2nd Northumbria
International Witness Seminar Conference

# EXAMINING THE ISSUES & CHALLENGES OF EMAIL & E-COMMUNICATIONS
# EXPLORING STRATEGIES WITH EXPERTS

**24-25th October 2007**
**Newcastle upon Tyne, UK**

**Proceedings**

EDITED BY
SUSAN CHILDS
RACHEL HARDIMAN
NAOMI HAY-GIBSON
ELIZABETH LOMAS
JULIE MCLEOD

School of Computing, Engineering and Information Sciences
Northumbria University

Published by
School of Computing, Engineering & Information Sciences
Northumbria University
Pandon Building
Newcastle upon Tyne NE2 1XE, UK.
http://northumbria.ac.uk/sd/academic/ceis/

Published in 2008

ISBN 978-1-86135-350-4

2nd Northumbria International Witness Seminar Conference

# Examining the Issues and Challenges of Email and E-communications: Exploring strategies with Experts

24-25th October 2007
Newcastle upon Tyne, UK

Proceedings

Edited by
Susan Childs
Rachel Hardiman
Naomi Hay-Gibson
Elizabeth Lomas
Julie McLeod

Published in 2008

ISBN 978-1-86135-350-4

# Conference Sponsors

Iron Mountain UK Ltd
www.ironmountain.co.uk

Emerald Group Publishing Ltd
www.emeraldinsight.com

# Acknowledgements

**The conference organisers would like to thank:**

All of the witnesses for agreeing to participate in a unique event and making it so successful

The four seminar chairs for their expert facilitation of the discussion between speakers and audience

# Contents

# Foreword

I am delighted to introduce these proceedings of the second international Witness Seminar Conference hosted by Northumbria University's School of Computing, Engineering and Information Sciences. *Examining the issues and challenges of email & e-communications: Exploring strategies with experts* took place on 24 – 25th October 2007 at St James Park, Newcastle upon Tyne. It followed the success of the first conference, which had been unique in the records management discipline in the UK, in terms of its format and style[1].

The 'Witness Seminar' concept comes from oral history research where key participants in an event or activity are brought together in a seminar to discuss the topic as they remember it (see http://icbh.ac.uk/icbh/witness/welcome.html). The discussions are taped and transcribed, resulting in a rich data resource for historical research. We adopted the concept for experts to share their knowledge and ideas and reflect on their experiences. Building on the feedback and our experience from the first conference, this one comprised four seminars exploring different aspects of managing email and other electronic communications technologies from a records perspective. As before the witnesses (i.e. speakers) were invited to share their views and opinions on one specific aspect taking as their starting point a pertinent published article(s). They submitted their written views (witness statements) prior to the event and those who were chairing the seminars saw them in advance. At the event each chairperson had the freedom to facilitate their seminar as they wished, their aim being to generate lively discussion and debate between the speakers and with the audience. Each witness was also free to give their statement how they wished. The one rule was that no PowerPoint presentations or overheads were to be used, freeing the witnesses and the audience from this barrier to two-way communication. At the event two speakers did refer to complex diagrams to support their views.

The first three seminars explored the business, people and technology perspectives of email and e-communications, asking the following questions:

[1] School of Computing, Engineering & Information Sciences, Northumbria University. Exploring the essence of records management: Engaging with experts. 4-5th May 2006, Newcastle upon Tyne, UK. Edited by: Susan Childs, Susan Heaford & Julie McLeod, 2006.

- What are the records management implications and challenges of doing business electronically?
- Are people the problem and the solution?
- Is technology the problem or panacea?

The final seminar, 'Futurewatch', focused on moving forward, exploring new ways of working, potential new technologies and what records professionals and others need to keep on their radar screens. The witnesses came from different sectors and represented a range of professions – records and information managers, archivists, IT and computer scientists, lawyers, business managers and information systems specialists – to broaden and enrich the exchange of views and experience, reflect and think about the future.

