Redcliffe – who knows where I’d be stuck now if it wasn’t for your friendship, generosity and professional guidance, especially during my fledgling years in RIM (which some may argue I’m still in). I wouldn’t be where I am now with if it wasn’t for you. Huge thanks.

Of course I am eternally grateful to my partner Kylie for looking after normal life activities while I was locked away in a small room or at a library typing away. It’s back to your turn again to study.

Finally I would like to thank my close friends Matt, Flav, Saul, Naomi, Rod, Sanj and yes, even Mike, for those very rare times I got to have a social life. Thanks for keeping me sane. I hope they remember who I am when I emerge from the hermit’s cave.

Last but by far not least I would like to dedicate the last eighteen months of my life and this resultant thesis to my son Ignatius, whose life has been as much dominated by this project as has my own. I did it all for him.
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Chapter 1: Introduction

For the Records and Information Managers of today, the knowledge and skills required to do the work of enterprise records and information management are many and varied. Whether knowledge and skill acquisition has kept pace with the evolution in information and record producing technologies is a question that goes to the very heart of professional competence. This project reviews efforts by Records and Information Management Professionals Australasia to understand technology trends in the RIM workplace and their implications for education and training.

1.1 Context and background of the study: RIMPA, iQ and the Technology Survey

Records and Information Management Professionals Australasia (RIMPA), established in 1969 and formerly known until 2011 as the Records Management Association of Australasia (RMAA), is the largest and most significant records and information industry association in this region, with a membership of over 3000 records and information management professionals spread across Australia, New Zealand and a chapter in Malaysia:

[RIMPA] . . . as the largest Association for records and information management professionals in Oceania, is the source for professionals to develop and utilise their skills and experience to leverage the value of records as corporate assets and as evidence of business activities. As companies and government agencies worldwide seek to comply with regulations and improve business processes, they need an association to empower them with the knowledge and resources necessary to make informed decisions.

. . . For more than 40 years RIM Professionals Australasia has worked to advance records and information management professionals through the provision of sound information resources, superior education, quality training and global networking. (RIMPA, 2012b, para. 3-4)

A significant part of RIMPA’s Corporate Strategy is to work together to promote, enhance and develop Records and Information Management (RIM), with a commitment to meet the identified needs of its members (RIMPA, 2012c, p. 6). However, this is no easy task for any industry association without evidence describing the working environments of its members, the technologies and systems being used, and the processes in place within the respective organisations of those members.

In 2008 the RMAA Technology Survey was released via the Association’s Listserv, inviting all Listserv members globally to participate in the survey. The survey attempted to capture a snapshot of the records and information world – all technologies used and to what extent, demographics of the participants, organisational policies and processes around these technologies and peripheral devices – with particular focus on Records Management (RM) and Enterprise Content Management (ECM) systems and processes. The survey’s objective was to provide evidence of technology adoption trends, RIM capabilities in host organisations and the role of RIM personnel in technology selection and adoption. The results also indicated where the future of RIM and its people may be headed, how they might best equip themselves with the relevant skills and technologies for the future, and consequently how RIMPA can position itself to pre-empt and support that future.
Results from, and a resultant analysis of, the 2008 survey were published in the May 2009 edition of the Association’s journal iQ\(^1\). The 2008 analysis was performed by Dr Mark Brogan, Senior Lecturer in Information Technology and Recordkeeping Studies at Edith Cowan University, and Mr David Roberts, former Director of the State Records Authority of New South Wales.

In 2010 the 2008 survey was repeated. Consequently, the survey became more than a one off cross-sectional snapshot and could lay claim to being a longitudinal study. Brogan and Roberts once again accepted RIMPA’s offer to undertake the data analysis and results were published in the December 2011\(^2\) and February 2012\(^3\) editions of iQ. Collectively this provided the readers of iQ – survey participants, vendors, academics, association members (who are not all mutually exclusive) – a valuable opportunity to see the current state of affairs of technology within the RIM professionals’ workplace predominantly, but not exclusively, in Australia and New Zealand.

1.2 Statement of the problem

A consensus exists that changes are required going forward if the survey is to continue. This consensus is based on issues that have emerged over two iterations of the current instrument. The issues that need to be addressed are:

- Low participation rate
- The relatively high number of questions skipped
- The overall length of the survey
- Lack of currency – the failure to incorporate developments in technology that emerged in the period between the two surveys
- Ensuring the survey has a clear and distinct aim
- Ensuring what is captured is core to the survey’s aim
- Ensuring what is captured is relevant to the RIM profession
- The ambiguity of questions
- Misunderstanding of questions
- Scope – expansion of the instrument to encompass technology learning, skills and knowledge

These issues were identified by Brogan and Roberts in their analyses of the 2008 and 2010 data.

1.3 Aim of the study

The aims of this research are to:

1. review the existing survey to identify issues in validity, reliability and usability;
2. find solutions to any validity, reliability and usability problems identified in 1;
3. create a new section that measures perceptions of education and training requirements in the technology and RIM domains; and

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\(^1\) iQ Magazine – RIMPA’s quarterly publication containing “peer reviewed articles, industry news, case studies and articles related to the records and information management industry.” (RIMPA, 2012e)


4. propose a revised, fully tested, valid and reliable survey for RIMPA approval and deployment in the second half of 2012

1.4 Research questions
The following questions will be the focus of this research:

RQ1. What are the issues in validity, reliability and usability that exist with the current survey tool?
RQ2. What solutions exist to the validity, reliability and usability issues identified in RQ1?
RQ3. What procedural and descriptive knowledge is possessed and expected of RIM professionals in the 21st Century?

1.5 Definition of terms
The following is a reiteration of terms and acronyms used and/or definitions of those to come:

- **ABS** – *Australian Bureau of Statistics*
- **ASA** – the Australian Society of Archivists
- **ECM** – Enterprise Content Management
- **GFC** – Global Financial Crisis
- **IDM** – Image and Data Manager:
  
  [I]s a dedicated magazine and Web site covering collaboration and information management for Australia and New Zealand. It offers expert insight, case studies and essential updates on topics such as
  
  - imaging & workflow
  - email and instant messaging
  - enterprise content management
  - document & records management
  - network storage and archiving
  - knowledge management
  - compliance & ediscovery (IMD, 2012, para. 1)

- **iQ Magazine** – RIMPA’s quarterly publication containing “peer reviewed articles, industry news, case studies and articles related to the records and information management industry.” (RIMPA, 2012e, para. 2)
- **IM** – Information Management
- **Likert scale**: A likert scale is considered an ‘agree – disagree’ scale. This setup gives respondents a series of attitude dimensions. For each dimension, the respondent is asked whether, and how strongly, they agree or disagree to each dimension....and the intent of the likert is in that the statement will represent different aspects of the same attitude. (SurveyMonkey, 2011e, p. 12)
- **Listserv** – RIMPA’s electronic mailing list
- **New survey** – the 2012 iteration of the survey (the output of this project)
1.6 Outline of the thesis

This thesis is organised into six chapters. In Chapter One: Introduction, the context and background to RIMPA and the Technology survey has been provided followed by a statement of the problem and what this research aims to achieve. A list of predominantly industry-specific terms and definitions is also provided.

Chapter Two, The Literature Review, presents an appraisal of the body of knowledge that relates to the aims of this study and research questions. It provides a critical examination and evaluation of the current literature supporting solutions to the previously stated problems of the old survey tool. It commences by concentrating on identifying knowledge, skills and technology in the RIM workplace located within the context of procedural and descriptive knowledge, education and training, risk management and compliance. The chapter then focuses specifically on the review and analyses around the previous RIMPA Technology Surveys provided by Brogan and Roberts (2010, 2011 and 2012) in iQ. The Literature Review concludes with an examination of survey design best practice, with a particular focus on participant engagement as well as validity and reliability, specifically in terms of currency, relevancy and ambiguity concerns.

Chapters Three and Four describe the design, methods, materials and procedures used for this research and the contextual theoretical framework in which they operate. This includes an outline of the Focus Group and Pilot Test process.

Chapter Five follows with a discussion of the findings from the Focus Group review and subsequent Pilot Test of the new survey tool. It also provides an in-depth account and rationalisation of the alterations made to the old survey.

The thesis then concludes with Chapter Six illustrating the limitations of this research, implications for future research and survey design, recommendations on survey delivery and a review on enhancements to future survey analysis.

Chapter 2: Literature review

2.1 RQ3 - Identifying knowledge, skills and technology in the RIM workplace

“Should records managers . . . be concerned or confident that their current practices will serve them well in the digital future?” (Cummings & Findlay, 2010, p. 266).

With technology rapidly evolving we need to identify the knowledge, skills and technology required and used in the workplace and the environmental factors that also affect them. The main foci will be:
1. The knowledge and skillsets required and desired;
2. Education and training; and
3. The risk management and compliance environments.

2.1.1 Knowledge and skillsets of RIM professionals

Ten Berge and van Hezewijk (1999) explain that there are two main forms of knowledge – Declarative (also known as Descriptive) and Procedural – and that the distinction is “between knowing that and knowing how” respectively (p. 605). To further define these in context Declarative/Descriptive knowledge is what we consider actual ‘knowledge’ about RIM and technology. That is, the stored theoretical, technical, factual and event-based knowledge (ten Berge & van Hezewijk, 1999, p. 608; Hovde, 2009, p. 166). Procedural knowledge is what we consider to be the skills and knowledge about how to accomplish our daily tasks, the means and know-how of applying the Descriptive knowledge to perform our RIM activities. (ten Berge & van Hezewijk, 1999, p. 607; Hovde, 2009, p. 166).

In a very broad and over-simplified sense, and not without significant overlaps, Descriptive knowledge is obtained through education while Procedural knowledge and skills are obtained through training.

In Australia there is a National Competency Standard for the Records and Archives Industry that identifies the necessary Procedural knowledge, the skills, required at all levels that allow benchmarking and transferability across states and territories as well as the RIM Profession. However, in a recent work Algate isolated a number of other skills that have emerged as standard for the modern RIM professional to possess that historically have not been expected of a RIM professional. These include, amongst others (2008, pp. 105-112):

- RIM skills
- Management skills
- Project Management skills
- Change Management skills
- Communication and marketing skills
- Business analysis and consultation skills
- Training skills
- Information Technology (IT) skills
- Relationship management
- Being “legalese savvy” (Algate, 2008, p.111)

Algate also recognises that there are a number of useful personality traits that are beneficial for RIM professionals to possess, including (2008, p. 112):

- Tenacity
- Ingenuity
- Initiative
- Adaptability
- Confidence
Anderson (2007) in a paper one year prior to Algate’s also recognises such skills and even personality traits are key to the progression of the RIM industry and its professionals, but goes on to highlight that even though they are desirable and necessary, they are more capabilities or aptitudes than competencies and therefore should be left out of any competency standards for the profession.

Whether or not these skills will ever become part of a formal RIM competency standard is not the main issue, the focus needs to be on ensuring RIM professionals are aware of what is required of them and that they are fully equipped with the relevant and applicable procedural and descriptive knowledge. This is where the identification of the demands and requirements in the industry, and consequently further education and training, need to occur.

2.1.2 Education and training

Eastwood (2006) expressed the view that “employers are rightfully indignant if they have to expend time and resources to train graduates to do things their education ought to have prepared them to do. They expect graduates to slip into practice more or less effortlessly” (p. 164). However, criticism of this type “results from confusion of the purposes of education and training. Training leading to such specifically situated knowledge and skills is the responsibility of the employing organisation. All organisations have particular procedures [and systems] tailored to their particular environment” (Anderson, 2007, p. 99). Education is the Descriptive or Declarative knowledge, defined as providing “[w]hile Training is the Procedural knowledge and is defined as the] . . . acquisition of specific skills and competencies necessary in the workplace” (Anderson, 2007, p. 94).

Marler, Liang and Dulebohn (2006) demonstrate the importance of training, in organisations deploying new Web-based enterprise-wide software systems, and explain:

[T]hat training is an important organizational (sic) intervention that affects not only procedural knowledge but can play a role in change management by influencing employees’ beliefs and intentions to use the new system efficiently. The latter is important because organizations (sic) that invest in sophisticated new technologies have a vested interest in assuring that employees maintain, if not increase, their productivity using a new software system following migration to the new technology. A better understanding of what factors contribute to effective organization-wide (sic) technology training and use can be critical to realizing (sic) expected returns on large investments in upgrading information technology. (p. 740)

Universities provide education, workplaces provide training, but neither of these steer the industry. This is where a professional industry association steps in to develop frameworks, boundaries and overall guidance as to what is required, what is relevant and what should be taught and by whom.

In 2006 RIMPA, then the RMAA, jointly with the Australian Society of Archivists (ASA) released the Statement of Knowledge for Recordkeeping Professionals. This document acts as a formal industry guide and “forms a foundation for the responsibilities of the recordkeeping profession . . . [aiming] . . . to:

• inform the design of educational programs, assessment and qualifications frameworks;
course recognition and accreditation” (RIMPA, 2012h, p. 1).

Periodically this document is updated, but how can it be measured as an accurate representation of actual skills and knowledge requirements of the profession, and shown to be relevant to current societal demands in the context of constantly and rapidly evolving technologies? For the statement to effectively act in its capacity to advise on appropriate professional development and relevant qualifications frameworks RIMPA requires the Technology Survey to test the statement’s relevance and correct alignment with the profession.

Broady-Preston in 2009 explains how the UK government has reported on:

A paradigm shift . . . from a supply-led system to a demand-led system . . . universities would be required to become more directly ‘engaged’ with employers. In place of the current system whereby academics devise degree schemes and offer these to the market, it is posited that programme content would be ‘designed in partnership with employers and employer organisations’. (p. 271)

This is a move from a ‘push’ to a ‘pull’ perspective (Broady-Preston, 2009, p. 271) in the context of fundamental education as opposed to ongoing professional training. In this context RIMPA could spend a great deal of time and money contacting numerous employers of RIM staff as well as the RIM staff themselves to ascertain what is expected of the modern RIM professional and what technologies and systems are in place. However, to achieve a more representative and current account of the RIM marketplace the Technology Survey is a significantly more effective means to produce reliable and quantified results to successfully present a current and relevant Statement of Knowledge.

2.1.3 Risk management and compliance

Corresponding with the rapid evolution of technologies there has also been a number of significant variables influencing the appeal of certain web-based technologies and demonstrating cause for their potential utilisation in the workplace. In recent times natural disasters in the Australasia region, such as the Queensland floods in 2010-2011 and the New Zealand earthquakes in 2011, as well as the ongoing Global Financial Crisis (GFC), has encouraged consideration and evaluation of cost-saving measures such as outsourcing and employing offsite solutions. Different online information storage and web-based technologies are becoming more common and readily available in ‘the Cloud’. There are 2 significant issues arising here:

1. The uptake of offsite solutions, such as Cloud technologies, significantly impacting the management of records and information; and
2. Ensuring all necessary security and risk management measures are in place to protect the organisation’s records and information.

Stuart and Bromage review the use of web technologies in the context of records management and communicate that organisations should not necessarily be dissuaded:

[I]n their use of web technologies, but [want] to emphasise the involvement needed by records managers in the formation of policies, education and risk analysis for any system or space designed to manage or store information and records . . . users often
do not think of implications, such as accountability of information and other potential risks, that web use carries into the workplace. (2010, pp. 217-218)

Stuart and Bromage continue in their assessment to further include the social media aspects of the Cloud:

Businesses are using the interactive power of the web for more than hosting collections of relatively static documents – indeed they are holding whole conversations with their customers – and the reuse of information is more than common. Where these conversations are occurring is often not given a second thought by users. However, in relation to an organisation’s actual records, it is becoming clear that this second thought should be given. (2010, p. 218)

Stuart and Bromage are correct in not wishing to dissuade the use of Cloud technologies necessarily, as a strong business case exists for delocalising information storage, particularly with respect to risk management and cost savings. In times of devastating natural disasters, terrorist threats, or information and systems vandalism, storing information in the Cloud has significant benefits with respect to Business Continuity, global collaboration and reduction of technical infrastructure costs. But there is a trade-off with other prospective risks:

- Potential information leaks
- Setting Retention Schedules to records that could be in “multiple locations and multiple copies . . . [instead of] . . . a single ‘point of truth’ or only having one copy or a number of controlled copies of information” (Stuart & Bromage, 2010, pp. 219-20)
- Multiple copies potentially stored in different global locations each with their own regulations, laws and policies around records and data retention. Information could be stored in a geographical location with less protection and privacy laws than the originating country of the organisation
- True and full auditability of records
- “there are standards and technologies available [in an organisation] that mean that records can be kept secure and under the control and ownership of the organisation – as a safety net the organisation still owns its network. However, in the cloud, ownership and control can be difficult to achieve” (Stuart & Bromage, 2010, p. 220)
- eDiscovery risks and costs
- The Cloud lacks technical standards

Cloud technologies are not the only concerns with respect to risk management and compliance. E-mail management and technological obsolescence are also significant ongoing issues for maintaining and accessing organisational records and information. Archives New Zealand reported in their 2009 Digital Continuity Plan that their “2008 recordkeeping survey found that 67% of public sector agencies hold information that they can no longer access” (Section 4.2). Cumming and Findlay also report that the results of a 2005 survey by the State Records Authority of New South Wales “indicated that 38 per cent of respondents had some technology dependent records that were either not accessible or accessible only with some difficulty” (2010a, p. 268)
2.2 The technology survey

There are a number of quantitative and qualitative data collection methods that can be used to gather data, such as interviews, questionnaires, observation, text analysis, and other methods specific to qualitative studies. Even though all these methods are effective at gathering detailed, meaningful information they are time consuming, require specific expertise (Connelly, 2011, p. 61) and are too situation-specific and granular. This is especially the case when the aim is to achieve a comprehensive representational overview of phenomena, such as technology in the RIM workplace. The technology survey is the correct tool to “find out about the state of play with technology and the records programme in our technology rich organisations . . . [with the aim] . . . to understand enterprise records and information management in our public and private sector organisations” (Brogan & Roberts, 2009, p. 40).

The technology survey currently has 101 questions in all (Appendix 1 and Appendix 2), divided into the following 13 sections:

1. Demographics
2. WP / document and records applications
3. IM / ECM
4. Email
5. Information archiving technologies
6. Digital images
7. Technology
8. Vendor / system development
9. NOS / OS / Server / NAS / SAN
10. PC / laptop / wireless
11. PDA’s / video / copiers / MFD’s
12. Portals / ISP / business continuity / contacts
13. Comments and other requests

The philosophy and drive behind the technology survey is similar to that proposed by Roberts (2008), which proposes a methodology for auditing knowledge using a 15-element inventory specifically within the library environment describing and recording:

[P]rocesses and use the data derived for planning and control, forecasting and managing demand and supply of service and capacity. Through modelling and empirical investigation such data can be used to understand and explain what is relevant to evaluate and improve practice. The theoretical constructs, methodological tools and practical methods available to information professionals to determine the nature and volume of information and communication activity in different domains, settings, and contexts are of primary importance. (pp. 584-5)

Brogan and Roberts acknowledged that one survey alone is not enough and “that the greatest value to professionals would come from a longitudinal study, enabling ‘flash in the pan’ innovation to be sorted from durable change” (2011, p. 32). One way in which this was demonstrated in the comparison of the 2008 and 2010 results was by the lack of significant movement and uptake of cloud-based computing in the RIM space. This is not to say that it isn’t a part of people’s every day
working environment, as a 2008 survey on Professionals and Web 2.0 use in the Asia-Pacific region demonstrated with results of “59% of professionals use Web 2.0 at least once a week” (CCH Australia, p. 1). It should be made clear, though, that the CCH survey specifically focused on Web 2.0 and its social media components, whereas the RIMPA technology survey only touched on it. This will be discussed later in more detail as a reliability issue of the current tool.

To date there have been very few surveys like RIMPA’s Technology Survey, especially not in Australasia, aside from a very similar survey released in 2011 by IDM (Image and Data Manager). There were some overlaps between the survey and those conducted by CCH Australia in 2008 and Symantec in 2011, however the aims were significantly different as were the participants involved. For example, Symantec’s participants were global and purely from legal organisations. Not only does this result in a scarcity of literature on technology surveys in the RIM environment, but also reveals an opportunity for further research.

2.3 RQ2 - Validity and reliability in instrument design

*Validity* refers to how accurately an instrument measures what it expressly intends to measure. It is further classified into 3 types:

1. **Content validity** (also known as logical validity) – do items measure the content knowledge in a specific area they were intended to measure? No measure exists to test the content validity of tool, so it usually relies on the judgement of experts, the researcher’s knowledge and relevant theoretical literature. This type of validity will be the fundamental concern of this research;

2. **Construct validity** – do items measure hypothetical constructs or concepts? “Construct validity...focuses specifically on the concept of concern, not by the score, but by looking more abstractly at the concept” (Maughan, 2009, p. 119). This type of validity is also relevant to this study; and

3. **Predictive or concurrent validity** (also known as *Criterion-related*) – do scores predict a criterion measure? Do results correlate with other results? Again, this type of validity is not directly relevant to this study because I will not be benchmarking the results of the survey to any other survey, only the survey questions themselves are being analysed. However, comparisons to other survey questions from other technology surveys will influence the redesign of this survey, such as the *Professionals and web 2.0* survey (CCH Australia, 2008), the *Information Retention and eDiscovery Survey* (Symantec, 2011) and the University of Minnesota biennial Technology survey (University of Minnesota, 2011).


"*Reliability* refers to the accuracy or dependability of the instrument in measuring what you are trying to measure . . . Reliability is about consistency” (Maughan, 2009, p. 119) and stability. However an instrument can be reliable without being valid. For example if a clock was running exactly an hour slow each day, it would have reliability, because each day would measure at a constant and reliable 23 hours, however this is not valid as we know a day is 24 hours in length not 23. The clock is not accurately measuring what it intends to measure, and therefore an invalid tool.
The existing technology survey was reviewed to identify any and all issues in validity, reliability and usability. To assist in addressing these issues there was a review of the literature around the following three areas as they relate to the Technology Survey:

1. Participant engagement;
2. Future trends, current fads and enduring fundamentals in the technology realm; and
3. Definitions of terms used and ambiguities.

### 2.3.1 Participant engagement

These days it seems we are inundated with surveys. If you go to a fast food restaurant, hotel, or service your car, you are asked to complete a survey . . . Surveys are an important data collection method for research and organizational (sic) quality improvement. On the other hand, frequent requests for surveys can be overwhelming . . . and can negatively affect . . . response rate[s] to requests. (Connelly, 2011, p. 61)

Vast research exists in the area of increasing survey participation, from over simplified introductions of monetary or non-monetary (gift or prize) incentives to complex theories such as Leverage-Salience theory. There is no question that monetary and non-monetary (gift or prize) incentives will increase survey participation, as Edwards et al demonstrated with the evaluation of 6 electronic survey trials containing 17,493 participants in total. “The odds of response were almost doubled when a non-monetary incentive was used” (2009, p. 5). However the purpose of the technology survey is for it to be used as a longitudinal study tool and there is a warning from Singer, Van Hoewyk and Maher in 1998 that incentives “can have potentially adverse effects on long-term relationships with respondents . . . [and] . . . can be detrimental to the quality of response and can foster replacement of intrinsic with extrinsic [short term, transactional] motivation of respondents” (cited in Kolar & Kolar, 2008, p. 364).

To be successful in creating a robust longitudinal research tool we need to ensure a long-term commitment by the participants. The development of a psychological contract with RIMPA respondents is required. To achieve this we need to be aware that both past survey experiences as well as future expectations both play significant roles in survey participation and need to be taken into account (Kolar & Kolar, 2008, p. 366).

Edwards et al identified the following as further strategies that have shown increased response rates with respect to e-questionnaires delivered via email:

- **Reduced length** – response rates from trials comprising 7589 participants increased by over a half when using shorter e-questionnaires
- **Appearance and delivery:**
  - Introduction to survey – response rates from trials comprising 48,910 participants increased by about a quarter when using a personalised approach to the email
- Inclusion of a picture in email – response rates from trials comprising 720 participants tripled when a picture was included in the email.
- Inclusion of the word ‘Survey’ in email subject – response rates from trials comprising 3,845 participants decreased by a fifth when ‘Survey’ was mentioned in the subject heading of the email.
- Origin – who sent the questionnaire – response rates from trials comprising 720 participants saw a decrease of more than half when the e-questionnaires were signed by a male compared to being signed by a female.

(2009, pp. 5-6, pp. 9-10)

Although “Contact – Methods and number of requests for participation” (2009, p. 7) was analysed by Edwards et al in regard to postal questionnaires, no results were provided for e-questionnaires. This is surprising as it is a significant variable to investigate in electronic survey research. Two further key variables mentioned, but not tested, by Kolar and Kolar – 1. Time availability, and 2. Interest in the topic (2008, p. 372) – were also totally neglected in the review by Edwards et al.

Blair and Kropf (2005, p. 570) found that introductory themes to the survey that emphasised community cooperation and helpfulness – defined as ‘norms of cooperation’ and ‘exchange theory’ – showed a greater response rate than those that emphasised self-interest – ‘utilitarian individualism’ (Loosveldt & Carton, 2002, p. 429) – benefits by completing a survey.

Thompson, Zhang and Arvey (2011) investigated non-response to surveys in terms of passive and active non-response:

Passive non-response occurs due to circumstances, such as when survey recipients misplace or forget to complete surveys they may have otherwise intended to fill out . . . Active non-respondents make an overt, conscious . . . decision to withhold their participation at the time in which they receive a survey.

(p. 396)

Both of these types of respondents needed to be factored in when redesigning the survey. Passive non-respondents need the reminders to complete the survey, while active non-respondents require positive motivation to complete the survey.

Kramer, Schmalenberg and Keller-Unger, though analysing survey participation of professional nurses in hospital, have drawn together a valuable “aggregated list of procedures and incentives effective in increasing response rates to Web and paper-based surveys in general populations and in professional populations other than nursing” (2009, p. 179) drawn from an analysis of previous survey studies. The most relevant to the technology survey are:

- Personalized (sic) contacts/letter – Use real names of investigator or agency and real signatures of requester.
- Respondent-friendly questionnaire – Questions are clear, easy to understand, font size, visual layout, number of pages, use of color (sic) suggests high salience; layout in accordance with visual design principles.
- Number of contacts and precontacts – Consensus is 5 contacts for mail surveys: prenotice, questionnaire mailed, thank you post card, replacement questionnaire, final contact by different mode. Crucial in Web surveys but too many causes diminishing returns and saturation resistance.
- Financial, material, social incentives
- Sponsorship – prestige and relevance of person/organization (sic) doing the asking.
- Is the population academic or professional? – Students and academics respond more frequently to surveys than do people for marketing or ‘for-profit’ agencies.
- Decrease ‘bundling’ – Number of surveys administered at the same time.
- Issue salience – Related to behaviors (sic) or interests important and relevant to respondent — both interests that are current and timely as well as those that are important but not current. (Kramer et al, 2009, p. 179)

Groves, Singer and Corning in 2000 looked at Leverage-saliency theory which examines the concerns of more than 2 variables acting together as a balancing act, a pros vs. cons approach, and the side that’s the heaviest is salient. They express Leverage-Saliency using the following depiction and explanation:

![Figure 2.1](image)

Figure 2.1: Two persons with different leverages and saliences associated with survey attributes

Consider a scale with multiple hooks on which to place weights, each hook representing some attribute of the request that could be judged relevant to the decision. The distance from the fulcrum to the hook measures the importance the sample person assigns to the attribute in the decision to participate (we label this distance the ‘leverage’ of the attribute). The size of the weight placed on the hook reflects how salient the attribute is made during the survey request.

For Person 1, the survey has two attributes with positive leverage (its link to his or her involvement in the community and a cash incentive). Both of these features were made salient to Person 1 (reflected by the large size of the attached balls). One negative feature, the topic of the interview, was given relatively smaller
emphasis. These three combine into a net positive reaction by Person 1 to the survey request. Person 2 has only one potential positive influence (incentives). Person 2 is negatively predisposed to the topic and the sponsorship of the survey, both of which are made relatively salient in the introduction. These negative effects are not overcome by the communication about the incentive (despite the fact that the incentive is given high positive leverage by the person). In short, how potential influences manifest their effects is dependent upon what happens when the survey request is made. The achieved influence of a particular feature is a function of how important it is to the potential respondent, whether its influence is positive or negative, and how salient it becomes to the sample person during the presentation of the survey request. (pp. 300-1)

Groves et al assert that Leverage-salience theory explains why certain successful survey design features weren’t replicable across tests and that uncontrolled variables, or ‘counterweights’, affecting participants need to be factored in (2000, p. 302).

2.3.2 Future trends, current fads and enduring fundamentals in the technology realm

In Brogan and Roberts’ 2011 analysis of the RIMPA technology survey they commented that:

In addition to design issues, a range of developments and products that have emerged or risen to prominence since 2008 will need to be included in further iterations. One important change, captured in the 2010 survey, was the arrival of Windows 7. Alas the change from PDAs to smart phones (iPhone and Android) did not make it in, along with MS Office 2010 and Windows Server 2008 (network OS). These and other new products and developments made their appearance only in the ‘Other (please specify)’ option. (p. 2)

Brogan and Roberts in 2012 also identified in Part 2 of their analysis of the 2010 RIMPA technology survey the following as necessary inclusions in an updated and relevant RIM technology survey:

- Webmail (Gmail, Hotmail, Yahoo, MSN)
- social networking services like Facebook, MySpace and Twitter
- blogs as a communication tool for organisations with customers and stakeholders
- broadening the spectrum of wireless devices and computing utilised
- RIM processes around the use and capture of records from smart devices
- RM functions available within, and add-ons integrated with, portal environments
- inclusion of “new technologies and knowledge bases . . . [including] . . . business intelligence and collaboration, data mining, enterprise resource planning, customer relationships management, information life cycle management, [and] data archiving with XML” (2012, p. 35)

Email is always lists high as a RM priority, however results from Symantec’s 2011 Information Retention and eDiscovery survey showed that email has dropped from being the most commonly requested set of records to be the third that a company must produce for eDiscovery. Email is now outranked by files and documents and database or application data. Further to this Symantec also found that businesses are more frequently being required to produce social media records as well, which includes “corporate posts on Facebook, Twitter, LinkedIn and blogs”, as well as instant
messages and SMS texts from mobile devices (p. 7). It must be kept in mind that though the Symantec survey included participants from 2,000 companies globally, the companies were all from the legal industry and included both legal representatives as well as IT professionals.

2.3.3 Definition of terms used and removal of ambiguities

Desimone and Le Floch note that an important aspect of validity relates to the clear explanation of terms and concepts used so the survey designer and the participant have the same understanding of the questions and there is no misinterpretation (2004, p. 4). All potential ambiguities need to be removed from any survey and no assumptions should be made by the survey designers about the participants’ understanding of terms and concepts used. One example is the use of the acronym ‘IM’. Would this mean Instant Messaging or Information Management in a technology survey? Brogan and Roberts use the example of Enterprise Content Management (ECM) as a source of definition uncertainty and confusion for survey respondents:

We do not know what our respondents’ common understanding of ECM is nor what the relationship between these two concepts is [RM and ECM]. Do they stand side by side? Or is records management merely a small subset of ECM, as the Association for Information and Image Management tells us? Nor do we know whether ECM is synonymous with other broad concepts like information management in a wide cross-section of respondents’ organizations (sic). (2011, p. 7)

In 2011 Connelly provides several basic and common-sense principles for defining terms and concepts, reducing ambiguity and potentially increasing future survey participation:

- Outline what you want to know from what audience. This survey blueprint will help in writing and organizing the survey. Only include what is absolutely necessary.
- Write meaningful items that address only one idea per item. Avoid ‘double-barrel’ items as they are not interpretable. For example, when you get a response for an item such as, ‘How satisfied are you with your pay and benefits?’ you do not know if the answer refers to pay or benefits.
- Use clear, simple, unambiguous language. Avoid abbreviations, jargon, and technical terms, because those terms may not be known by all (p. 61)

A necessary addition to that list is that you should know your audience. Any survey designer should have a clear understanding of who their participants are. For RIMPA the technology engages with records, information, document, archive and library specialists and not just ‘IT’ people as such, so very technical terms need to be clearly defined. This is supported by Brogan and Roberts recognising that “the comprehensive and IT inclusive nature of the survey is a potential source of unreliability, with some questions assuming significant prior learning of IT concepts” (2009, p. 41).

2.4 Summary

This review has covered the topics around the need for identifying knowledge, skills and technology in the RIM workplace, the role of the technology survey as a tool for identifying these, and issues around validity and reliability of surveys and how they can be avoided or resolved. While researching these areas it soon became apparent that there is a significant deficit in research work concerning
many current technology arenas and how they relate to RIM. Even simple journal articles from 2009 until the present day were scarce. For example works on ‘RIM’ and the ‘Cloud’, or ‘collaboration tools’ and ‘RIM’, even ‘Social Media’ and ‘RIM’ to an extent were not common. I acknowledge that these are all evolving arenas still in a process of morphing and defining themselves, however this noticeable lack is an opportunity and catalyst for further research work.

Chapter 3: Theoretical framework

As the aims of this research were to identify issues in the validity, reliability and usability of the existing survey, find solutions to these issues and propose a revised survey to employ as an effective longitudinal research tool, it is underpinned by the post-positivist worldview. It is post-positivist, as opposed to positivist, because the research is not aiming to discover absolute truths to knowledge, but rather to examine causes which probably determine effects or influence outcomes. Post-positivism also focuses on reducing ideas into smaller, more discrete sets to test and develop knowledge:

[B]ased on careful observation and measurement of the objective reality that exists ‘out there’ in the world . . . thus, in the scientific method, the accepted approach to research by postpositivists (sic), an individual begins with a theory, and then makes necessary revisions before additional tests are made. (Creswell, 2009, pp. 6-7)

Chapter 4: Design, methods and materials

4.1 Design

![Diagram](Figure 4.1: The Nature of Scientific Inquiry (Pedler, 2007))
Figure 4.1 describes the research cycle. This project is concerned with objectives and instrument design based on:

- Critical evaluation of the existing Technology Survey Instrument in terms of the research literature on instrument design;
- Expert review of the current instrument via an Expert panel (Focus Group);
- Re-design of the instrument based on literature and Focus Group findings;
- Focus group validation of the re-designed instrument.

It does not include data collection and analysis which will be undertaken in late 2012 as discrete activity.

4.2 Focus Group and Pilot Test

The only participants involved were those participating in the Focus Group and follow-up Pilot Test of the revised tool. There were six participants who were chosen based on all the following criteria:

- highly skilled and knowledgeable in RIM
- possess a moderate to high IT knowledge and skill level
- possess a desire for improving the skills, knowledge and standing of RIM professionals – demonstrated by their:
  - higher than average activity in various online Listserv and LinkedIn discussions,
  - conference and seminar participation over many years, and/or
  - professional role
- highly regarded and well respected in the RIM community
- they all operate in different RIM sub-communities, avoiding bias in representation. It was ensured that there was a New Zealand voice and an international voice as well as Australian voices, a voice from State Government, a voice from Federal Government, a vendor voice, a private organisational voice, a RIMPA association representative voice, a young voice and an old voice

The Focus Group participants were contacted about the research being undertaken and invited to participate, and were also asked to provide their consent via email (Appendix 3). Once they had replied with their consent a follow-up email provided the participants with the Focus Group session questions to be discussed (Appendix 4) as well as supporting research literature relevant to each question. The research literature offered a consistent understanding and context around validity and reliability, Focus Groups, and knowledge and skills within a RIM context. The nine articles provided to the participants were:

- The Skillset Needed by the Records Manager of Today (Algate, 2008)
- Education and training for records professionals (Anderson, 2007)
- Professional education, development and training in a Web 2.0 environment: A case study of the UK (Broady-Preston, 2009)
- Unlocking the business value of information: Information On Demand (Hulme, 2009)
- Validity and reliability of measurement instruments used in research (Kimberlin & Winterstein, 2008)
Validity and reliability: What Do These Terms Mean? (Maughan, 2009)
Using Focus Groups: lessons from studying daycare centers, 9/11, and Hurricane Katrina (Peek & Fotherhill, 2009)
Current state of play: records management and the cloud (Stuart & Bromage, 2010)
Procedural and Declarative Knowledge: An Evolutionary Perspective (ten Berge & van Hezewijk, 1999)

The Focus Group were given access to a cloned version of the old survey for the purpose of review and assessment in terms of validity, reliability, currency and usability. The outcome of their review was discussed in one recorded Focus Group session in-person and via phone-conference. The participants were made aware at all times that the Focus Group session was to be recorded and that any and all information they provide in Focus Group and Pilot Test activities, such as interviews and instrument trials, will remain confidential. The feedback around the survey design is the main focus, not the survey data itself, which is why the participants were also made aware that they may be mentioned only in potential follow-up publications but only in the context of an acknowledgment and appreciation of their contribution. No name identified data from the pilot will be published at any stage and all data will be destroyed after 5 years.

Following the Focus Group session an analysis of the recorded session was completed to draw out ideas and recommendations for improvements to the tool (Appendix 6). Once the Focus Group suggestions were accommodated into the new survey, along with the alterations based on the research literature, the resultant revised and improved tool was supplied to the Focus Group participants to trial in a Pilot Test to appraise its validity, reliability and ensure it was free from any potential errors or flaws in survey design. They also provided a point of reference for the time taken to complete the survey. The Pilot Test window was two weeks with participants given advance notification. The testers were asked to supply feedback, and an evaluation of the feedback resulted in further minor alterations to the tool.

The resultant finalised tool (Appendix 8) will be submitted as a complete survey instrument for approval and use by RIMPA initially in the second half of 2012, and then biennially after that.

4.3 Instruments
The online survey tool called SurveyMonkey was the only instrument utilised for this study. SurveyMonkey is:

[A] commercial product available since 1999. Using this service, researchers can create their own surveys quickly using custom templates and post them on Web sites or e-mail them for participants to complete. SurveyMonkey then can generate results and report back to the researcher as descriptive statistics or as graphed information. The results can be downloaded into a spreadsheet or database for future analysis. The basic program is free for 100 responses per survey and no more than 10 questions per survey. For additional responses, more questions, and several custom features, SurveyMonkey charges a monthly or annual fee. (Creswell, 2009, p. 149)
4.4 Procedure

There were seventeen key steps involved in this study:

1. Draft invitation and Consent Advice to Focus Group participants (Appendix 3) – providing reviewers information about:
   a. The aims of the research and its significance to the RIMPA and the RIM profession;
   b. The reason for their involvement;
   c. The processes around the Focus Group session and follow-up Pilot Testing;
   d. What is expected of them as Focus Group participants – to provide any and all positive and negative feedback, suggestions for improvements or alterations, error checking and timing the process;
   e. Assurance of confidentiality and privacy of information provided via the survey; and
   f. An expression of personal gratitude on behalf of myself as well as the professional gratitude of the RIM profession.