As in the first conference, the semi-structured, discursive format created a relaxed, informal atmosphere, which engaged everyone in very open and frank discussions. The experience was just as rewarding and stimulating as before. The discussion continued at a social evening at BALTIC Centre for Contemporary Art, the gallery housed in a former flour mill on the south bank of the River Tyne. In their new education space delegates learned from Gary Malkin, Baltic's Librarian and Archivist, about the latest developments for digitally capturing and providing access to the gallery's non-permanent collection using Quay TV. We enjoyed being the first group to use the space, complete with funky chairs and plasma screen TVs and evening views of the river looking east towards its mouth, for an event.

Participants gave their permission for us to digitally audio record the entire event. As a result of transcribing the recording these proceedings capture not only the prose of the pre-conference witness statements but also the reality of the event. They are a record of the witness statements on the day, with only minor editing for clarity's sake. They capture the enthusiasm, beliefs, concerns, ideas and interactions from the discussion as it unfolded. Listening to the recordings transports those of us who were there back to the room in St James' Park, with its magnificent views of the football pitch, and reminds us of the rich and rewarding experience we shared. By including the audio recording with the printed proceedings we hope that you will get a sense of the energy and enjoyment of

that experience and might want to participate in a future conference. I want to thank everyone whose contribution has been captured for agreeing to the publication of such an accurate and contemporaneous record and not just a formal, peer-reviewed version. It has so much more value.

Feedback during and after the event was very positive, in fact one of the witnesses, Heather Jack, suggested a mechanism was needed for continuing the discussion and debate. To that end we identified some of the key issues that emerged from each seminar and posted them to our e-records management research project blog[2] for delegates and anyone else to comment upon. We hope you will comment and that you will want to participate in our next witness seminar conference.

Julie McLeod

Professor in Records Management, School of Computing, Engineering & Information Sciences, Northumbria University

January 2008

[2] AC+erm: Accelerating positive change in e-records management. A research project funded by the AHRC. Blog at http://www.acerm.blogspot.com Project website: http://www.northumbria.ac.uk/acerm

# Wednesday 24 October 2007

## OPENING SESSION
2.00-2.30pm

### WELCOME
**Professor Julie McLeod**
Professor in Records Management, Northumbria University

Good afternoon Ladies and Gentlemen. I'm very pleased to welcome you to Newcastle and the 2nd witness seminar conference hosted by the School of Computing, Engineering & Information Sciences at Northumbria University. It is a different style of event and I hope one that those who weren't at our first conference find a very interesting and valuable experience. It offers a rare opportunity to discuss and explore issues, in this case around the management of information in email and e-communications, with leading names not only in the records management discipline but other related fields.

Even as a non-football fan I think there is something magical and exciting about this venue – I just hope that the views of the hallowed turf of St James' don't distract us but stimulate our thoughts and lead to a rich, rewarding exchange over the next one and half days.

I am delighted to introduce Professor Alistair Sambell who is Dean of the SCEIS to say a few words and formally open the conference...

### FORMAL OPENING
**Professor Alistair Sambell**
Dean of the School of Computing, Engineering & Information Sciences, Northumbria University

Well thank you very much. It is my pleasure to formally welcome you on behalf of Northumbria University and on behalf of the School to this second witness conference, which Julie and colleagues have organised, in records management. And I

know that if the event today is anything like as successful as last year's event you're in for a really productive and valuable time. We are delighted to see so many people here today from such a wide range of areas representing a diverse range of organisations. We've got colleagues here from all across the UK, from across Europe and from as far away as Canada and Australia, and I think that just underlines really what an interesting and valuable event that it is and the agenda that has been put together is so current and relevant. But also for those of you who don't know Newcastle particularly well, welcome to Newcastle as a city. You're obviously right at the heart of the city. This is the heart of Newcastle - St James's Park. Great views of the legendary turf here, where we won only two nights ago. Fantastic! But I hope you get a chance if you don't know the city to have a look around during your time here. We're very proud of the city and I hope you'll see a little bit of what goes on here and some of the developments that have happened in Newcastle over the past few years; and I'm thinking particularly of down by the Quayside – of the Millennium Bridge, the Sage (the music centre), the Baltic Arts Centre. Fantastic facilities and hopefully that will inspire you to come back to Newcastle again and spend some more time here and just see some of the fantastic things that are going on in Newcastle.