2. Seek and receive approval from the Ethics Committee (Appendix 5);

3. Identify potential participants, including several reserve invitees in case anyone could not attend or declined participation;

4. Create clone of current survey for Focus Group to review;

5. Email out invitation;

6. Create a Change Management Log (Appendix 6) to track all alterations planned and made to the survey. This was updated accordingly at all stages of the study and includes the outcomes of the Focus Group review;

7. Review and evaluate current survey elements for RIM technology relevance/significance – this will involve an examination of:
   a. the questions asked, to determine the relevance of questions asked and the currency of options provided; and
   b. the answers provided in previous two surveys to determine if constant 0% replies indicate inappropriate options provided as well as to evaluate amendment suggestions supplied by participants.

8. Identify items that fail relevance/significance test;

9. Identify validity and reliability issues at macro survey level and micro item level;

10. Create new survey;

11. Run Focus Group session;

12. Evaluate ideas and recommendations for improvements to the tool (Appendix 6) as suggested by Focus Group;

13. Redesign survey – this will involve:
   a. removing items that fail relevance/significance test;
   b. adding new items based on step 7 and information gained from the review of current research literature;
   c. fixing any validity and reliability issues; and
   d. including the results of Focus Group review and analysis.

14. Create new preamble;

15. Run Pilot Test;

16. Update survey as necessary based on any issues identified and suggestions arising from the Pilot Test after evaluation of their comments; and
17. Finalise survey redesign.

4.5 Limitations of the study
There are a number of limitations in the approach to this research.

4.5.1 Expert Panel (Focus Group) - Composition
The first limitation is that a more random selection of Pilot Testers chosen from a broader reach of RIM professionals may have been more beneficial to the study. The expert composition of the panel may have introduced knowledge bias that is not typical of RIM practitioners.

The second limitation involves the small number of participants involved in the Focus Group. The old survey had 101 questions, and even though a significant reduction of this occurred for the redesigned pilot, the new survey was still substantial in length, and therefore it was a ‘big ask’ of anyone to complete both the initial review followed by a Pilot Test. This is why it was not desirable to approach too many potential participants with a substantial survey that isn’t yet active.

4.5.2 Participation rate
The third limitation is that the Pilot Test didn’t address the participation rate issue which was seen in the 2008 and 2010 surveys. It is also acknowledged that only a much larger pool of testers could potentially address this issue, however this was not viable, as explained previously.

4.5.3 Limited time frame
The fourth limitation is the timeframe of the research didn’t allow for multiple interview sessions, Pilot Tests nor greater testing windows. Consequently test-retest stability and reliability could not be effectively tested.

A fifth limitation concerns the ‘one-off’ nature of the re-design, with no iterative qualitative assurance processes taking into account real data gathering. Ideally the instrument will used by RIMPA as a longitudinal study tool over many years, therefore time validity could not be tested by this study.

4.6 Ethical considerations
No significant ethical issues were anticipated or occurred in this research.

As previously noted, with a small pool of six Pilot Testers there is a possibly of testers and their host organisation being identified by the information provided. That is why it was stressed to all participants that the survey was anonymous and that any and all information provided during Pilot Testing will remain confidential and private, and the identity of the testers may only be mentioned in potential follow-up publications and only in the context of an acknowledgment and appreciation of their contribution. No name identified data from the pilot will be published at any stage and all data will be destroyed after 5 years.

All participants consented by email to participate and were also afforded the opportunity to decline participation at any stage. They were also regularly informed that the Focus Group session was recorded for review and analysis purposes.
Chapter 5: Analysis and resultant changes

5.1 Introduction
This study was focused on updating RIMPA’s old survey with the specific goal of providing RIMPA and its members with a robust longitudinal research tool. This tool will enable RIMPA to gain valid and reliable empirical evidence about its members within the important and topical context of current and future technology, as well as the skills and knowledge around that technology. The new survey will also facilitate a better understanding by RIM professionals of how current technology and future developments both directly and indirectly impacts on not only their management of their host organisation’s records and information but also their desired and required skills and knowledge.

The survey demanded an extensive amount of change and reshaping to ensure a robust tool was achieved. Issues concerning validity, reliability, currency and useability needed to be resolved or minimised as much as possible within the parameters of maintaining a certain level of backwards compatibility from the new survey to the old. This chapter reports the many steps taken to resolve and/or minimise the issues identified in the research based on the review of current research literature, the review by the authors of the two previous analyses and by the Focus Group and resultant Pilot Test.

5.2 Design and layout
Before any issues around irrelevancy and lack of currency of content within the survey were addressed, the survey had to be structurally and visually redesigned on both the macro and micro levels to ensure participants become engaged with the survey from the outset. As with a meal, ‘the first bite is with the eye’. The first macro change that occurred was around branding. This survey was and will be both initiated and promulgated by RIMPA, however the old survey just had the bare bones of a survey – there was no visible ongoing association with RIMPA except for in the Introduction, the ongoing page titles and final Thank You, and the layout was basic black wording on a white background, with orange used only for section headings and blue used for the title (Figure 5.1).

![RMAA Technology Survey 2010](Image)

Figure 5.1: Old survey template (SurveyMonkey, 2012b, p. 3)
The opening step was to ‘brand’ the survey and enhance its visual appeal. Branding demonstrates professionalism and provides ownership and sponsorship by the host organisation – RIMPA – resulting in an increase in confidence around the survey’s aim and use of resultant data. Using corporate colours has the effect of participants relating the survey to the brand, and avoids the potentially off-putting blandness of all white. This will also take the first step towards developing a psychological contract with the respondents for future participation. RIMPA’s corporate colours are blue, orange and white, as displayed in their logo and website menus (Figures 5.2 and 5.3).

![RIMPA Logo](RIMPA_logo.png)

**Figure 5.2:** RIMPA logo (RIMPA, 2012b)

![RIMPA Website Banner](RIMPA_website_banner.png)

**Figure 2.3:** Example of RIMPA website banner (RIMPA, 2012b)

Using RIMPA’s corporate colours as a palette, a survey template was created. This template also included the corporate logo at the top of each page (Figure 5.4):
The next phase was setting ongoing guidelines for question structure and general layout. This included:

- Using standard question language based on the Australian Bureau of Statistics (ABS) census form, such as starting questions with ‘which best describes...’ (Australian Bureau of Statistics, 2011a)
- Using standard answer options where possible based on ABS protocols, such as applying standard age brackets employed by the ABS (Australian Bureau of Statistics, 2011b), which can potentially be used to compare results with other research data obtained from other surveys
- Ensuring answer options provided are listed in alphabetical order, thus removing any bias towards selecting specific answers
- Ensuring the commonly occurring answer options of Don’t know/unsure, None, NA and Other are listed consistently in that order at the end of each list of options if required as answer options
- Providing dropdown menus wherever possible for answer options where only one response is required, as opposed to a long column of radio buttons to select from, thus reducing burden on the participants and enhancing useability
- Creating ‘white space’ between each question. This enhances useability by ensuring questions aren’t accidentally skipped because they are too close together
- Rearranging questions into a new order, ensuring a more logical flow and by clustering related questions into distinct thematic sections
- Providing segues at the start of new sections that don’t smoothly lead-on from the previous questions, which otherwise may have appeared ‘jarring’ to participants when progressing through the survey
• Providing definitions of terms and concepts if required, thus removing any ambiguity and the potential of users skipping questions due to possible misunderstanding or lack of knowledge of terms and concepts used

Once these parameters had been established, they provided the framework for the next significant step, moving the Demography section from the start to the end of the new iteration. The drivers for this were:

• “Questions like demographics or personal information are usually best to introduce towards the end of the survey. This way, respondents are likely to have already developed confidence in the survey’s objective” (SurveyMonkey, 2011f, p. 15)
• “Ask interesting questions in the beginning of the survey to grab the participants’ attention. This helps to stimulate interest. Place demographic and/or sensitive questions at the end of the survey. If they are in the beginning, participants may opt out early.” (SurveyMonkey, 2011f, p. 17)
• Answering demography questions isn’t as demanding on the participants as other more thought provoking and technical questions, therefore it is prudent to end the survey with these questions as participants may be experiencing a level of fatigue by the end

5.3 Retention and deletions

Now that the parameters of the new survey were in place the issues around length, relevancy and focus required addressing. The old survey had 101 questions covering a very broad and disconnected range of technology arenas, which also used outdated and therefore irrelevant and invalid terms, concepts and objects. This burden on participants needed to be rectified. As Edwards et al identified in 2009, reducing the length of surveys increased participation by over half from trials comprising 7589 participants (p. 5). A review of each question occurred to evaluate its need for retention into the new iteration or removal completely. It was not viable to maintain a survey with 101 questions, so each question was appraised against the following, not mutually exclusive, fundamental validity and reliability measures:

1. Relevancy to the aim of the survey – items to be retained must be relevant to aim of the survey;
2. Has previous analysis been carried out on the question – it is hoped that this survey continues to be used as a longitudinal research tool, so it is important to maintain a level of continuity and backwards compatibility to the previous four years of results wherever possible and practicable. Also a lack stimulus for analysis demonstrates a lack of relevancy and/or interest in that matter;
3. Relevancy to the participants – the items need to be relevant to the professional lives of the target participants. For example, the question “What is your organisation’s primary brand of photocopier?” isn’t relevant to RIMPA and its members as demonstrated by the 52.9% (2008) and 37.6% (2010) of participants skipping the question;
4. Was the question skipped by a large number of participants. For example, the question of “What software does your organisation use for electronic facsimiles?” was skipped by 58.6% (2008) and 49.6% (2010) of participants; and
5. Did the question previously received a large number of ‘Not applicable’, ‘No/None’ and/or ‘Don’t know’ responses. For example, the question of “Does your organisation use
Hierarchical Storage Management (HSM) file archiving technology?” received 96.4% (2008) and 95.7% (2010) Unsure/Don’t Know/NA and No/None responses.

Once the initial review and cull was achieved, work commenced on re-organising, altering and updating the existing questions as well as adding new questions. This is not to say deletion of questions was a once-off process, quite the opposite. All questions, including new questions, were continually scrutinised as an ongoing process according to the above measures by the researcher with significant input of course by the Focus Group and the authors of the previous analyses.

5.4 Alterations and additions

5.4.1 The Introduction

The first item that required updating was the introduction to the survey. The old survey provided a personalised introduction from the CEO of RIMPA, Kate Walker (Appendix 2), which explained, as all well designed surveys should, how to progress through the survey, how long it will take to complete, the list of topics covered, survey closing date and a thank you. However the introduction didn’t provide an explanation of why it was being conducted, what its aim was, consent advice, or how participation benefitted participants and the greater RIM community. The introduction was therefore redrafted accordingly to address these omissions and provide a list of topics covered by the survey, which now encompassed a new section on the knowledge and skills of RIM professionals as part of its stated aim:

Thank you for taking the time to complete this survey. It is greatly appreciated.

A key component of RIMPA’s Corporate Strategy is to work together to promote, enhance and develop Records and Information Management. To promote the interests of members and position RIM for success requires understanding of industry forces and trends that impact on the RIM program.

This aim of the RIMPA Technology Survey is to measure technology adoption in RIMPA member employing organisations, where technology impacts on the work of RIM professionals and consequently has implications for education, training and competency standards. This survey also provides insight into where the RIM program fits and functions in member organisations and what organisations expect from their RIM staff. Analysis of survey results shows us how we can best equip ourselves with current and emerging in-demand knowledge and skills likely to be important into the future.

This survey is held every two years, making it an extremely valuable longitudinal research tool for RIMPA’s members, as well as the greater global RIM community. Since it was last undertaken in 2010, the survey has been substantially updated and revised, a task informed by a group of leading RIM educators and practitioners functioning as a focus group.

This survey should take approximately 15-20 minutes to complete and contains the following sections:

*About the organisation:
- Enterprise records and information management
- New and emerging technologies - the Cloud and Social Media
- Portable devices
- Email
- Information archiving technologies
- Operating environments
- Business continuity

*About the practitioner:
- The RIM toolbox: knowledge and skills
- About You

*Comments

Once complete, please ensure you click on the “DONE” button to submit. Please answer each question as best you can and avoid skipping questions if possible - even choosing “Don't know” or "Not applicable" is in itself insightful data.

Your participation in this survey is voluntary and will imply informed consent. All answers provided will remain anonymous, identifiable only by IP addresses. All information obtained will be used only for research purposes and results may be reported in articles and presentations.

You are encouraged to circulate the request to complete the survey to ensure that a wide sample of the profession is included in the results.

If you have any questions about the survey, please email me directly at kate.walker@rimpa.com.au

We thank you for your time and effort completing this survey and look forward to analysing the results and sharing them with you.

Thank you,
Kate Walker CEO

(SurveyMonkey, 2012b)

5.4.2 Q&A
The second stage of modification revolved around the questions that were retained from the old survey. These were far from being ‘ready to go’ as is. Significant work was required for each and every question to address all of the following validity and reliability concerns. Each question had to:

- be clear and succinct
- be unambiguous – for example, many questions asked about ‘you’ but could be interpreted easily as being about the participant personally or the participant’s organisation
- be specific about what is being asked and not too general or vague
- not be compound in nature
- be relevant to the aim of the survey
- be relevant to the participants to maintain engagement
- be current and not include outdated or obsolete terms or concepts
- contain a current, exhaustive and exclusive list of options
• provide guidance on how to answer if required, such as stating ‘select all that apply’ when more than one answer is possible
• be free of all bias in selecting options and/or ‘leading’ participants
• clearly define any specific terms or concepts which have the potential to be misinterpreted, not understood or not known by participants
• be future-proofed if at all possible and practicable
• be appropriately located, providing logical flow and clustering

There are an abundance of instances from the old survey that demonstrate issues involving all of the above concerns, which is why this survey has been updated. For a micro review of all changes made the Change Management Log (Appendix 6) provides a full and detailed account on all alterations made to each and every question, with supporting explanation and justification for each change at every stage of the survey’s evolution to the final iteration.

The following are the thirty six questions that were retained from the old survey and updated plus the new questions introduced, clustered into sections similar to those contained in the old survey. It must be noted at this point, however, that this is not the complete list of questions, only those not discussed in greater depth later:

**Email**

1. What email system does your organisation use? (select all that apply)
2. Does your organisation set a server-side limit on mailbox size?
3. Does your organisation delete email off the server after a designated period?
4. Which of the following best describes practices in your organisation for managing business email? (select all that apply)
5. Does your organisation offer web access to work email?
6. Does your organisation prevent access to personal web-based email services?

**Information archiving technologies**

7. What file formats does your organisation use for retention (greater than 5 years) of electronic records? (select all that apply)
8. Does your organisation hold electronic information that is no longer accessible or difficult to access due to any of the following technological reasons? (select all that apply)
9. Does your organisation have a dedicated database archiving software solution?
10. Does your organisation have a dedicated email archiving software solution?
11. If so, does the dedicated email archiving system integrate with your enterprise RIM system/s?
12. Does your organisation have a software solution for searching of Outlook (pst) archives stored either locally or on the network?

**Operating environments**

13. What primary desktop operating system does your organisation use?
14. Does your organisation use open-source software?
15. If so, in what areas is it used (not including portable device apps)? (select all that apply)
16. What proportion of personnel use laptops in place of desktop computers?
17. Does your organisation offer local wireless network access?
18. Does your organisation offer wireless connectivity in your conference rooms to visitors?
19. Does your organisation allow VPN (virtual private network) remote network access?
20. Does your organisation use RFID (radio-frequency identification) technology?
21. What technologies is your organisation currently assessing for potential future use? (select all that apply)
22. What level of influence or involvement do Records and Information managers in your organisation have in the following areas of procuring enterprise RIM technologies?

**Business Continuity**

23. Does your organisation have a business continuity plan (BCP)?
24. Does your organisation have a backup internet connection?
25. What online backup solution does your organisation use for some or all of your data protection?

**About you**

26. Which of the following paid memberships do you have?
27. Which best describes your occupation?
28. Where are you located within your organisation?
29. Where is your workplace?
30. What size is your organisation?
31. Which best describes your organisation’s industry/sector?
32. If your organisation is government-based, what is your organisation’s government type?
33. Gender:
34. Age:

**Comments**

35. What new or emerging issues with technology do you see in your organisation arising in the next 5-10 years?
36. Feel free to add any comments, suggestions, thoughts or questions - whilst we can’t provide a response all comments will be read.

### 5.4.3 Enterprise RIM systems

If there is one core object of technology for Records and Information Managers, it would have to be the systems that are used to manage the host organisation’s records and information. In the old survey this was divided distinctly into questions relating to Records Management (RM) systems and questions relating to Enterprise Content Management (ECM) systems. The decision was made to unite these into one overarching concept to be examined – Enterprise Records and Information Management (Enterprise RIM) systems. Even though there is still a strong distinction between the
core functionalities of RM and ECM systems and what they manage, there were a number of undeniable justifications that necessitated a convergence. Firstly, it was apparent from the results of the old survey that many participants didn’t have a clear knowledge of the differences between the two:

The fact that all the functions had significant positive response rates in both questions - indeed "Capture of emails" was ranked third in both questions - suggests that there is not a clear common understanding in our community of the difference in the scope of RM and ECM. (Brogan & Roberts, 2011, p. 35)

Secondly, there is trend in the marketplace now for systems to have a wide range of functionality. Long gone are the days of having one system with one purpose, which has led to some systems becoming a ‘Jack of all trades’. For better or worse the fact of the matter is that this survey must reflect the current and short-term future environment, and so the overlap of functionality with no rigid boundaries must be accommodated in the re-design.

Thirdly, one of the central intentions of this redesign is to reduce the burden on participants. The old survey saw the same four in-depth RM questions repeated for ECM. Combining these into one set of questions about Enterprise RIM systems allowed a further reduction in questions while maintaining a level of continuity with the old survey. This will benefit those participants who only use one tool for all processes – they won’t have to answer the same questions twice.

Finally, and possibly most importantly, the fourth reason for converging provides a step up to more meaningful research. It enables a greater focus on the required and desired capabilities and functionalities of system or systems, and whether they do this well or not, regardless of whether it is labelled a RM, ECM, EDRMS, etc. system. This will allow for more informative and evocative data from the survey, as opposed to just capturing simple data around what each systems does for each participant. This kind of rich information can only benefit the marketplace for both vendor and user alike.