We're particularly proud – the University – to be hosting this conference. Because it reflects a long tradition of records management from Northumbria University, lead by Julie McLeod and other colleagues, some of whom are here today. In terms of teaching, we've been teaching records management, information management, related disciplines for many, many years and I think I'm right in saying we were the first university in the UK to offer a distance learning programme in records management as well. And we have now had over 100 graduates from that programme and it's a very, very successful programme; I think that just underlines the relevance and importance of records management. We've also been privileged to work with a number of leading external organisations on work based learning; and the likes of the BBC, the National Archives, working with some other colleagues from the University has brought a wealth of experience into the University as well. Underpinning that activity in terms of teaching from our point of view is a very strong tradition of research activity and currently Julie and colleagues are working on what is one of the first Arts and Humanities Research Council funded records management projects looking at electronic records management. I'm sure Julie will talk to colleagues more

about that as the event goes on and in private conversations and so on. But a particularly exciting project and, you know, again we are particularly proud that we are hosting and running that project.

We're also very pleased to have with us here today two of the expert advisors to that project – Adrian Cunningham and John McDonald - who have come to the UK and who are with us for this event and also the records advisory panel meeting w had over the past day or two. So, a particularly warm welcome to Adrian and John. That research which underpins the teaching just reflects the innovation and development, the strong tradition of records management that we have at Northumbria and I think you'll see some of that over the next couple of days.

The School – we have a school titled Computing, Engineering and Information Sciences – it's kind of what it says on the title. Not the snappiest of titles but it reflects a breadth of discipline (particularly a unique bringing together of disciplines from a University perspective and that's particularly exciting). I think in terms of records management what that means for us is it is very exciting because records management is a subject that lends itself, by its very nature, to interdisciplinary collaboration. Bringing together within the school context experts and academics whose enthusiasm for their subject across computing, business information systems, information technology, as well as engineering, maths and so on, bringing those disciplines together opens up some really exciting possibilities for research and teaching and I know that's been very stimulating. We've been having collaboration with Julie and with colleagues in areas as diverse as mathematics and electrical, electronic engineering and some of the ideas coming out of that are again, I think, particularly stimulating. Records management has clearly never been a more relevant and current topic in terms of the change, the reliance on information on record, on tape, in terms of legislation, in terms of accountability, in terms of the possibility of technology. The sort of events such as today, I think, are a really exciting opportunity to stimulate discussion and hopefully, you know, we all learn something from that and the way we think about the subject as well.

The conference should be a very interesting one. It's certainly organised in a way that's designed to be interactive, designed to stimulate and challenge ideas and so I

just hope everyone enjoys it. And so welcome to Northumbria, welcome to Newcastle. Thank you very much.

## INTRODUCTION

### The aims of the conference and the 'witness seminar' format

**Julie McLeod**

Before we begin the first seminar I thought it would be useful to say something about the conference style.

Witness seminars have their roots in oral history. In the UK they have been pioneered by the Centre for Contemporary British History and the Wellcome Trust, but have been used elsewhere. Their purpose is to gather key people together to discuss a chosen event (or topic) and capture their testimony of it. The discussion, usually chaired by a leading person, is recorded and transcribed to form a record that complements existing written records, enabling a full account of the event (or topic) to be preserved for future research.

Our witness seminars are a modification of this format. Their purpose is not to recollect and document contemporary history (i.e. an event) but to explore a topic of current and future significance to the records profession, in this case the issues & challenges of email & e-communications, and to do that by involving multiple disciplines and professions in the discussions and debate, exchanging views and experience together at one point in time.