This convergence achieved a notable reduction plus enhancement resulting in the following eight questions starting off the new survey:

1. **What Enterprise RIM system/s does your organisation use to manage its records, documents and content? (select all that apply)**
   (NB: If answer is “None” then the participant will automatically skip to Question 8)
2. **What proportion of your organisation's total information is managed by the enterprise RIM system/s?**
3. **How many people in your organisation are Enterprise RIM system/s users?**
4. **What functions and formats does your organisation’s Enterprise RIM system/s manage? (select all that apply)**
5. **Rate the satisfaction of your organisation with the Enterprise RIM systems' management capabilities for formats and functions?**
6. **What organisation unit(s) or function(s) have been assigned program governance/coordination responsibility for Enterprise RIM system/s?**
7. **What are the barriers to achieving more widespread benefits from the Enterprise RIM system/s in your organisation? (select all that apply)**

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8. If your organisation does not currently have, and is not presently installing, an Enterprise RIM system/s, why not? (select all that apply)

5.4.4 New technologies

Using outdated or obsolete concepts and terms, such as PDA, was not the only significant issue identified in the old survey involving currency. There were a number of glaring omissions around the new, and not so new, technologies and trends that considerably touch the RIM world that were often commented on in many of the ‘Other Comments’ fields of some of the previous questions. “The data show the growing importance of technologies currently outside the RIM space that are significant in RIM terms” (Brogan & Roberts, 2012, p. 35). For example (non-Blackberry) smartphones, tablet devices, social media and the Cloud. Although some of these technologies and concepts, such as the Cloud, may not as yet become a part of standard organisational operations, there is no doubt that social media, smartphones and tablet devices are essential and in everyday use by many organisations and a significant part of their standard business practices. These omissions were observed in both the questions themselves as well as the options provided for retained questions.

After clustering was completed, two new sections were created which are devoted purely to these technology matters – i.) New and emerging technologies – the Cloud and Social Media, and ii.) Portable devices. The following are the ten new and/or updated questions in these sections:

**New and emerging technologies – the Cloud and Social Media**

1. Does your organisation permit the use of "cloud" technology for the storage of its records?
2. If so, which of the following best describes its use?
3. Does your organisation permit the personal use of external social media?
4. Does your organisation utilise social media as part of their mainstream business practices?
5. If so, which of the following are used? (select all that apply)
6. If so, does your organisation capture and store social media content using any of the following solutions?

**Portable devices**

7. Which of the following portable devices are utilised by your organisation? (select all that apply)
8. Does your organisation allow personal "apps" to be installed on the portable devices?
9. Do any of your organisation’s portable devices have an enterprise RIM application/s installed?
10. Do your organisation’s portable devices synchronise to a system (such as Outlook) which integrates with an enterprise RIM system/s?

There was no shortage of information in this arena to assist updating the questions and options. Industry publications, such as iQ and Image and Data Manager (IDM) magazine, the RIMPA Listserv,
and the technology itself, such as the social media site LinkedIn’s discussion groups, and various blogs all provided a wealth of information around common, current and emerging technologies used or being considered by organisations.

5.4.5 Knowledge and skills

As previously stated, one of the core intentions of the redesign was to decrease the burden on users by reducing the number of questions in the survey. However, technology and RIM do not exist in isolation. There are also the skills and knowledge in demand in the workplace that are also important in the context technology and RIM. The significant role skills and knowledge have in building bigger and better RIM programs and careers necessitated inclusion, which consequently introduced an obligatory increase in question quantity.

A new section was introduced just before the demography-based section of ‘About you’, titled ‘The RIM practitioner’s toolbox – knowledge and skills’. In this section thirteen completely new questions were launched:

1. The following kinds of skills are important for today’s RIM professional
   (Agree/Disagree likert scale provided for each option)
2. The following kinds of theoretical knowledge are important for today’s RIM professional
   (Agree/Disagree likert scale provided for each option)
3. The following aptitudes and personality traits are important for today’s RIM professional
   (Agree/Disagree likert scale provided for each option)
4. Do you have a copy of the Records and Archives Competency Standards for your jurisdiction?
   (e.g. Australia’s National Competency Standards for the Records and Archives Industry)
5. Have you ever utilised RIMPA’s Statement of Knowledge: Tasks, Competencies and Salaries
   (aka TCSRP) document to guide your acquisition of requisite RIM competencies?
6. Has the introduction of new technologies in the organisation changed the competencies
   required for your role?
7. How important are the following for advancing your RIM-related knowledge and skills?
8. Does your organisation subsidise or pay for you to attend conferences, seminars &
   workshops in RIM?
9. Does your organisation subsidise or pay for external higher education courses in RIM?
10. What is the highest level of education you have completed?
11. Is your highest level of education RIM-related
12. Have you completed any of the following? (Please select highest qualification achieved)
13. How many years of work experience do you have in RIM?

The inclusion of skills and knowledge questions will have the added invaluable benefit of also providing for the first time in the survey’s history an opportunity to access the perceptions of training and learning requirements of RIM professionals. This is also taken a step further by the inclusion of a new question concerning the independent variable in the Demography section of the participant’s role in the organisation. By finding out not just the perceptions of RIM professionals, but indeed the perceptions of Senior Management as well as those of everyday RIM personnel on the front line, any gap that may exist between those perceptions can be identified. This, in turn, will provide RIMPA with a robust method of determining the training and education requirements of
RIM professionals that are in greatest need. The importance of this to the survival and evolution of RIM professionals in an ever-changing technological environment cannot be emphasised enough.

5.4.6 Focus Group review

There were only six external participants in this research, those who participated in the Focus Group and resultant Pilot Test. However it should be noted that a seventh person, who was initially approached to participate but was unable to due to matters unrelated to this research, also provided additional informal feedback during Pilot Testing. The six core participants were only required for one session, which lasted 75 minutes, with a follow-up Pilot Testing period of 2 weeks. Any form of bias was avoided wherever possible, for example there was no discussion about the survey at all with any of the Focus Group prior to the Focus Group session, neither of the previous analyses by Brogan and Roberts were provided to the group, and no further information that what was necessary was provided, so as to allow for an open and unbiased approach to the Focus Group free from any external shaping or undue influence.

Once the session was completed, the use of Content Analysis, either inductive or deductive, to draw out themes and recommendations was contemplated for employment to analyse the session, but rejected as a required device for the following reasons:

- There was only one Focus Group session, so there was no need to track any recurring themes and content across multiple Focus Group sessions
- The majority of the information utilised as resources for updating the survey have been based in the literature review, with the Focus Group predominantly validating the findings from the research and providing additional information
- Within a context of Content Analysis the Focus Group aspect of the research is mostly surface-level, as we are not concerned with tracking emotional responses, dynamics of relationships, immersion in the data, use of theoretically derived categories from existing theories or prior research (Moretti et al, 2011, p. 420-421) and so forth, only high-level themes previously missed, misinterpreted from or additional to the literature review
- One purpose of Content Analysis is to code themes that are not explicitly defined or mentioned, however the Focus Group session for this research was very black and white and had very rigid boundaries. In an oversimplified sense the session was concerned only with how the survey could be improved – what needed to go, what needed to stay, what need to change and what was missed in the first place
- We were not using the Focus Group session to test a hypothesis in the traditional quantitative sense, we were simply updating a survey tool, so were looking only for ideas to update the survey, as well as find flaws with the existing tool

Therefore using formal Content Analysis to code and analyse the data obtained from the session would be unnecessary and excessive, providing only superfluous data with no significant value added to analysis and interpretation of data. All suggestions made by the Focus Group were recorded in tab 2 of the Change management and Focus Group review log (Appendix 6).

There were a number of instances during the session when the discussions moved away from the survey directly and revolved more generally around RIMPA as an organisation in the greater RIM community, however for the majority of the session there were two distinct areas of outcomes.
Firstly there were the suggestions directly addressing what changes were required to the current survey. Secondly there were a number of thoughts and ideas towards dividing and building on what RIMPA wants to accomplish with this survey. For example, dividing the survey into several separate surveys – one an HR-based survey, one on education and training, one technology-based survey, one vendor-based survey – also how they could take the results from the surveys and discuss nationally at RIMPA branch level. These and other outcomes will be discussed later in the Recommendation section.

As expected, the majority of the outcomes around updating the survey validated what was found from the literature review and previous analyses completed by Brogan and Roberts. Such as:

- Questions on skills, knowledge and competencies need to be included
- Ask about what qualifications the participants hold
- Are these qualifications RIM-related
- When asking about skills and competencies, ensure ‘relationship management’, ‘communication skills’, ‘presentation skills’ and ‘selling skills’ are included
- Merge all RM and ECM questions because Records and Information managers don’t know where the distinctions, commonalities and convergences of ECM and EDRMS, etc. lie in managing records and managing content
- Ask about the functional role of the participant - are they the manager, the records advisor, the Chief Information Officer (CIO), etc.
- Ensure ‘you’ and ‘your organisation’ are clearly distinguished throughout the whole survey. Wording needs to be consistent, differentiated and clarified
- If we don’t separate the survey into 2 new surveys then there needs to be two distinct sections – ‘About your organisation’ and ‘About you’
- Remove any vague or general questions that are too open to interpretation, such as ‘Do all your systems integrate seamlessly?’
- Include a personal question about how RIM professionals update and upgrade their competencies
- Launch the survey via various delivery mediums, not just the Listserv. If the survey is delivered via more mediums, such as social media discussion groups, blogs, and other similar professional association correspondence, this would have three benefits:
  1. The survey would reach a broader audience;
  2. It would create greater awareness of RIMPA’s existence – anecdotal evidence from the session showed that many industry professionals in Oceania still aren’t aware of RIMPA’s existence; and
  3. Everyone’s perception of RIMPA would be positively affected – anecdotal evidence from the session also demonstrated that there is an opinion that RIMPA is lagging somewhat behind other similar RIM associations. Consequently, if they become active in those modern spaces by launching the survey there (such as blogs, LinkedIn discussion groups, Twitter, and so forth) they will be perceived as embracing and being in touch with the modern technological world. They would shake-off any possible perception or stigma of being only relevant to ‘paper-based RIM’ professionals.
However as hoped, there were also a number of additional suggestions, of which the following were adopted into the survey:

- Add a question around what team, department and/or organisational function you work in, such as legal, IT, compliance, records, etc.
- Add a ‘future horizons’ scanning question aimed at exploring what technology and issues around technology in the future do participants think will affect them, their organisation and/or the RIM industry in the next 5-10 years. This will provide an opportunity to hear from the younger generation of Records and Information managers who might have a good grasp and view on what’s coming
- Add a question around what percentage of the organisation’s total information do they currently manage
- Add extremely succinct narrative or segues, as well as definitions if required, at the start of each section if the new sections do not flow smoothly on from the previous section
- Include the word ‘competencies’ as part of the aim in the Prologue

Once the suggestions of the Focus Group and the alterations based on the literature were all accommodated into the new survey, the survey was then supplied to the Focus Group to trial in a Pilot Test for the purposes of appraising its validity, reliability and ensuring it was free from any errors or flaws in survey design. They also provided a firm point of reference for the time taken to complete the survey.

5.4.7 Pilot Test
The feedback from the Pilot Testing was very encouraging, in the sense that not many issues were identified overall. Less than half of the 67 questions were commented on, and of the issues identified many of them were relatively minor as demonstrated in comments such as:

- question 5 needs to include a Not Applicable (NA) answer option
- the Other answer option in question 9 and in 11 doesn’t quite fit
- need to include just on laptop, perhaps Netbook, as opposed to on other mobile devices as an option for question 17
- you need a ‘none of the above’ answer option in question 57 and then point to filling in ‘other’
- the list of options was not in alphabetical order in question 57
- you need a ‘none of the above’ answer option in question 58 too

These comments resulted in minor alterations to the survey accordingly.

There were also responses that required no action as they were concerns that were noted, however these were addressed by later questions. For example, in question 4 – How many people in your organisation are Enterprise RIM system/s users? – one response was that “somewhere here should be way of expressing number of RIM users with numbers in the organisation” (Focus Group participant, personal communication, May 20, 2012). This concern is addressed in the final section of the survey by question 60 – What size is your organisation? A second example was around question 23 – Does your organisation offer web access to work email? – one response was “where do Citrix connection come in here - it’s not web based but it’s how our people work remotely” (Focus Group participant, personal communication, May 20, 2012).
participant, personal communication, May 20, 2012). This concern is addressed later by question 37 - Does your organisation allow VPN (virtual private network) remote network access?

Two further comments addressed usability issues. One participant expressed concern over the number of items to assess for questions involving likert scale ratings. This involved questions 40, 44, 45 and 49. Another comment also involved question 40:

Q40 - The following list describes tasks and processes in the procurement of Enterprise RIM technology. For each, decide if you agree or disagree with the statement that “RIM staff are acknowledged by the organisation as important stakeholders in this task or process” (Focus Group participant, personal communication, May 20, 2012)

The participant said that they had to read the questions several times before they knew exactly what was being asked. Although these concerns are valid, the questions were not altered except for minor alterations in the wording of question 40 as no other participants expressed these concerns.

Another two participants suggested that the survey should include a skip logic, which would remove the need to answer a number of questions if they answer a particular way for a question. For example, if someone said in question 1 that they did not use an Enterprise RIM system, then they could skip the next 6 questions, thus reducing further burden on the participant. These suggestions were actioned and saw a reduction of one to nine questions when completing the survey.

The most significant issue raised involved the potential scenario of someone who works from home and/or does not have an actual ‘office’:

Someone working remotely for an organisation might find it hard to answer some questions as the assumption seems to be on individuals working in a physical organisation with VPN type access, which is not the same as using something like Google docs when the person completing the survey does not have VPN access to system. Might be something to check that those who work from home 100% of the time are covered in the survey. I cannot recall (but might have missed) seeing a question that I could have answered that I use Google Docs in a work capacity. (Focus Group participant, personal communication, May 20, 2012)

Fortunately there were several questions that indirectly address this concern. These are:

- Question 9 – Does your organisation use the “cloud” for the storage of any of its records?
- Question 10 – If so, which of the following best describes its use?
- Question 59 – Where is your workplace? – One of the available options is “online only”

The final point to note is that the testers recorded times between 15 to 30 minutes to complete the survey. The Prologue to the survey was altered accordingly, working on the assumption that the maximum time included not just answering the questions but also assessing the tool as they went, which would not be relevant, and consequently not transferable to the normal participation scenario. Therefore this was accounted for in the stated maximum time in the Prologue.
In short, no significant alterations were made to the survey to bring it to its final incarnation. A full account of all Pilot Testing concerns can be found in the Change Management and Focus Group review log (Appendix 6).

5.5 Summary
This survey experienced extensive changes at both the micro and macro levels to bring it to its final robust form. A complete overhaul was required and achieved while maintaining a significant level of backwards compatibility. The old survey originally had 101 questions that remained unchanged across 2008 and 2010, however this research has significantly reduced this to 67 questions. Of course, the focus of this research was not just to reduce the burden on participants by removing outdated and irrelevant questions, but also to address the issues of validity, reliability, currency, delivery, presentation and introduce questions examining skills and knowledge both generally in RIM as well as specifically as they relate to technology.

The first stage involved changes to the overall design and layout, providing a new eye-catching and professional looking RIMPA-branded foundation to commence building the new survey on. After this was achieved the next stage was to determine which questions needed to go and which needed to remain, otherwise time would’ve been wasted updating questions that ended up ‘on the cutting-room floor’. This culling provided the basic framework of the new survey, but unfortunately in a form with no logical or discernible flow, which therefore necessitated a clustering of the questions.

A new prologue had to be drafted as the existing introduction had many glaring omissions, such as a demonstrable aim, consent advice, and beneficial outcomes to the participants as well as the greater RIM community. Once the revised introduction was incorporated into the new iteration, a more micro review took place – a review of each question and available answer’s validity, reliability and currency – resulting in an update of each and every question to resolve the issues identified. This, however, was not achieved in isolation, as the Focus Group review played a significant role in not just providing additional considerations but also confirming existing planned alterations. This included the addition of questions around new technologies as well as the skills and knowledge of RIM professionals.

The final result was a robust longitudinal research tool, fine-tuned in a Pilot Test of the tool by the Focus Group members, which will be presented to RIMPA as a proposed update of the existing RIMPA Technology Survey. This presentation will also include additional suggestions for delivery and future iterations of the survey. The additional suggestions will be discussed in the Further Design and Iterations chapter of this research as they are not core to the update of the survey itself. The final version of the survey can be accessed using the following link:


Chapter 6: Conclusion and recommendations

6.1 Introduction
The aims of this research were to review the existing 2008/2010 RIMPA Technology Survey instrument to identify issues in validity, reliability and usability, find solutions to these issues and create a new section that measures the perceptions of education and training requirements in the
technology and RIM domains. In doing so, the result was a revised, fully tested, valid and reliable survey to submit to RIMPA for approval and deployment in the second half of 2012.

The purpose of this chapter is to discuss the limitations of the new survey, the implications for future research, the recommendations for delivery of the survey as well as tangential recommendations to RIMPA, and to purport the rewards to the RIM community of the empirical evidence the new survey will gain.

6.2 Limitations

During this research a significant obstacle arose that required addressing – should the questions around Records Management (RM) and Enterprise Content Management (ECM) remain separate or should they be amalgamated?

There were significant advantages and disadvantages to both courses of actions: If the questions remained separated then there would be the disadvantages of a continued burden on participants involving quantity of questions, which would be in opposition to one of this research’s aims. Also many participants may use one system for both RM and ECM, which would mean they would be answering duplicate and therefore redundant questions, again adding unnecessary burden on the users. However, maintaining the separation would have the advantages of avoiding the possibility of compound questions, remaining in-line with the majority opinion of the Focus Group that they are different, as well as providing for better backwards compatibility of survey results.

On the other hand merging the questions on RM and ECM had the disadvantages of loss of direct backwards compatibility, and the loss of ability to rate potentially two discrete systems separately if participants do in fact use two systems for different purposes. Conversely the advantages would be a reduced burden on participants in the volume of questions, a consistency achieved with the common perception in the profession that the future of RM and ECM systems is a convergent one, as well as being in-line with the common current practice of using one system for both purposes.

As previously noted, the final decision was to amalgamate these questions. Of course it was realised that this could have significant negative impacts if the questions remained as they were. The questions themselves had to evolve to address the identified issues and justify their existence as unified entities. The result was a re-evaluation of what the questions focused on. Instead of staying with simply looking at what these RM and ECM systems do and what they manage, the questions were re-constructed to look at what we want them to do and manage, and whether they do it well or not, regardless of what label the system has been given at any point in time (EDRMS, ECM, ERM, and so forth). There was an added benefit of also addressing a separate issue evident from the results of the old survey, which was an apparent lack of a clear knowledge in the profession of the differences between RM and ECM systems, and that these terms may be out-dated and misleading.

It should also be noted on this point, another contributing factor to combining the questions was that even though the Focus Group identified RM and ECM as distinctly different, they also commented and acknowledged that there is trend in the marketplace now for systems to have a wide range of functionality. Consequently, for better or worse, the boundaries of each have become blurred and the reality is that there’s a great deal of overlap, so maintaining a separation could be carry forward a source of unreliability in the survey.
It is acknowledged that the final decision to merge RM and ECM may be a limitation of the new iteration of the survey, but as the Focus Group session has shown, there is not currently a clear right or wrong direction to follow, only a need to follow the best course of action in minimising any validity and reliability issues after taking all variables into account.

Another acknowledged limitation and potential source of invalidity of the new survey, again carried over from the previous iteration, is the representativeness of the results. As the Focus Group noted, if more than one person from the one organisation completes the survey on behalf of the organisation, can the survey be considered truly representative? Can a survey that potentially has 10 people from organisation A and 1 person from organisation B responding claim to have data that is truly representative of both organisations? It may be better and more statistically valid to have only 1 respondent for each organisation participate, however if this is the case then a new set of issues could result – if only one person responds on behalf of an organisation can we be confident that their knowledge is complete, correct and comprehensive, as well as being truly objective? This research does not supply answers to these questions. Also, there is a further weakness around representation in the method of gathering data using the old survey. We may have had 620 responses in 2008 and 242 in 2010, but for all we know these responses could have all come from only 3 organisations. Is that a truly representational result of the profession? This matter will be addressed in the following Recommendations section with regard to capturing IP (Internet Protocol) addresses.

One final limitation of the new survey, also present in the old survey, is that it may be trying to capture too much in its net. Even though the range of topics covered and number of questions asked have both significantly reduced, the final product may have the potential of still being deemed too wide at the expense of depth. The only possible solution to this would lie in dividing the survey into multiple, more focused iterations. This will also be discussed further in the following section.

6.3 Further design and iterations

6.3.1 Implications for future research and survey design

Amongst all the specific points discussed during the Focus Group session there was one very clear and re-occurring statement – the survey was trying to do too much. This was divided into three main areas of concern. Firstly, one Focus Group member commented that the survey was qualitative at some points, quantitative at others. They questioned whether a mixed-method survey really works as a valid research tool. Secondly, another Focus Group member directly stated that the survey was trying to do too much. It was trying to gather too many types of intelligence. The survey was attempting to gather data on “the tactical (the now), the operational (how we do it) and the strategic (the future)” (Focus Group participant Focus Group session, April 2, 2012) all at once, and again it was questionable whether this was appropriate in such a research tool. The third and most regularly stated point during the session, as alluded to at the end of the previous section, and following on from the last point, is that the survey probably needed to be split into several more specific and focused surveys. The survey had great breadth at the loss of any real depth, and the survey would most likely benefit by being split into multiple surveys, which should be:

- One survey focused on the hard infrastructure-based technologies, more quantitative in design, which would provide more robust longitudinal results
• One technology survey more focused on the individual’s perceptions and perspectives, experiences and processes around technology, which would be more qualitative in design
• One HR-based survey, involving the questions relating to how technology has affected staffing structures, staff competencies and salary ranges
• One education and training survey, which would include questions on the skills and knowledge relating to technology
• One brand and vendor-based survey, which would focus on the brands of PC and laptops, involvement of RIM in the procurement of technologies, and vendor management

All three issues raised by the Focus Group are valid concerns that could be addressed by further research. It is acknowledged that perhaps it was a failing of this research that splitting the survey wasn’t realised sooner by the researcher, as this could have been a viable direction for this research to take. Having said that, there is an important counter-balancing point, stressed by the Focus Group as well as encountered in the research literature, which is the effect of ‘survey overload’. Any potential future research or consideration by RIMPA around dividing the survey must also consider the overload effect on the participants. The Technology Survey isn’t the only survey the participants are asked to do. As one Focus Group member pointed out, in Government particularly, staff are regularly asked to complete internal surveys (Focus Group participant Focus Group session, April 2, 2012). Any further investigation would have to ask – at what point do we reach saturation?

Another area of potential research in the context of RIM technology is the distinction between Records Management (RM) systems and Enterprise Content Management (ECM) systems. As previously discussed, a significant stage in the evolution of this survey was the convergence of RM and ECM systems questions based on the following reasons:

1. many participants in the previous surveys didn’t have a clear knowledge of the differences between the two;
2. there is current trend in the marketplace now for systems to have a wide range of functionality, resulting in an overlap of functionality with no rigid boundaries around different types of systems;
3. there had to be a reduction of burden on the participants achieved by reducing the number of questions;
4. many organisations use only one system for both RM and ECM processes; and
5. converging will allow for more meaningful research to be completed, with a greater focus on the required and desired capabilities and functionalities of these systems, and whether they do this well or not, regardless of whether it is labelled a RM, ECM, EDRMS, etc. system.

If more time was available then further research and Focus Group sessions could have more robustly confirmed that the most appropriate decision was reached. It would be prudent for further research to be considered in this area, though perhaps after the next iteration of the survey has been run live and results analysed.

6.3.2 RIMPA – survey delivery

The aims of this research were to specifically identify and resolve any and all issues around validity, reliability and usability of the existing survey instrument and to propose a revised, fully tested, valid and reliable survey for RIMPA approval and deployment in the second half of 2012. However, until
this point all discussion in this study has involved alterations relating directly to the survey itself. No mention has yet been made around how the survey is delivered to the RIM professionals, which is fundamental to achieving participation in the first place. Earlier, changes to the survey introduction were discussed, but users still have to be provided with the link to the online survey, with some kind of motivation to proceed to the survey to complete it. This section will examine the various factors that affect survey participation, resulting in an additional proposal to RIMPA on further strategies they could employ to increase participation. These strategies will be provided to RIMPA with the new survey.

Traditionally RIMPA has delivered the survey via email using its Listserv medium, but are RIMPA doing all they can to optimise engagement and participation? Reiterating the outcomes from the research of Edwards et al in 2009, they showed that the following factors significantly influenced participation with regard to online questionnaires delivered via email specifically:

- Introduction to survey – response rates from trials comprising 48,910 participants increased by about a quarter when using a personalised approach to the email
- inclusion of a picture in email – response rates from trials comprising 720 participants tripled when a picture was included in the email – it should be noted that RIMPA will most likely be unable to include a picture as they have a policy of ‘plain text only’ to be used for all Listserv communications so the content of the email is accessible to all and on all devices
- inclusion of the word ‘Survey’ in email subject – response rates from trials comprising 3,845 participants decreased by a fifth when ‘Survey’ was mentioned in the subject heading of the email
- who sent the questionnaire – response rates from trials comprising 720 participants decreased by over a half when the e-questionnaires were signed by a male compared to being signed by a female (pp. 9-10)

SurveyMonkey also provide best practice advice around delivery of online surveys with regard to emails (2011c, pp. 2-3):

- Avoid SPAM – do not use spam language in the body of the message, nor the subject title such as using uppercase text, money symbols, words like ‘prizes’, and so forth. Not only could recipients delete the email upon seeing these, but also mail filters could automatically send the email to the Junk Mail folder without the recipients’ knowledge
- Use a professional reply email address
- Avoid certain days of the week:
  
  If your audience is mostly working professionals, then you may want to avoid sending surveys Friday, Saturday, or Sunday. In addition, Mondays are good to avoid as many people have work to get started for the week and emails to catch up or clean out their in-boxes. (p. 3)

The above considerations are no doubt a good starting point for achieving successful levels of participation, however they only tackle the tradition email notification element. Could it be perceived as ironic, out of touch and consequently injurious to the new technology survey, especially one that now includes questions on the influence of social media on RIM, if it is only delivered via email? RIMPA have the ownership of, and therefore at their disposal, three other forms of contact
with both members and non-members of their association alike – their website, their blog launched in mid-2011, and their iQ magazine. RIMPA can notify and promote the survey to a wide range of potential participants, many of who may not be subscribed to the Listserv. But it doesn’t end there. RIMPA can also use additional social media to promote the survey, such as various LinkedIn discussion groups, which of course would include their own RIMPA-branded group, Twitter, even the websites, blogs, and Listservs of other professional RIM associations globally. This was also a noted outcome from the Focus Group, which took it a step further by demonstrating several flow-on effects. These effects included raising the awareness of RIMPA’s existence as there are many, even in this region, who still appear to be unaware of their existence. Another effect was positively changing people’s perception of RIMPA, by moving the perception away from being an association originating from a paper records management background to an association very much in touch with the modern technological world.

No matter what, or how many, avenues RIMPA chooses to launch the survey, attention still needs to be given to the content of the message delivered inviting people to participate. This will be what recipients will see first and therefore will govern their decision to participate or not. Engagement and motivation are vital. There are a number of general concerns, applicable to the communication around any survey, that should be factored in (SurveyMonkey, 2011c, pp. 1-3):

- Contact your respondents in advance. Let them know about the upcoming survey and the reason it is being conducted
- Include a succinct explanation of the survey – the survey intention, what you will do with the data, if it is anonymous, etc.
- Indicate how long the survey takes to complete and indicate the cut-off date
- Consider the availability of your recipients. Avoid busy periods and allow your respondents enough time to complete the survey
- Offer incentives that reach your target audience, such as an iPad or gift voucher. Although, as previously cited, Blair and Kropf in 2005 found that introductory themes to a survey that emphasised community cooperation and helpfulness – ‘norms of cooperation’ and ‘exchange theory’ (p. 570) – showed a greater response rate than those that emphasised self-interest benefits by completing a survey – ‘utilitarian individualism’ (Loosveldt & Carton, 2002, p. 429).

More specifically to this particular survey, a point that must also be stressed in the communication promoting the survey is the significant reduction in questions from the previous survey. There will, of course, be many who will be completing this survey for the first time, but there will also be a large number who will remember the previous iterations and could, therefore, instantly avoid participation from the outset due to the burdensome quantity of questions previously experienced. This is why it needs to be communicated at the outset in the email invitation that there has been a significant reduction from 101 down to 67 questions.

The final consideration in the area communicating the survey relates to passive non-response and reminders. As previously iterated “passive non-response occurs due to circumstances, such as when survey recipients misplace or forget to complete surveys they may have otherwise intended to fill out” (Thompson et al, 2010, p. 396). Passive non-respondents may need reminders to complete the survey, such as follow-up communications, even the inclusion of a link in the communication to an
iCalendar (in the form of an .ics file) reminder, which would add a reminder in the email calendar of the recipient if they opted for that.

Moving away from promoting the survey to the actual delivery of the survey itself there are three final design aspects that RIMPA should also consider. Firstly, although no one would doubt the validity of the invitation to participate, SurveyMonkey does advise that it is good practice to “include your company name in the survey URL... (when creating the URL)... so respondents know it is an official questionnaire” (2012c). Secondly SurveyMonkey also advise “redirect[ing] participants back to your site” once the survey is complete (2012c). This has already been included in the new survey as the consequence of clicking on the “DONE” button at the end of the survey.

The third aspect and final recommendation to RIMPA focuses on the issue of representativeness discussed earlier in the Limitations overview. We may have had 620 responses in 2008 and 242 in 2010, but for all we know these responses could have all come from only 3 organisations. Is that a truly representational result of the profession? If the new survey is approved and utilised by RIMPA then they must ensure IP addresses are captured when completing the survey. This will provide the necessary evidence to substantiate or negate the claim of representativeness of participants across the industry. Although current tools and analyses appear to suggest a significant difficulty in equating IP addresses to specific organisations, this is not the point, and in fact may work against the claim of anonymity of data supplied. The point is to demonstrate that the survey is not being completed by only a small number of organisations. Capturing IP addresses succeeds in this aim.

6.3.3 RIMPA – survey analysis

There were a large number of reliability issues all throughout the old survey that made previous analyses extremely difficult. Many questions were compound in nature, where more than one matter was being asked about in one question, and there was a lack of exclusivity in the options provided. For example, question 2 in the old survey asked:

What industry / sector does your organisation operate in?

| Aerospace | Hospitality |
| Agriculture / Forestry | Information Systems |
| Architecture / Engineering | Insurance |
| Associations | Internet / Web Services |
| Banking | Legal Services |
| Computer Hardware | Manufacturing |
| Consulting / Training | Nonprofit Organisation |
| Data Processing | Petroleum |
| Education / Library | Pharmaceutical / Biotech |
| Electronic Commerce | Printing / Graphics Services |
| Employment | Records Storage |
| Financial Services | Research / Development |
| Food / Beverage | Retail / Merchandising |
| Forms Distributor | Service Company |
| Forms Manufacturer | Software - Data Capture |
| Government - Commonwealth | Software - Forms |
| Government - Federal | Transportation |
| Government - State | Utilities / Gas / Electric |
| Government - Local | Other (please specify) |
| Healthcare / Medical | |

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Because this question included the four options of Government (Commonwealth, Federal, State and Local) it was not only asking which industry but also whether you worked in the private or public sector at the same time, which therefore made the question compound and consequently unreliable. The lack of exclusivity can also be demonstrated by this question – a RIM professional working in a state hospital could answer either Government – State or Healthcare / Medical. Hospitality and Food / Beverage are also not mutually exclusive, neither are Banking and Financial Services. This made interpretation of the results very difficult and the outcome unreliable.

The new survey has not only addressed these issues, but also taken it a step further paving the way for more complex penetration of the data. With the inclusion of new questions on education and training, perceptions of education and training, and people’s roles within their organisation we will be able to undertake inferential statistical analysis using those independent variables contained within the Knowledge and skills and About you (demography) sections. RIMPA for the first time will be able to measure the kinds of knowledge and skills in demand in the workplace. They will also be able to examine the perceptions of senior management around the knowledge and skills expected of RIM professionals and directly compare that to the perceptions of the frontline non-managerial professionals. RIMPA can then determine if there is a discontinuity or even significant gap between the two and as a result work towards addressing any mismatch and formulating their strategies around the education and training needs of their members.

6.3.4 RIMPA – beyond the survey

During the Focus Group session a number of concerns and points were raised that, although not all necessarily relating directly to the Technology Survey and its revision, were important standalone points that the researcher believes should be communicated in this research as well as to RIMPA directly.

Firstly regarding matters tangential to the survey, one noteworthy outcome of the Focus Group session was that once the survey was completed and results obtained it was suggested that each state branch of RIMPA should sit down with their members and have a round-table discussion about the results. The outcomes from these discussions would then be fed back to RIMPA headquarters for action. Another point was that if the new survey was to include questions around competencies then this would provide RIMPA with empirical evidence on how they could update the RIM competencies listed on their website. Consequently this would provide an opportunity for RIMPA to re-evaluate and possibly update their membership criteria, which the Focus Group expressed concern around as currently being perceived as somewhat paper records based, and therefore slightly out-dated and out of step with the modern RIM profession.

Flowing on from this, in the Focus Group discussion around the competencies listed on the RIMPA website, was a reflection on RIMPA’s website as a source of valuable and relevant information for the modern aspiring RIM professional. One outcome from the session was that RIMPA could provide definitions of key terms and concepts used in the survey, but as one participant said, if they wanted to know the definition of ECM, for example, they would go to a number of other websites before RIMPA’s, such as those of IDM or AIIM (Association for Information and Image Management). These concerns then begged the questions in the session ‘what information should be provided on RIMPA’s website?’ and ‘how can RIMPA update their website, competencies and membership criteria to be
more current?’ (Focus Group participant, Focus Group session, April 2, 2012). This research is far from being best placed to address these questions. It is hoped, though, that the empirical evidence gained from the new survey and resultant analyses will provide the answers to these and other questions discussed.
References


Pedler, P. (2007). *CSG5140 Research Methods: Scientific Research Methods* lecture notes. (Available from Edith Cowan University, P.O. Box 124, Mount Lawley, Western Australia, 6050)


Appendix

Appendix 1: The ‘old survey’ – 2008/2010 survey questions only

DEMOGRAPHICS
1. What RMAA Branch / SIG area do you work in?
2. What industry / sector does your organisation operate in?
3. What size is your organisation?
4. Sex:
5. Age:
6. Are you a financial member of the RMAA?

WP / DOCUMENT AND RECORDS APPLICATIONS
7. What is your organisation’s primary word processor?
8. What formats does your organisation use for retention of electronic records?
9. What macro / document template system does your organisation use?
10. What document comparison tools does your organisation use?
11. What software do you use for metadata checking / removal?
12. What software do you use for automated document assembly?
13. What electronic document and records management system (EDRMS) does your organisation use?
14. Does your EDRMS / platform provide the following functionality?
15. Have you implemented all functionality available in your EDRMS / Platform?
16. If you do not currently have (or are not presently installing) an electronic records management system, why not?
17. What software does your organisation use for Contract Management?
18. What software does your organisation use for workflow?
19. What software does your organisation use for electronic facsimiles?
20. Do all your "system" integrate seamlessly?
21. Does the Records and Information Management area of your organisation have any influence / involvement on the procurement of technologies?
22. If yes, please describe the context of your involvement:
23. What is/was the most important factor of your decision to implement RIM technology?
24. Has the introduction of new technology affected staffing structures?
25. Has the introduction of new technologies increased staff competencies and in turn increased salary ranges?

IM / ECM
26. Has your information management or enterprise content management (ECM) solution delivered any of the following benefits to your organisation?
27. What are the barriers to achieving more widespread benefits from information management / ECM in your organisation?
28. What does your organisation’s information management / ECM solution manage?
29. How long does it usually take staff at your organisation to retrieve a specific piece of business information?
30. Which of the following would you consider to be records management (RM) or enterprise content management (ECM) functions? RM FUNCTIONS:
31. ECM FUNCTIONS:
32. Who in your organisation is responsible for information management and ECM? RM FUNCTIONS:
33. ECM FUNCTIONS:
EMAIL
34. What groupware / email system does your organisation use?
35. Does your organisation offer web access to email?
36. Does your organisation set a limit on mailbox size?
37. If so, what is that limit?
38. Does the organisation "age" email (delete email after a designated period)
39. Does your organisation limit the size of incoming or outgoing email?
40. Do you route voice mail to user email in-boxes?
41. Do you route faxes to user email in-boxes?
42. Which scenario best describes your current practice with regard to email management?

INFORMATION ARCHIVING TECHNOLOGIES
43. Does your organisation have a dedicated email archiving system?
44. Does your organisation have a dedicated database archiving system?
45. Does your organisation use Hierarchical Storage Management (HSM) file archiving technology?
46. Do you have a software solution for networking searching of Outlook (pst) archives?

DIGITAL IMAGES
47. How do you provide digital image collections online?
48. What software do you use for the management of your digital image collections?
49. Do you identify business critical / important images?
50. If yes, please describe how:

TECHNOLOGY
51. Does your organisation use barcode technology?
52. If yes, please describe:
53. Does your organisation use RFID (Radio-frequency identification)?
54. What technologies is your organisation current analysing and/or assessing?
55. Does your organisation permit the use of personal instant message (IM) programs like AOL, Yahoo or MSN?
56. Does your organisation use an Enterprise (secure / internal only) instant message program like Microsoft LCS, Lotus SameTime or GroupWise Messenger?
57. Does your organisation prevent access (via system restrictions) to personal web-based email services like Yahoo and MSN?

VENDOR / SYSTEM DEVELOPMENT
58. How does your company decide on what improvements or enhancements should be made to its product offerings?
59. Does your company prioritise improvements to its product offerings?
60. How are these priorities set?

NOS / OS / SERVER / NAS / SAN
61. What operating systems are used for networking?
62. What is your primary file server operating system?
63. What brand of server are you currently buying?
64. Did you purchase additional warranty / service extensions for servers?
65. Do you use virtual server software?
66. Are you using NAS (Network Attached Storage) and/or SAN (Storage Area Network) Solutions?
67. Does your organisation use OpenSource software?
68. If yes, in what areas?

**PC / LAPTOP / WIRELESS**
69. What primary desktop PC operating system do you use?
70. What brand of PC are you currently buying?
71. How often do you cycle / replace your desktop PC’s?
72. Do you purchase additional warranty / service extensions for PC’s?
73. What size display do you use for desktop PC’s?
74. What brand of laptop are you currently buying?
75. How often do you cycle / replace your laptops?
76. What percentage of personnel use laptops in place of PC’s?
77. Do you offer wireless networking at your organisation?
78. Does your organisation offer wireless connectivity in your conference rooms to visitors?
79. Is procurement and support in your organisation determined by an approved standard operating environment (SOE)?