Our invited experts and chairs have been carefully chosen to represent a broad range of roles and disciplines. They include records managers, record keepers, information and knowledge managers; legal, IT and information systems professionals, business managers and academics. They work in different sectors and come from different

countries[3]. My thanks to all of them for accepting our invitation to participate and for their enthusiasm.

Each seminar will be conducted in a semi-structured manner taking as its starting point pre-selected articles. All of the experts have read their articles, I hope you have been able to read them all too via the conference website links. The aim is not to simply evaluate the articles but to use them as a common starting point and a vehicle for stimulating the discussions. They are a means to an end, not an end in themselves.

The Chair will ask each witness to present their views on the articles and their position on the seminar topic in turn. He/she will then facilitate discussion and debate between the witnesses before opening up the discussion to everyone. And they will close their seminar with a short summary.

The principles of conducting the witness seminars are threefold:

1. the witnesses have the right of pre-emption, so the seminars will be facilitated so that they do speak first
2. the law should be observed (e.g. Freedom of Information, Human Rights, privacy and defamation)
3. confidentiality, in relation to your organizations, employment contract and/or experience, will be observed and respected. No-one is expected or required to represent the views of their organization if this is inappropriate, but to express their own views based on personal and/or professional experience. And the Chatham House rule applies i.e. the information we exchange can be used but the identity and affiliation of those who share the information remains confidential to those of us here (i.e. must not be revealed).

Returning to the conference title the *Issues & Challenges of Email & E-Communications*. Is email passé? Not interesting? Shouldn't we be more concerned

[3]The UK, Australia, Canada and the USA

with other electronic and mobile communications technologies? We could easily answer all of those questions in the affirmative but, whilst email has been the foremost electronic communication method for well over a decade, we don't seem to have managed it particularly well, either from a records management perspective, a storage perspective or a legal discovery perspective, let alone the perspective of business efficiency and effectiveness. In fact some would say it is managing us!

But we do have a lot of evidence and experience of the use, mis-use and abuse of email. Can we identify what works well, what needs to work better and the lessons learned, so that we can position our organisations to better manage not only email records but the records (and challenges) of the more recent (and future) e-communications technologies such as instant messaging, mobile and VoIP phone calls and social networking systems?

To facilitate an exploration of this topic the seminars focus on three key facets of information, records, content and knowledge management viz. people, processes and technology. We deliberately begin with the broader business perspective and the information and records implications and challenges of conducting business via email, before we look at the people perspective and ask if they are the problem and/or the solution. Only then do we look at the technology perspective and again ask if it is the problem or in fact a panacea. I imagine we will start to broaden our discussion beyond email at least in this seminar, but to ensure we address not just the present but keep an eye on the future, it is vital that the final session explicitly focuses on moving forward.

Framing the scope of each seminar and choosing articles as starting points was very challenging! The issues are complex. There are so many questions to ask and to answer so I hope the ones provided in the programme in no way limit our discussion but, as I said earlier, stimulate it.

For every article we have chosen there are countless others that would have been equally suitable, perhaps more suitable. But with a Google search of email and

records returning 163 million hits (even email & records management returned over 41.5 million) and a targeted search of the LISA bibliographic database still returning over 50 hits, selection was never going to be easy! So, from the many that were considered but not selected, a few concepts, concerns, challenges, catastrophes and statistics to set the scene….

First, catastrophes. *"Careless clicks can - and do - sink corporate ships"* is a wonderful line from Nancy Flynn writing about some of the biggest email blunders of 2003[4]. At best email catastrophes have been extremely embarrassing for individuals and organisations; at worst, financially damaging. You'll probably recall the so-called Profs case (named after the email system) involving Oliver North, when White House emails were deleted at the outbreak of the Iran-contra scandal[5]. That was 20 years ago (1987); earlier this year the White House had another email problem, announcing it had lost e-mail records relating to an ongoing investigation and admitting that some employees were "using e-mail accounts outside its control." They said that part of the problem was that "its policy was not clear enough and that it had not kept pace with technologies", such as Blackberries[6]. No doubt the White House is not alone in suffering an email catastrophe more than once.