**PDA’S / VIDEO / COPIERS / MFD’S**
80. Do you use any PDA technologies?
81. Extent of technical support
82. Are passwords required for PDA’s?
83. Do you have "add-on" applications included on PDA’s?
84. What is the replacement cycle for PDA’s
85. What percentage of your organisation use a PDA?
86. Do the PDA’s integrate with the organisation’s DM / RM / EDRMS system?
87. What benefits does your organisation get from mobile technology?
88. Does your organisation have video conferencing equipment?
89. What is your organisation's primary brand of photocopier?
90. Does your organisation use multifunction / all-in-one devices?
91. What is your organisation's primary brand of multifunction / all-in-one device?

**PORTALS / ISP / BUSINESS CONTINUITY / CONTACTS**
92. What portal product do you use?
93. Who is your organisation’s primary Internet Service Provider (ISP)?
94. Does your organisation have a disaster recovery / business continuity plan?
95. Does your organisation have a redundant or backup internet connection?
96. What primary brand of firewall router do you use?
97. What web filtering appliance / software system do you use to block harmful or objectionable web content?
98. What online backup service provider do you use for some or all of your data protection?
99. How frequently does your organisation back up data?
100. What does your organisation use for contact management / marketing?

**COMMENTS AND OTHER REQUESTS**
101. Feel free to add any comments, suggestions, thoughts or questions - whilst we can’t guarantee a response (as we aren’t collecting identifying data) - we will read them all.
Appendix 2: The ‘old survey’ – 2008/2010 full original survey

PAGE: RMAA TECHNOLOGY SURVEY 2010

This survey will take approximately 20-30 minutes to complete - however, please note that there are NO compulsory questions - obviously the more questions you answer, the better the survey results.

If you don't know the answer - leave it blank or put don't know in "other".

The survey is split into the following sections:

- Demographics
- Word Processing / Document / Records Management Systems
- Information Management / Enterprise Content Management
- Email
- Information Archiving Technologies
- Digital Images
- Technology
- Vendor and System Development
- Operating Systems / network attached storage / storage area network
- PC’s / Laptops / Wireless technology
- PDA’s / Video / Copiers / Multi Function Devices
- Portals / ISP / Business Continuity and Contacts
- Comments

PLEASE COMPLETE ALL SECTIONS YOU ARE ABLE TO.

You are encouraged to circulate the request to complete the survey to ensure that a wide sample of the profession is included in the results.

You are also encouraged to work with your IT Department to share information and to more clearly understand your respective operating environments.

We have included a %completed bar, so that you can see "are we there yet".

The survey will remain open until 30 November 2010 and will be held every two (2) years.

If you have any questions about the survey, please direct them to Kate Walker - kate.walker@rmaa.com.au

We thank you for your time and patience and look forward to analysing the results and sharing them with you.

PAGE: DEMOGRAPHICS

1. What RMAA Branch / SIG area do you work in?
   - Australian Capital Territory
   - Fiji
   - International
   - Malaysia
   - New South Wales
New Zealand
Northern Territory
Papua New Guinea
Queensland
South Australia
Tasmania
Victoria
Western Australia
Other (please specify)

2. What industry / sector does your organisation operate in?
   Aerospace
   Agriculture / Forestry
   Architecture / Engineering
   Associations
   Banking
   Computer Hardware
   Consulting / Training
   Data Processing
   Education / Library
   Electronic Commerce
   Employment
   Financial Services
   Food / Beverage
   Forms Distributor
   Forms Manufacturer
   Government - Commonwealth
   Government - Federal
   Government - State
   Government - Local
   Healthcare / Medical
   Hospitality
   Information Systems
   Insurance
   Internet / Web Services
   Legal Services
   Manufacturing
   Nonprofit Organisation
   Petroleum
   Pharmaceutical / Biotech
   Printing / Graphics Services
   Records Storage
   Research / Development
   Retail / Merchandising
   Service Company
   Software - Data Capture
   Software - Forms
   Transportation
   Utilities / Gas / Electric
   Other (please specify)
3. What size is your organisation?
   Small - <100 users
   Medium - 101 - 250 users
   Large 251 - 500 users
   Very Large - >500 users

4. Sex:
   Male
   Female

5. Age:
   Under 25 years
   26 - 35 years
   36 - 45 years
   45 - 55 years
   55 years plus

6. Are you a financial member of the RMAA?
   Yes, a Corporate Nominee (i.e. Company member)
   Yes, an Affiliate Member (i.e. individual member)
   Yes, a Student Member
   Yes, a professional Associate member (i.e. ARMA)
   Yes, a professional Chartered member (i.e. MRMA)
   Yes, a professional Fellow member (i.e. FRMA)
   Yes, a retired member
   No
   Other (please specify)

7. What is your organisation's primary word processor?
   Word 2007
   Word 2003
   Word XP
   WordPerfect
   Don't Know / Unsure / NA
   Other (please specify)

8. What formats does your organisation use for retention of electronic records?
   PDF
   PDF / A
   MS OOXML
   JPEG
   TIFF
   Native Format (e.g. word, excel etc)
   Don't Know / Unsure / NA
   Other (please specify)

9. What macro / document template system does your organisation use?
   None
   Custom
   Don't Know / Unsure / NA
10. What document comparison tools does your organisation use?
   - None
   - Custom
   - Don't Know / Unsure / NA
   - Other (please specify)

11. What software do you use for metadata checking / removal?
   - None
   - Custom
   - Don't Know / Unsure / NA
   - Other (please specify)

12. What software do you use for automated document assembly?
   - None
   - Custom
   - Don't Know / Unsure / NA
   - Other (please specify)

13. What electronic document and records management system (EDRMS) does your organisation use?
   - Objective
   - TRIM
   - OpenText
   - Interwoven
   - Filesurf
   - CMS
   - Dataworks
   - Don't Know / Unsure / NA
   - Alfresco
   - Knowledgetree
   - RecFind
   - DocBanq
   - None
   - Manual
   - Other (please specify)

14. Does your EDRMS / platform provide the following functionality?
   - Document Management
   - Records Management
   - Physical Records Management
   - Electronic Records Management
   - Web Content Management
   - Workflow
   - Knowledge Management
   - Enterprise Content Management
   - Information Management
   - Data Maintenance
   - Compliance
   - Archiving
15. Have you implemented all functionality available in your EDRMS / Platform?
   Yes
   Don't Know / Unsure / NA
   Only certain features - what are they and why

16. If you do not currently have (or are not presently installing) an electronic records management system, why not?
   Unclear on needs
   Lack of support from management
   Waiting for upgrade
   Immature products
   Other (Under Evaluation)
   Other (Pending Project)
   Don't Know / Unsure / NA
   Other (please specify)

17. What software does your organisation use for Contract Management?

18. What software does your organisation use for workflow?

19. What software does your organisation use for electronic facsimiles?

20. Do all your "system" integrate seamlessly?
   Less than 5% integration
   6-25% integration
   26-50% integration
   51-75% integration
   75-90% integration
   More than 90% integration
   Don't Know / Unsure / NA
   Other (please specify)

21. Does the Records and Information Management area of your organisation have any influence / involvement on the procurement of technologies?
   Yes
   No
   Don't Know / Unsure / NA
   Other (please specify)

22. If yes, please describe the context of your involvement:

23. What is/was the most important factor of your decision to implement RIM technology?
Compliance
Solve business problems
The secure and systematic management of unstructured or semistructured data such as emails and documents
A reduction in redundancy and duplication of information
A reduced risk of not being able to retrieve information when required
Improved security, thereby reducing the risk of unauthorised access
Greater ability to discover and re-use corporate information
Better control of document versions
A reduction in the response time for information requests
Don't Know / Unsure / NA
Other (please specify)

24. Has the introduction of new technology affected staffing structures?
   Yes, generally increased requirements
   Yes, generally reduced requirements
   No
   Don't Know / Unsure / NA
   Other (please specify)

25. Has the introduction of new technologies increased staff competencies and in turn increased salary ranges?
   Yes - increased competencies and salary ranges
   Yes - increased competencies but not salary ranges
   No
   Don't Know / Unsure / NA
   Other (please specify)

IM / ECM

26. Has your information management or enterprise content management (ECM) solution delivered any of the following benefits to your organisation?
   Better regulatory compliance
   Find business information more quickly
   More efficient business processes
   Better capture and re-use of knowledge
   Improve customer service
   Better legal discovery
   None
   Don't Know / Unsure / NA
   Other (please specify)

27. What are the barriers to achieving more widespread benefits from information management / ECM in your organisation?
   Changing existing work practices
   Too many information silos
   Difficulty integrating with existing systems
   Too many decision makers / Politics
   Cost / Difficult to justify ROI
   Hard to adopt new tools
   Lack of suitable tools
   Solutions require too much customisation
28. What does your organisation’s information management / ECM solution manage?
   - Paper records and files
   - Electronic documents
   - Electronic records
   - Information security
   - Emails
   - Audit logging
   - Scanned items
   - Compliance
   - Web content
   - Workflow
   - Don’t Know / Unsure / NA
   - Other (please specify)

29. How long does it usually take staff at your organisation to retrieve a specific piece of business information?
   - Seconds
   - Minutes
   - Hours
   - Days
   - Months
   - Don’t Know / Unsure / NA
   - Other (please specify)

30. Which of the following would you consider to be records management (RM) or enterprise content management (ECM) functions? RM FUNCTIONS:
   - Capture of paper records
   - Capture of electronic records
   - Capture of emails
   - Indexing / retrieval of paper records
   - Indexing / retrieval of electronic records
   - Capture of electronic and scanned documents
   - Long-term electronic archiving
   - Long-term storage of paper
   - Maintenance of audit logs
   - Management of workflow processes
   - Management of web content
   - Don’t Know / Unsure / NA
   - Other (please specify)

31. ECM FUNCTIONS:
   - Management of web content
   - Management of workflow processes
   - Capture of emails
   - Capture of electronic and scanned documents
   - Indexing / retrieval of electronic records
   - Maintenance of audit logs
Capture of electronic records
Long-term electronic archiving
Indexing / retrieval of paper records
Capture of paper records
Long-term storage of paper
Don't Know / Unsure / NA
Other (please specify)

32. Who in your organisation is responsible for information management and ECM? RM FUNCTIONS:
Both records management and information technology departments
Records / Document / Information Managers only
Business Units, Records Managers, Information Managers and IT department
Business Units and Records and Information Managers
IT Department only
Individual Business Units only
Outsourced
Don't Know / Unsure / NA
Other (please specify)

33. ECM FUNCTIONS:
Both records management and information technology departments
Records / Document / Information Managers only
Business Units, Records Managers, Information Managers and IT department
Business Units and Records and Information Managers
IT Department only
Individual Business Units only
Outsourced
Don't Know / Unsure / NA
Other (please specify)

PAGE: EMAIL
34. What groupware / email system does your organisation use?
Outlook
GroupWise
Lotus Notes
Don't Know / Unsure / NA
Other (please specify)

35. Does your organisation offer web access to email?
Yes
No
Don't Know / Unsure / NA
Other (please specify)

36. Does your organisation set a limit on mailbox size?
Yes
No
Don't Know / Unsure / NA

37. If so, what is that limit?
38. Does the organisation "age" email (delete email after a designated period)
   Yes
   No
   Don't Know / Unsure / NA

39. Does your organisation limit the size of incoming or outgoing email?
   Yes - both incoming and outgoing
   Yes - incoming only
   Yes - outgoing only
   No
   Don't Know / Unsure / NA
   Other (please specify)

40. Do you route voice mail to user email in-boxes?
   Yes
   No
   Don't Know / Unsure / NA

41. Do you route faxes to user email in-boxes?
   Yes
   No
   Don't Know / Unsure / NA

42. Which scenario best describes your current practice with regard to email management?
   Users keep all messages in the mail file
   Users profile mail into the document / records management system
   Users permitted to create personal archive files
   Currently evaluating applications to manage email history
   We use an archiving application to move mail off servers
   We use a Records Management application to store email
   We "age" email
   Don't Know / Unsure / NA
   Other (please specify)

43. Does your organisation have a dedicated email archiving system?
   Yes, Zantaz
   Yes, Symantec (Enterprise Vault)
   Yes, EMC (Email Xtender)
   No
   Don't Know / Unsure / NA
   Yes, Other (please specify)

44. Does your organisation have a dedicated database archiving system?
   No
   Yes, EMC
   Don't Know / Unsure / NA
   Yes, Other (please specify)

45. Does your organisation use Hierarchical Storage Management (HSM) file archiving technology?
   No
Yes, StorNext Storage Manager
Yes, Managed Server HSM
Yes, DiskXtender (EMC)
Yes, Infinistore ArchiveFiler (HP File system extender)
Yes, InfiniteStorage Data Migration Facility (Silicon Graphics)
Don't Know / Unsure / NA
Yes, Other (please specify)

46. Do you have a software solution for networking searching of Outlook (pst) archives?
   Yes
   No
   Don't Know / Unsure / NA
   Other (please specify)

PAGE: DIGITAL IMAGES
47. How do you provide digital image collections online?
   Searchable databases - that provides metadata only (no image)
   Searchable databases - with results via thumbnails, metadata etc.
   Don't Know / Unsure / NA
   Other (please specify)

48. What software do you use for the management of your digital image collections?
   None
   Don't Know / Unsure / NA
   Other (please specify)

49. Do you identify business critical / important images?
   Yes
   No
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

50. If yes, please describe how:

PAGE: TECHNOLOGY
51. Does your organisation use barcode technology?
   Yes
   No
   Don't Know / Unsure / NA
   Other (please specify)

52. If yes, please describe:

53. Does your organisation use RFID (Radio-frequency identification)?
   Yes, HF technology
   Yes, UHF technology
   Yes
   No
   Don't Know / Unsure / NA
   Other (please specify)
54. What technologies is your organisation current analysing and/or assessing?

55. Does your organisation permit the use of personal instant message (IM) programs like AOL, Yahoo or MSN?
   Yes
   Yes, but internal only
   No, and we enforce the policy
   No, but the users do it anyway
   Don’t Know / Unsure / NA
   Other (please specify)

56. Does your organisation use an Enterprise (secure / internal only) instant message program like Microsoft LCS, Lotus SameTime or GroupWise Messenger?
   Yes
   No
   Don’t Know / Unsure / NA
   Other (please specify)

57. Does your organisation prevent access (via system restrictions) to personal web-based email services like Yahoo and MSN?
   Yes
   No
   Don’t Know / Unsure / NA

PAGE: VENDOR / SYSTEM DEVELOPMENT
58. How does your company decide on what improvements or enhancements should be made to its product offerings?

59. Does your company prioritise improvements to its product offerings?
   Yes
   No
   Other (please specify)

60. How are these priorities set?
   (5-point rating scale used "Lowest Priority - Highest Priority")
   Biggest customer gets most say
   Ongoing scanning of standards dictates implementation
   User forums are used and consulted
   Research team is dedicated to working on enhancements that new technology and IP enable
   Ongoing surveys of user satisfaction with the product are used to make enhancements to the functionality and useability of the product offering
   All of the above
   Other (please specify)

PAGE: NOS / OS / SERVER / NAS / SAN
61. What operating systems are used for networking?
   Windows 2003
   Linux
   Novell Netware
62. What is your primary file server operating system?
   - Windows Vista
   - Windows XP
   - Windows 2003
   - Netware 6.x
   - Netware 5.x
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

63. What brand of server are you currently buying?
   - HP / Compaq
   - Dell
   - IBM
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

64. Did you purchase additional warranty / service extensions for servers?
   - Yes
   - No
   - N/A
   - Outsourced
   - Don't Know / Unsure

65. Do you use virtual server software?
   - No virtual services
   - VMWare ESX
   - MS Virtual Server
   - VMWare GSX
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

66. Are you using NAS (Network Attached Storage) and/or SAN (Storage Area Network) Solutions?
   - Use a SAN
   - Use a NAS
   - Outsourced
   - Don't Know / Unsure / NA

67. Does your organisation use OpenSource software?
   - Yes
   - No
   - Outsourced
   - Don't Know / Unsure / NA
68. If yes, in what areas?

**PAGE: PC / LAPTOP / WIRELESS**

69. What primary desktop PC operating system do you use?
   - Windows 7
   - Windows Vista
   - Windows XP
   - Windows 2000
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

70. What brand of PC are you currently buying?
   - Dell
   - HP / Compaq
   - IBM
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

71. How often do you cycle / replace your desktop PC's?
   - As needed
   - 1 year
   - 2 years
   - 3 years
   - 5 years
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

72. Do you purchase additional warranty / service extensions for PC's?
   - Yes
   - No
   - N/A
   - Outsourced
   - Don't Know / Unsure

73. What size display do you use for desktop PC's?
   - 17" LCD
   - 18" + LCD
   - 17" CRT
   - 19" CRT
   - 15" LCD
   - Outsourced
   - Don't Know / Unsure / NA
   - Other (please specify)

74. What brand of laptop are you currently buying?
   - Dell
IBM
HP / Compaq
Toshiba
Sony
Outsourced
Don't Know / Unsure / NA
Other (please specify)

75. How often do you cycle / replace your laptops?
   As needed
   1 year
   2 years
   3 years
   4 years
   5 years
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

76. What percentage of personnel use laptops in place of PC's?
   10% or less
   11-25%
   26-50%
   51-75%
   76-90%
   Over 90%
   Outsourced
   Don't Know / Unsure / NA

77. Do you offer wireless networking at your organisation?
   No / None
   Entire Office
   Only conference rooms
   Selected areas
   Away from the office
   Connect to home networks
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

78. Does your organisation offer wireless connectivity in your conference rooms to visitors?
   Yes
   No
   Outsourced
   Don't Know / Unsure / NA

79. Is procurement and support in your organisation determined by an approved standard operating environment (SOE)?
   Yes
   No
   Outsourced
80. Do you use any PDA technologies?
- Blackberry handhelds
- BlackBerry Enterprise Server
- Palm or Palm compatible handhelds
- Pocket PC / Windows Mobile handheld
- Goodlink Server
- MS Exchange 2003
- Notify Link Server
- Outsourced
- Don't Know / Unsure / NA
- Other (please specify)

81. Extent of technical support
- One PDA platform
- Multiple PDA platforms
- Outsourced
- Don't Know / Unsure / NA

82. Are passwords required for PDA's?
- Yes, all PDA's
- Yes, some but not all PDA's
- No
- Outsourced
- Don't Know / Unsure / NA

83. Do you have "add-on" applications included on PDA's?
- Attachment viewing
- Internet browsing
- None
- Spell checking
- Time Entry
- Mapping
- Outsourced
- Don't Know / Unsure / NA
- Other (please specify)

84. What is the replacement cycle for PDA's?
- As they break
- 1 year
- 2 years
- 3 years
- 4 years or more
- Outsourced
- Don't Know / Unsure / NA
- Other (please specify)

85. What percentage of your organisation use a PDA?
- 10% or less
86. Do the PDA's integrate with the organisation's DM / RM / EDRMS system?
   Yes
   No
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

87. What benefits does your organisation get from mobile technology?
   Access to email, contacts, calendar, documents
   Always available to clients
   Faster response time to clients
   Connectivity to the office
   Improved communications
   Ability to work out of office / flexibility
   Enhanced client service
   Reduced need for laptops
   Increased productivity
   More billable hours
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

88. Does your organisation have video conferencing equipment?
   Yes
   No
   Outsourced
   Don't Know / Unsure / NA

89. What is your organisation's primary brand of photocopier?
   Canon
   Xerox
   Ricoh
   Konica
   Sharp
   No primary brand
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

90. Does your organisation use multifunction / all-in-one devices?
   Yes
   No
   Outsourced
91. What is your organisation’s primary brand of multifunction / all-in-one device?
   Canon
   Xerox
   HP
   N/A
   Sharp
   Lexmark
   Outsourced
   Don’t Know / Unsure / NA
   Other (please specify)

PAGE: PORTALS / ISP / BUSINESS CONTINUITY / CONTACTS

92. What portal product do you use?
   None
   Sharepoint
   Interwoven
   Internally developed
   Hummingbird
   Outsourced
   Don’t Know / Unsure / NA
   Other (please specify)

93. Who is your organisation’s primary Internet Service Provider (ISP)?

94. Does your organisation have a disaster recovery / business continuity plan?
   Under development
   Yes
   No
   Outsourced
   Don’t Know / Unsure / NA

95. Does your organisation have a redundant or backup internet connection?
   Yes
   No
   N/A
   Outsourced
   Don’t Know / Unsure

96. What primary brand of firewall router do you use?
   Cisco
   SonicWall
   WatchGuard
   Juniper
   Don’t Know / Unsure / NA
   Outsourced
   Other (please specify)

97. What web filtering appliance / software system do you use to block harmful or objectionable web content?
98. What online backup service provider do you use for some or all of your data protection?
   None
   Websense
   SurfControl
   Symantec
   McAfee
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

99. How frequently does your organisation back up data?
   Daily
   Every 2 days
   Weekly
   Monthly
   Outsourced
   Don't Know / Unsure / NA
   Other (please specify)

100. What does your organisation use for contact management / marketing?
     Outlook
     None
     Microsoft Access
     Custom
     GroupWise
     Lotus Notes
     ACT!
     Outsourced
     Don't Know / Unsure / NA
     Other (please specify)

PAGE: COMMENTS AND OTHER REQUESTS
101. Feel free to add any comments, suggestions, thoughts or questions - whilst we can't guarantee a response (as we aren't collecting identifying data) - we will read them all.
Appendix 3: Invitation to participate in a Focus Group and Consent Advice

Aligning with the rapidly shifting technological goalposts: The review and update of the RIMPA technology survey

Invitation to Participate in a Focus Group

Dear (participant’s name),

I am currently undertaking a Masters of Information Services through Edith Cowan University, studying the technological environment of Records and Information Management (RIM) Professionals.