Other examples include the "good day to bury bad news" email from a UK central government advisor shortly after the September 11 2001 terrorist attacks in America; the sacking of a UK high street bank employee whose emails revealed they had been using company time to conduct their own private business; the Morgan Stanley example where failure to produce emails under a legal discovery request lead to a $1.57 billion fine. And the online public display of over 1.5 million Enron emails revealed details of employees' personal relationships, salaries, and (worse) bank records, social security numbers etc. One could say it wasn't a wise move by the Federal agency[7] to publish everything but, equally, it demonstrates the risks of using

[4] Flynn, N. 'Biggest email blunders of 2003', Clearswift News and Events [Online]. (2003) Available at: http://www.clearswift.com/news/item.aspx?ID=230.

[5] The National Security Archive. 'The Iran contra affair 20 years on.' [Online]. (24 November 2006). Available at http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB210/index.htm.

[6] InFocus Editorial 'Ready… or not?', *Information Management Journal*, May/June 2007, p.4.

[7] Federal Energy Regulatory Commission. *FERC epolicy case study 2003.*

company email systems for personal communication. I think that's enough catastrophes for one day!

Moving on…concepts that have struck me in reading around email relate to retaining, deleting and archiving email.

"Email has transformed business but it can be a nightmare" is the first line in an article by Adam Gifford in the New Zealand Herald on 14 March 2007[8]. A nightmare because of our reliance on it, the information overload it causes, security issues and the cost of storing it etc. This lead to the development of software[9] to 'archive' emails in such a way that "only one true single instance of a message right down to the attachment" is stored, and claims of as much as 90% reduction in space used to store emails.

In terms of concepts the meaning of 'archive' here is *not* what most records professionals would recognise (i.e. a black hole!); but the concept of at least constructing that 'archive' to have only the 'master' record, and no duplicates, is very attractive to records professionals. But the same article (and others I've read) says "emails can't be thrown away" Surely I'm not the only person here who has trouble with the concept of needing to keep *all* emails for legal or any other purposes.

What about concerns?…"email is simultaneously a boost and a drag to productivity"[10] - it's fast, we can communicate across time zones, tick things of our 'to do' list, but we can't always find our emails and, when we're out of email contact the inbox just gets bigger. Recently I was out of email contact for 5 working days – I couldn't get a wireless connection in my hotel room and I came back to 303 messages. Of those only 15 had been flagged as spam and filtered into my spam box by the system; a lot more spam had made its way into my inbox. It took me 10 days to catch up on all of the

[8] Gifford, A. 'Kiwi software at frontline of email defence', *New Zealand Herald* . [Online] (14 March 2007). Available at: http://www.nzherald.co.nz/section/11/story.cfm?c_id=11&objectid=10428601.

[9] *Now called Quest Archive Manager.*

[10] Duhon, B. 'The joy of email', *AIIM E-DOC magazine*. [Online] (September/October 2004). Available at: http://www.edocmagazine.com/article_new.asp?ID=28844.

emails. I wasn't happy about that but I focused on issues that I perceived as my highest priorities. I did feel pressured by the number of unread messages in my inbox and I'm not alone in feeling stressed by email. A recent survey[11] revealed that "34% of workers felt 'stressed' by the sheer number of emails and obligation to respond quickly"; some employees "view their emails as many as 30 or 40 times per hour" – yes per hour not per day! – and half the survey participants said they checked more than once an hour. Females tended to feel more pressure to respond than males – though not me, based on my recent example!! So, stress and productivity impact are just two concerns with email and e-communications.

Finally, the challenges. There are many – volume, technology, discovery, security, people's behaviours, to mention but a few. According to the technology consultancy IDC[12] over 20 trillion emails were sent worldwide in 2006 and they predict the figure will be just under 30 trillion by 2010 by which time (they also predict) there will be 250 million instant messaging accounts! Storage can no longer be discussed in mere gigabytes or even petabytes - we're now faced with zettabytes (Zb). Do you know how many zeros that is? 21! The same report estimates that over 80% of the information in organisations is unstructured data/information which clearly includes email.