The purpose of my research project is to examine and revise the current technology survey instrument employed biennially by the Records and Information Management Professionals Australasia organisation - RIMPA. The survey is used to gain empirical evidence about the use of technology in the Records and Information industry, specifically relating to Records Management (RM) and Enterprise Content Management (ECM), and the related policies and processes surrounding the technology used within the Records and Information Management professionals’ working environments.

The current tool has been used to conduct two surveys to date, one in 2008 and the second in 2010, however as a longitudinal study instrument the current survey requires revision to ensure validity and reliability. For example, the technologies and platforms used by organisations for information management have changed significantly since 2008. My study is aimed at updating the survey to ensure currency, usability, validity and reliability.

The revised survey is expected to play an important role in enabling RIMPA to be informed on the technology education and training needs of its members, as well as technology adoption and RIM program trends in the workplace.

Your participation:

My research plan is based on the establishment of a Focus Group to provide feedback and evaluation of the current instrument and proposals for changes to the instrument. Members of the Focus Group will also trial the revised instrument. Your assistance as one of these participants will not only be personally greatly appreciated, but will also play a significant role in helping RIMPA better align its member programs with the needs of the RIM industry as it evolves to encompass and respond to technological change.

Below is a list of all invited to participate:

- (participant 1’s name)
- (participant 2’s name)
- (participant 3’s name)
- (participant 4’s name)
Research protocol:

Please be aware that any and all information you provide in Focus Group activities such as interviews and instrument trials will remain confidential. The feedback around the survey design is the main focus, not the survey data itself. Participants will be mentioned only in potential follow-up publications and only in the context of an acknowledgment and appreciation of their contribution. No name identified data from the pilot will be published at any stage and all data will be destroyed after 5 years.

About the Principal Researcher:

The Principal Researcher, Devitt Larkin, is a Master of Information Services student in the Archives and Records stream of the School of Computer and Security Science at Edith Cowan University. He is employed as a Documentation Manager and EDRMS Administrator for the global Securities Legal team within Macquarie Group Services Australia, Pty Limited, a member of the Macquarie Group of companies, and is a member of Records and Information Management Professionals Australasia association.

If you have any questions about the project call Devitt directly on 0404 070 462, or email: dlarkin@our.ecu.edu.au.

For further information about the researcher and this research you can contact the project Supervisor, Dr Mark Brogan, School of Computer and Security Science, Edith Cowan University on +61 8 9370 6300 or by email: m.brogan@ecu.edu.au.

Thank you for taking the time to consider this request.

Kind regards,

Devitt Larkin

ECU Student
School of Computer and Security Science
Edith Cowan University
2 Bradford Street
Mount Lawley WA 6050
dlarkin@our.ecu.edu.au
W: +61 2 8237 4431
M: 0404 070 462
Appendix 4: Focus Group questions

1. Technology currently plays an integral role in the work of RIM professionals:
   a. Regarding current Information and Communications Technologies (ICTs), are you satisfied with the state of knowledge and hands-on skills shown by RIM professionals?
      i. What ICT knowledge and skills are adequately represented in practitioners?
      ii. What areas are omitted or poorly represented?
   b. What emerging areas of knowledge and skills that are currently under represented, should be given priority by RIM professionals to ensure future demand for the profession in the 21st century?
   c. Deriving business value from ICTs isn't just about technology. What other kinds of learning should RIM professionals undertake to maximise return from investment in ICTs?

2. Technology survey results from 2008 and 2010 have shown confusion in the profession around the differences between "RM" (Records Management) and "ECM" (Enterprise Content Management). How would you define and clarify the differences between these two?

3. In research, validity in instrument design is the idea that an instrument measures what it is intended to measure. A technology survey instrument might be invalid if it misses important technologies &/or includes technologies that are irrelevant. What validity issues exist with the 2010 survey that require correction?

4. In research, reliability in instrument design means that the data and conclusions are reliable. Sources of unreliability in surveys include obscure, ambiguous, confused or compound questions (where more than one question is asked). What sources of unreliability exist with the 2010 survey that require correction?

5. Between RIMPA's first survey in 2008 and second survey in 2010, the survey participation rate dropped by 62% from 2008 to 2010 (r= 630 (2008); r=242 (2010)). The skip rate also significantly increased for individual questions. What issues exist with the survey that might explain low participation and high skip rates?

6. Are there any other changes that you would like to see in future iterations of the survey?
MEMO

TO: ROB CASHA WALLS
FROM: ANGUS STEWART, CHAIR, FACULTY HUMAN ETHICS SUBCOMMITTEE

DATE: 22 JANUARY 2012

SUBJECT: HUMAN ETHICS CLEARANCE APPLICATION

Dear Rob,

The following ethics application for:

V600 David Larkin: MSc Info Services - Update of IMPA technology survey

is approved, Category 1.

Data collection may commence immediately.

Best wishes,

[Signature]

Angus Stewart

Faculty of Computing, Health and Science

ECU
Appendix 6: Change management and Focus Group review log

<table>
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<tr>
<th>Change management and Focus Group log.</th>
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Appendix 7: The ‘new survey’ – 2012 survey questions only

Enterprise records and information management (RIM)
1. What Enterprise RIM system/s does your organisation use to manage its records, documents and content? (select all that apply)
   (NB: If answer is “None” then the participant will automatically skip to Question 8)
2. What proportion of your organisation's total information is managed by the enterprise RIM system/s?
3. How many people in your organisation are Enterprise RIM system/s users?
4. What functions and formats does your organisation’s Enterprise RIM system/s manage?” (select all that apply)
5. Rate the satisfaction of your organisation with the Enterprise RIM systems' management capabilities for formats and functions?
6. What organisation unit(s) or function(s) have been assigned program governance / coordination responsibility for Enterprise RIM system/s?
7. What are the barriers to achieving more widespread benefits from the Enterprise RIM system/s in your organisation? (select all that apply)
   (NB: Once participant answers this question they will automatically skip to Question 9)
8. If your organisation does not currently have, and is not presently installing, an Enterprise RIM system/s, why not? (select all that apply)

New and emerging technologies - the Cloud and Social Media
9. Does your organisation use the “cloud” for the storage of any of its records?
10. If so, which of the following best describes its use?
11. Does your organisation permit the personal use of external social media?
12. Does your organisation utilise social media as part of mainstream business practice?
13. If so, which of the following are used? (select all that apply)
14. If so, does your organisation capture and store social media content using any of the following solutions?

Portable devices
15. Which of the following portable devices are utilised by your organisation? (select all that apply)
16. Does your organisation allow personal "apps" to be installed on the portable devices?
17. Do any of your organisation's portable devices have an Enterprise RIM application/s installed?
18. Do your organisation's portable devices synchronise to a system (such as Outlook) which integrates with an Enterprise RIM system/s?

Email
19. What email system does your organisation use (select all that apply)
20. Does your organisation set a server-side limit on mailbox size?
21. Does your organisation delete email off the server after a designated period?
22. Which of the following best describes practices in your organisation for managing business email? (select all that apply)
23. Does your organisation offer web access to work email?
24. Does your organisation prevent access to personal web-based email services?

Information archiving technologies
25. What file formats does your organisation use for long term retention of electronic records? (select all that apply)
26. Does your organisation hold electronic records and documents that are no longer accessible or difficult to access due to any of the following technological reasons? (select all that apply)
27. Does your organisation have a dedicated database archiving software solution?
28. Does your organisation have a dedicated email archiving software solution?
29. If so, does the dedicated email archiving system integrate with your enterprise RIM system/s?
30. Does your organisation have a software solution for searching of Outlook (pst) archives stored either locally or on the network?

Operating environment
31. What primary desktop operating system does your organisation use?
32. Does your organisation use open-source software?
33. If so, for what is open source used (not including portable device apps)? (select all that apply)
34. What proportion of personnel use laptops in place of desktop computers?
35. Does your organisation offer local wireless network access?
36. Does your organisation offer wireless connectivity in your conference rooms to visitors?
37. Does your organisation allow VPN (virtual private network) remote network access?
38. Does your organisation use RFID (radio-frequency identification) technology?
39. What technologies is your organisation currently assessing for potential future use? (select all that apply)
40. The following list describes tasks and processes in the procurement of Enterprise RIM technology. For each, decide if you agree or disagree with the statement that “RIM staff are acknowledged by the organisation as important stakeholders in this task or process”

Business continuity
41. Does your organisation have a business continuity plan (BCP)?
42. Does your organisation have a backup internet connection?
43. What online backup solution does your organisation use for some or all of your data protection?

The RIM practitioner’s toolbox - knowledge and skills
44. The following kinds of skills are important for today’s RIM professional
45. The following kinds of theoretical knowledge are important for today’s RIM professional
46. The following aptitudes and personality traits are important for today’s RIM professional. 
47. Do you have a copy of the Records and Archives Competency Standards for your jurisdiction? (e.g. Australia’s National Competency Standards for the Records and Archives Industry)
48. Have you ever utilised RIMPA’s Statement of Knowledge: Tasks, Competencies and Salaries (aka TCSRP) document to guide your acquisition of requisite RIM competencies?
49. Has the introduction of new technologies utilised by your organisation changed the competencies required for your role?
50. How important are the following for advancing your RIM-related knowledge and skills
51. Does your organisation subsidise or pay for you to attend conferences, seminars & workshops in RIM?
52. Does your organisation subsidise or pay for external higher education courses in RIM?
53. What is the highest level of education you have completed?
54. Is your highest level of education RIM-related?
55. Have you completed any of the following? (Please select highest qualification achieved)
56. How many years of work experience do you have in RIM?
**About you**

57. Which of the following paid memberships do you have?
58. Which best describes your occupation?
59. Where are you located within your organisation?
60. Where is your workplace?
61. What size is your organisation?
62. Which best describes your organisation's industry/sector?
63. If your organisation is government-based, what is your organisation’s government type?
64. Sex:
65. Age:

**Comments**

66. What new or emerging issues with technology do you see in your organisation arising in the next 5-10 years?
67. Feel free to add any comments, suggestions, thoughts or questions - whilst we can't provide a response all comments will be read.
Appendix 8: The ‘new survey’ – 2012 full survey


Prologue

Thank you for taking the time to complete this survey. It is greatly appreciated.

A key component of RIMPA’s Corporate Strategy is to work together to promote, enhance and develop Records and Information Management. To promote the interests of members and position RIM for success requires understanding of industry forces and trends that impact on the RIM program.

This aim of the RIMPA Technology Survey is to measure technology adoption in RIMPA member employing organisations, where technology impacts on the work of RIM professionals and consequently has implications for education, training and competency standards. This survey also provides insight into where the RIM program fits and functions in member organisations and what organisations expect from their RIM staff. Analysis of survey results shows us how we can best equip ourselves with current and emerging in-demand knowledge and skills likely to be important into the future.

This survey is held every two years, making it an extremely valuable longitudinal research tool for RIMPA’s members, as well as the greater global RIM community. Since it was last undertaken in 2010, the survey has been substantially updated and revised, a task informed by a group of leading RIM educators and practitioners functioning as a focus group.

This survey should take approximately 15-20 minutes to complete and contains the following sections:

*About the organisation:
- Enterprise records and information management
- New and emerging technologies - the Cloud and Social Media
- Portable devices
- Email
- Information archiving technologies
- Operating environments
- Business continuity

*About the practitioner:
- The RIM toolbox: knowledge and skills
- About You

*Comments

Once complete, please ensure you click on the “DONE” button to submit. Please answer each question as best you can and avoid skipping questions if possible - even choosing "Don't know" or "Not applicable" is in itself insightful data.

Your participation in this survey is voluntary and will imply informed consent. All answers provided will remain anonymous, identifiable only by IP addresses. All information obtained
will be used only for research purposes and results may be reported in articles and presentations.

You are encouraged to circulate the request to complete the survey to ensure that a wide sample of the profession is included in the results.

If you have any questions about the survey, please email me directly at kate.walker@rimpa.com.au

We thank you for your time and effort completing this survey and look forward to analysing the results and sharing them with you.

Thank you,

Kate Walker CEO

**Enterprise records and information management (RIM)**

*Please note:* To enhance the reliability of this survey, the term "Enterprise RIM system" is used to encompass ECM, EDRMS and ERM type enterprise systems that manage content, documents and records at enterprise level.

1. What Enterprise RIM system/s does your organisation use to manage its records, documents and content? (select all that apply)
   
   *(NB: If answer is “None” then the participant will automatically skip to Question 8)*
   
   Alfresco
   
   Autonomy Records Manager (fka CA Records Manager, fka MDY Technologies FileSurf)
   
   Avante
   
   BluePoint
   
   DataWorks
   
   DocBanq
   
   Documentum
   
   Fedora
   
   FileNet
   
   i5
   
   InfoVision (fka AUSinfo)
   
   InfoXpert
   
   KnowledgeTree
   
   Meridio
   
   Nuxeo
   
   Objective
   
   OnBase
   
   OpenText
   
   Oracle
   
   RecFind
   
   RecordPoint
   
   Rio
   
   SharePoint
   
   TAB FusionRMS
2. What proportion of your organisation's total information is managed by the enterprise RIM system/s?
   - 10% or less
   - 11-25%
   - 26-50%
   - 51-75%
   - 76-90%
   - Over 90%
   - Don't know / unsure
   - NA

3. How many people in your organisation are Enterprise RIM system/s users?
   - Less than 20 people
   - 21 - 100 people
   - 101 - 250 people
   - 251 - 500 people
   - 501 - 1000 people
   - 1001 - 5000 people
   - More than 5000 people
   - NA

4. What functions and formats does your organisation’s Enterprise RIM system/s manage?" (select all that apply)
   - Access and security
   - Accessing content from multiple locations
   - Audit logs
   - Collaboration
   - Compliance - internal policy
   - Compliance - regulatory
   - Discoverability of content stored
   - Document versioning
   - Electronic and scanned documents
   - Electronic records
   - Emails
   - Enterprise searching across multiple systems
   - Forms and templates
   - Indexing of content
   - Long-term electronic archiving
   - Long-term storage of paper
   - Paper records
   - Reporting
   - Retention and disposal
   - Social media content

TRIM
WorkSite (aka iManage)
In-house purpose-built software
Manual system (e.g. utilising Access database as foundation)
None
Don't Know / Unsure
Other (please specify)
5. Rate the satisfaction of your organisation with the Enterprise RIM systems' management capabilities for formats and functions?

- Extremely dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Extremely satisfied
- Don't know / unsure
- NA

Use this space for comments:

6. What organisation unit(s) or function(s) have been assigned program governance / coordination responsibility for Enterprise RIM system/s?

- Records / Document / Information Managers (RM) only
- Information Technology (IT) department only
- Individual business units only
- Both RM and IT
- Both RM and business units
- Both IT and business units
- RM, IT and business units
- Outsourced
- No one
- Don't know / unsure
- NA

Comments:

7. What are the barriers to achieving more widespread benefits from the Enterprise RIM system/s in your organisation? (select all that apply)

(NB: Once participants answer this question they will automatically skip to Question 9)

- Changing existing work processes
- Difficult to justify ROI
- Difficulty integrating with existing systems
- Executive sponsorship / support
- Insufficient financial resources
- Insufficient system functionality knowledge
- Insufficient training resources
- Organisational policies
- Solutions require too much customisation
- System lacks suitable functionality
- Too many decision makers / politics
- Too many information silos
- User resistance to change
- No barriers
- Don't know / unsure
- NA
- Other (please specify)
8. If your organisation does not currently have, and is not presently installing, an Enterprise RIM system/s, why not? (select all that apply)
   - Lack of support from management
   - Pending project
   - No need for such a system
   - Unclear on user needs
   - Under evaluation
   - Waiting for new version to be released
   - Don’t know / unsure
   - NA
   - Other (please specify)

New and emerging technologies - the Cloud and Social Media
9. Does your organisation use the "cloud" for the storage of any of its records?
   - Yes
   - No
   - Don't know / unsure
   - NA
   Use this space for additional comments:

10. If so, which of the following best describes its use?
    - Public cloud - where cloud services are available to the public
    - Private cloud - where cloud services are provided solely to your organisation
    - Community cloud - where cloud services are shared by a community of entities
    - Hybrid cloud - a combination of the above &/or a cloud service + internal system
    - NA
    - Other (please specify)

11. Does your organisation permit the personal use of external social media?
    - Yes, unrestricted access
    - Yes, but restricted access
    - No
    - Don't know / unsure
    - NA
    Use this space for additional comments:

12. Does your organisation utilise social media as part of mainstream business practice?
    - Yes
    - No
    - Don't know / unsure
    - NA

13. If so, which of the following are used? (select all that apply)
    - Blogs and wikis - external, not owned by your organisation
    - Blogs and wikis - external, owned by your organisation
    - Blogs and wikis - internal to organisation
    - Facebook (which also includes BranchOut)
    - Instant message program - external to organisation
    - Instant message program - internal to organisation
    - LinkedIn
    - MySpace
Photo sharing sites (e.g. Flickr)
Social bookmarking or news website (e.g. DGG, Slashdot, Fark, Reddit, Delicious, Newsvine, StumbleUpon, etc)
Social media monitoring (e.g. Hootsuite, trackur, Icerocket, sproutsocial, etc)
Twitter
Yammer
YouTube
Don't know / unsure
NA
Other (please specify)

14. If so, does your organisation capture and store social media content using any of the following solutions?
   Yes, AXS-One
   Yes, HootSuite
   Yes, IBM Content Collector
   Yes, LiveOffice
   Yes, PageFreezer
   Yes, Proofpoint
   No
   Don't know / unsure
   NA
   Yes, other (please specify)

**Portable devices**

15. Which of the following portable devices are utilised by your organisation? (select all that apply)
   BlackBerry smartphones
   Smartphones (e.g. iPhone, Android, etc)
   Standard mobile phones
   Tablets (e.g. iPad)
   Netbooks
   Laptops
   None
   Don't know / unsure
   NA
   Other (please specify)

16. Does your organisation allow personal "apps" to be installed on the portable devices?
   Yes
   No
   Don't know / unsure
   NA

17. Do any of your organisation's portable devices have an Enterprise RIM application/s installed?
   Yes, BlackBerry smartphones only
   Yes, smartphones only
   Yes, tablets only
   Yes, all types of smartphones
18. Do your organisation’s portable devices synchronise to a system (such as Outlook) which integrates with an Enterprise RIM system/s?
   Yes
   No
   Don’t know / unsure
   NA
   Other (please specify)

19. What email system does your organisation use (select all that apply)
   GroupWise
   Lotus Notes
   Mail for Macs / Entourage
   Mozilla
   Outlook
   None
   Don’t know / unsure
   NA
   Other (please specify)

20. Does your organisation set a server-side limit on mailbox size?
   Yes
   Yes, but increases can be requested
   No
   Don’t know / unsure
   NA
   Use this space for additional comments:

21. Does your organisation delete email off the server after a designated period?
   Yes
   No
   Don’t know / unsure
   NA
   Use this space for additional comments:

22. Which of the following best describes practices in your organisation for managing business email? (select all that apply)
   Maintained in the email system (e.g. Outlook)
   Automatically profiled into an enterprise RIM system
   Manually profiled into an enterprise RIM system
   Archiving application moves email off servers (e.g. Enterprise Vault)
   Stored on local drives
   Stored on shared network drives
   Stored in personal archive files (local client pst files)
   Journaling
Print and file paper copies
Don't know / unsure
NA
Other (please specify)

23. Does your organisation offer web access to work email?
   Yes - for all
   Yes - upon request
   Yes - for management only
   No
   Don't know / unsure
   NA
   Other (please specify)

24. Does your organisation prevent access to personal web-based email services?
   Yes
   No
   Don't know / unsure
   NA

Information archiving technologies
25. What file formats does your organisation use for long term retention of electronic records?
   (select all that apply)
   AFF
   AFF4
   BITMAP
   CSV
   GIF
   HTML
   JPEG
   JPEG 2000
   JSON
   MHT
   Microsoft - XML (docx, xlsx, etc)
   OGG
   OLE
   PDF
   PDF / A
   PNG
   Print to paper
   RAW
   RTF
   Standard native (msg, doc, xls, etc)
   Standard - sound (mp3, wav, aiff, etc)
   Standard - video (mp4, avi, wmv, mpg, etc)
   SVG
   TIFF
   TXT
   WARC
   XML
   None
26. Does your organisation hold electronic records and documents that are no longer accessible or difficult to access due to any of the following technological reasons? (select all that apply)
   - Access requires hardware no longer available &/or stored on obsolete storage media (e.g. 8” floppy disks)
   - Access requires software no longer available
   - Information stored in unknown file formats
   - Information stored without appropriate titles &/or metadata
   - No
   - Don’t know / unsure
   - NA
   - Other (please specify)

27. Does your organisation have a dedicated database archiving software solution?
   - Yes, ArchivePlus
   - Yes, Arctools
   - Yes, Attempo Digital Archive
   - Yes, Autonomy Consolidated Archive
   - Yes, AXS-One
   - Yes, C2C’s ArchiveOne
   - Yes, CommVault Simpana Archive
   - Yes, EMC
   - Yes, FileTek StorHouse
   - Yes, HP Database Archving (fka OuterBay Database Archving)
   - Yes, IBM Optim
   - Yes, Indusa
   - Yes, Informatica Data Archive
   - Yes, LiveOffice
   - Yes, MessageSolution Enterprise Archive
   - Yes, Metalogix Archive Manager
   - Yes, OpenText
   - Yes, Permabit Enterprise Archive
   - Yes, Proofpoint
   - Yes, SAP
   - Yes, Solix Enterprise Data Managing Suite
   - Yes, Sonian
   - Yes, Unify
   - Yes, ZL Unified Archive
   - No
   - Don’t know / unsure
   - NA
   - Yes, other (please specify)

28. Does your organisation have a dedicated email archiving software solution?
   - Yes, Attempo Digital Archive
   - Yes, AXS-One’s Central Archive
   - Yes, CommVault Simpana Archive
   - Yes, EMC SourceOne Email Supervisor (fka EmailXtender)
Yes, IBM Content Collector
Yes, LiveOffice
Yes, MessageSolution Enterprise Archive
Yes, OpenText Email Management
Yes, Sonian
Yes, Symantec Enterprise Vault
Yes, Waterford Technologies MailMeter
No, email archiving managed as part of RIM system functionality
No
Don't know / unsure
NA
Yes, other (please specify)

29. If so, does the dedicated email archiving system integrate with your enterprise RIM system/s?
   Yes
   No
   Don't know / unsure
   NA

30. Does your organisation have a software solution for searching of Outlook (pst) archives stored either locally or on the network?
   Yes
   No
   Don't know / unsure
   NA
   Other (please specify)

Operating environment
Now we will move to the infrastructural backbone - the operating environments and business continuity of your organisation.

31. What primary desktop operating system does your organisation use?
    Linux
    Mac OS
    Windows 7
    Windows Vista
    Windows XP
    Windows 2000
    Windows for Mac
    There is no primary system used / multiple systems
    Don't know / unsure
    NA
    Use this space for additional comments:

32. Does your organisation use open-source software?
    Yes
    No
    Don't know / unsure
    NA
33. If so, for what is open source used (not including portable device apps)? (select all that apply)
   
   Archiving
   Enterprise RIM system(s)
   Graphics
   Internet content management
   Intranet content management
   Office productivity (WP, spreadsheet, presentation)
   PDF creation
   Teaching / education tool
   Web-based applications
   Don't know / unsure
   NA
   Other (please specify)

34. What proportion of personnel use laptops in place of desktop computers?
   
   10% or less
   11-25%
   26-50%
   51-75%
   76-90%
   Over 90%
   Don't know / unsure
   NA

35. Does your organisation offer local wireless network access?
   
   Yes, entire Office
   Yes, selected areas
   Yes, only conference rooms
   Not currently, but reviewing for future use
   No
   Don't know / unsure
   NA
   Other (please specify)

36. Does your organisation offer wireless connectivity in your conference rooms to visitors?
   
   Yes
   Not currently, but reviewing for future use
   No
   Don't know / unsure
   NA

37. Does your organisation allow VPN (virtual private network) remote network access?
   
   Yes - for all
   Yes - upon request
   Yes - for management only
   Not currently, but reviewing for future use
   No
   Don't know / unsure
   NA
   Other (please specify)
38. Does your organisation use RFID (radio-frequency identification) technology?
   Yes, HF technology
   Yes, UHF technology
   Yes, microwave technology
   Not currently, but reviewing for future use
   No
   Don't know / unsure
   NA
   Other (please specify)

39. What technologies is your organisation currently assessing for potential future use? (select all that apply)
   Business intelligence
   Cloud storage of and access to business information
   Customer relations
   Data mining
   Database archiving systems
   Electronic capture and maintenance of physical files (e.g. incoming mail, invoices, photos)
   Email archiving systems
   Enterprise RIM system(s) - not currently used
   Enterprise RIM system(s) - upgrade
   Laptops for personnel
   Opensource software
   Operating system upgrade (e.g. from Windows XP to 7)
   Portable devices - smartphones
   Portable devices - tablets
   RFID
   Virtual desktop environment (to replace physical PCs)
   Virtual Private Network (VPN) - remote network access
   Web content management
   Voice over the Internet Protocols (VoIP - e.g. Skype)
   Wireless network access
   Workflow tool
   Don't know / unsure
   None
   Other (please specify)

40. The following list describes tasks and processes in the procurement of Enterprise RIM technology. For each, decide if you agree or disagree with the statement that “RIM staff are acknowledged by the organisation as important stakeholders in this task or process”
   Analyse & define business needs
   Specify requirements of product required
   Development of procurement strategy (e.g. defining timelines)
   Research the market / information gathering on potential suppliers
   Supplier / vendor contact (includes requests for proposals, quotes, etc)
   Supplier evaluation / background investigation and review
   Preview and evaluation of the product
   Negotiations (e.g. contract, price, delivery schedules, SLAs, customisations, etc)
   Contract review and approval
Supplier selection / award of contract
Purchasing
Ongoing vendor management
Ongoing performance reviews & metrics (of SLAs, KPIs, etc)

**Business continuity**

41. Does your organisation have a business continuity plan (BCP)?
   - Yes
   - Under development
   - No
   - Don't know / unsure
   - NA

42. Does your organisation have a backup internet connection?
   - Yes
   - No
   - Don't know / unsure
   - NA

43. What online backup solution does your organisation use for some or all of your data protection?
   - ARCserve
   - B3 (Black Box Backup)
   - Carbonite
   - Civica Managed Service
   - EMC NetWorker (fka Legato NetWorker)
   - Mozy
   - Plan-b Data Backup
   - ShadowProtect
   - Symantec (e.g. NetBackup, Backup Exec, etc)
   - UltraBac
   - Reciprocal arrangement with other organisation/s
   - None - managed internally at external location/s
   - None
   - Outsourced
   - Don't know / unsure
   - NA
   - Other (please specify)

**The RIM practitioner's toolbox - knowledge and skills**
Exploiting opportunities to build bigger and better RIM careers and programs requires the right knowledge and skills. Use this section to tell us what knowledge and skills you think are important in the technology and RIM domain.

44. The following kinds of skills are important for today's RIM professional
   - Business analysis (e.g. ROI and cost/benefit analyses)
   - Business Continuity Planning (BCP)
   - Change management
   - Coding - advanced (e.g. css, java, etc)
   - Communication skills
Critical thinking
Customer relationship management
Database and systems analysis and design
Designing a RIM system
Designing language controls
Disaster recovery
Implementing a RIM system
Leadership skills
Marketing skills
Markup languages (e.g. xml, html)
Mentoring
Policy writing
Presentation skills
Procedure and task documentation writing
Process mapping
Project management
Relationship management
Reporting
Research skills
Resource management - financial / budget
Resource management - staff
Retention and disposal scheduling
Strategic planning
Time management
Training skills
Other (please specify)

45. The following kinds of theoretical knowledge are important for today's RIM professional
   Business classification schemes
   Characteristics of records
   Compliance principles
   E-discovery principles
   Electronic security knowledge
   Emerging technologies
   Ethics and codes of practice
   Information technology (IT) systems
   Legal knowledge (e.g. legal terms & processes, basic contract law)
   Legal mandates (e.g. acts, laws) & policies
   Metadata schemas
   Organisational knowledge (external business operations)
   Organisational knowledge (internal operations & structure)
   Purpose of records
   Purpose of RIM systems
   RIM processes and practices
   RIM standards and best practice
   RIM theories (e.g. records continuum theory, life cycle theory, etc)
   Risk management principles
   Other (please specify)
46. The following aptitudes and personality traits are important for today's RIM professional.
   Adaptability
   Analytical
   Confidence
   Customer-focused
   Flexibility
   Ingenuity
   Initiative
   Innovative
   Integrity
   Open-minded
   Persuasive
   Problem-solving
   Quality-focused
   Strategic thinking
   Tenacity
   Other (please specify)

47. Do you have a copy of the Records and Archives Competency Standards for your jurisdiction? (e.g. Australia's National Competency Standards for the Records and Archives Industry)
   Yes
   No
   No such standard exists within our jurisdiction
   Don't know / unsure
   NA

48. Have you ever utilised RIMPA's Statement of Knowledge: Tasks, Competencies and Salaries (aka TCSRP) document to guide your acquisition of requisite RIM competencies?
   Yes
   No
   Wasn't aware of their existence
   NA
   Other (please specify)

49. Has the introduction of new technologies utilised by your organisation changed the competencies required for your role?
   Extremely altered
   Somewhat altered
   No change
   Don't know / unsure
   NA
   Other (please specify)

50. How important are the following for advancing your RIM-related knowledge and skills?
   Conferences and seminars
   Higher education (e.g. university courses)
   Industry publications (not including iQ)
   iQ magazine
   Internet searches (e.g. Google searches)
   Listservs (not including RIMPA's)
Listserv (RIMPA’s)
Mentee
National Records and Archives Competency Standards
Online fulltext databases (e.g. Gartner)
RIMPA / ASA’s Statement of Knowledge
RIMPA / ASA’s Statement of Knowledge: Tasks, Competencies & Salaries (aka TCSRP)
RIMPA’s Continuing Professional Development (CPD) scheme
RIMPA’s website
Specific RIM websites (not including RIMPA’s)
RSS feeds
Social media (e.g. LinkedIn discussions, blogs, Twitter)
Training courses / short courses
Volunteer work
Webinars
Workshops
Other (please specify)

51. Does your organisation subsidise or pay for you to attend conferences, seminars & workshops in RIM?
   Yes, often
   Yes, but rarely
   No
   Don't know / unsure
   NA
   Other (please specify)

52. Does your organisation subsidise or pay for external higher education courses in RIM?
   Yes
   No
   Don't know / unsure
   NA
   Other (please specify)

53. What is the highest level of education you have completed?
   Higher Degree
   Postgraduate Diploma
   Bachelor Degree
   Undergraduate Diploma
   Associate Diploma
   Skilled Vocational Qualifications
   Basic Vocational Qualifications
   Year 12
   Year 11
   Year 10

54. Is your highest level of education RIM-related?
   Yes
   No

55. Have you completed any of the following? (Please select highest qualification achieved)
   Certificate III of Recordkeeping
Certificate IV of Recordkeeping
Diploma in Records and Information Management
Diploma of Information Management
Diploma of Recordkeeping
Advanced Diploma of Recordkeeping
Records Management & Archive Administration
Bachelor of Applied Science (RIM major)
Bachelor of Arts (RIM major)
Graduate Certificate in Digital Recordkeeping
Graduate Certificate in Information Studies
Graduate Certificate in Records Management
Graduate Diploma in Business and Information Management
Graduate Diploma in Information and Knowledge Management
Graduate Diploma in Information Management
Graduate Diploma in Information Studies
Graduate Diploma in Records Management and Archives
Graduate Diploma of Science
Master of Business Information Management
Master of Business Information Systems
Master of Business Information Systems (Professional)
Master of Information Management
Master of Information Services
Master of Information Studies
Master of Literature in Archives and Records Management
Master of Science in Archives and Records Management (International)
Master of Science in Records Management and Digital Preservation
Master of Science in Records Management and Digital Preservation (International)
Master of Science in Records Management and Information Rights
PhD
None of the above
Other (please specify)

56. How many years of work experience do you have in RIM?
   - Less than 5 years
   - 5 - 10 years
   - 11 - 15 years
   - 16 - 20 years
   - Greater than 20 years

About you

57. Which of the following paid memberships do you have?
   - RIMPA - Affiliate member
   - RIMPA - Corporate member
   - RIMPA - Student member
   - RIMPA - professional Associate member
   - RIMPA - professional Chartered member
   - RIMPA - professional Fellow member
   - RIMPA - unemployed or retired
   - RIMPA - vendor
   - RIMPA - in process of joining
   - RIMPA - former member / membership lapsed
None
Other/others (please specify)

58. Which best describes your occupation?
Archivist
Assistant
Business owner/proprietor
Chief Executive Officer (CEO)
Chief Information Officer (CIO)
Chief Operations Officer (COO)
Clerical and Administrative
Consultant
Department Head
Director
Division Head
Executive
Faculty Head
General Manager
Information Manager
Information Officer
Information Technology (IT) specialist
Junior
Knowledge Manager
Lecturer
Library Technician
Managing Director
Partner
Project Manager
Records Manager
Records Officer / Clerk
Retired
Senior Lecturer
Senior Records Officer / Clerk
System Administrator
Team Leader
Trainer
Vendor

59. Where are you located within your organisation?
Compliance
Finance / Accounts
HR
IT
Legal
Library
Records
Research
Risk Management
Sales
Other (please specify)
60. Where is your workplace?
   Australia - ACT
   Australia - NSW
   Australia - NT
   Australia - Qld
   Australia - SA
   Australia - Tas
   Australia - Vic
   Australia - WA
   Australia - Other Territories
   Canada
   Fiji
   Malaysia
   New Zealand
   Online only
   Papua New Guinea
   South Africa
   Sweden
   Trinidad and Tobago
   United Arab Emirates
   United Kingdom
   United States of America
   Other (please specify)

61. What size is your organisation?
   Less than 20 people
   21 - 100 people
   101 - 250 people
   251 - 500 people
   501 - 1000 people
   1001 - 5000 people
   More than 5000 people

62. Which best describes your organisation's industry/sector?
   Advertising & marketing
   Agriculture, forestry & fishing
   Airlines & aerospace
   Architecture & engineering
   Arts, culture & recreation services
   Automotive
   Banking, financial & insurance services
   Computer software & hardware
   Construction
   Consulting
   Defence
   Education and training
   Emergency services
   Employment & recruitment
   Healthcare, community services & pharmaceuticals
   Hospitality & tourism
   Industry association & trade union
Information media & telecommunications
Infrastructure, transport & postal
Internet & web services
Legal
Library
Manufacturing & processing
Mining & resources
Museums & heritage services
Non-profit
Publishing, printing & graphics
Records storage & archival services
Religious
Rental, hiring & real estate services
Research & development
Retail trade
Science
Utilities - electricity, gas, water & waste services
Wholesale trade
Other (please specify)

63. If your organisation is government-based, what is your organisation’s government type?
   - Government - federal
   - Government - local
   - Government - NZ central
   - Government - NZ local
   - Government - state
   - Government - territory
   - NA
   - Other (please specify)

64. Gender:
   - Female
   - Male

65. Age:
   - Under 20 years
   - 20 - 24 years
   - 25 - 29 years
   - 30 - 34 years
   - 35 - 39 years
   - 40 - 44 years
   - 45 - 49 years
   - 50 - 54 years
   - 55 - 59 years
   - 60 - 64 years
   - 65 years plus

Comments
66. What new or emerging issues with technology do you see in your organisation arising in the next 5-10 years?
67. Feel free to add any comments, suggestions, thoughts or questions - whilst we can't provide a response all comments will be read.

Thank you!
Please click on the “Done” button to submit your responses.

We at RIMPA would like to sincerely thank you for taking the time and effort to complete this survey, and we look forward to sharing the results with you in iQ magazine and via our website.