One solution to this volume challenge might be to never record 'email messages'! Sound crazy? Perhaps not. The VaporStream web-based messaging system operates such that a user opens an account on its web site and sends a message to someone. The message disappears from the user's screen and is temporarily stored on the system's server. Once it has been delivered it is deleted from the server. A similar thing happens when the recipient responds meaning there is no record of the virtual communication (unless I presume you utilise digital forensics techniques to uncover it).

[11] Conducted by the universities of Glasgow and Paisley. See Campbell, D. *The Observer*, 12 Aug 2007.

[12] Wray, R. 'How one year's digital output would fill 161bn iPods', *The Guardian*, 6 March 2007. P.27. EMC sponsored IDC report *The expanding digital universe: a forecast of worldwide information growth through 2010.*

Another solution must surely lie with people and processes. John Naughton[13] says "the problem is not with email as such, but with the way organisations have subverted – or perverted – it for bureaucratic purposes… [it] has morphed from a communication channel into a means of bureaucratic control… [it] has become a dysfunctional technology." So, he calls for people to change their own behaviour and "ask 'is this email really necessary?'" "In extremis [he says], call someone… it's good to talk"!

Since there are "lies, damned lies and statistics"[14] we may treat some of this data with a pinch of salt. But even so the statistics and examples are indicators of the past, current and potential future situation regarding email and possibly other electronic communications methods. Some highlight the links between the people, processes and technology, which form the focus of our seminars.

Now, the aim of our first witness conference was "to organise a "thinking" event; something to … encourage reflection on the "essence" of records management and to think about the future. An event that offered a different type of opportunity."[15] The experience suggested we achieved that aim and the feedback confirmed it. As the launch conference, in a hopefully continuing series, the aim was laudable but we need to build on that success and be a little more ambitious this time.

So, our aim this time is to identify topics and opportunities for research and development to help move forward. That might be blue sky, strategic research, applied research or practical, operational implementation or development. It might happen within your organisations or between organisations, involve internal or external collaboration. It might be something you can do or something you engage others to do.

---

[13] Naughton, J. '*You've got mail – all you need is a way to get rid of it*', *The Observer. [Online].(8 July 2007). Available at:* http://media.guardian.co.uk/site/story/0,,2121201,00.html.

[14] "There are three kind of lies – lies, damned lies and statistics" generally attributed to Benjamin Disraeli [1804-1881] (Quoted in Mark Twain Autobiography, Pt V Ch. 1 but also ascribed to others) Cohen, JM & Cohen, MJ. (1992). *The New Penguin Dictionary of Quotations*. Penguin.

[15] School of Computing, Engineering & Information Sciences, Northumbria University. Exploring the essence of records management: Engaging with experts. 4-5th May 2006, Newcastle upon Tyne, UK. Edited by: Susan Childs, Susan Heaford & Julie McLeod, 2006.

Achieving this aim, and any others you might have for yourselves, rests not just with the invited expert witnesses and chairs, but with all of us. The event is meant to be interactive. So, please do join in the discussion, under the management of our four chairpersons. Please do be provocative and challenging, but please do respect the opinions of others. Most of all, do enjoy the experience of *Examining the Issues & Challenges of Email & E-Communications and Exploring strategies with our Experts*.

With that, I would now like to introduce the first seminar *The business perspective*.

# SEMINAR 1:

## The business perspective: Doing business electronically – what are the records management implications & challenges?

2.30-3.30pm and 3.30-4.00pm

**Chair: Dr David Wainwright, Northumbria University**

Witness: Steve George, Iron Mountain Europe
Witness: Heather Jack, HJBS Ltd
Witness: Adrian Cunningham, National Archives of Australia
Witness: Martin Sanderson, TFPL

The starting point for the debate:

Dukart, J. 'Managing email – overview of issues', *AIIM E-DOC Magazine*. [Online]. (September/October 2004). Available at: http://www.edocmagazine.com/article_new.asp?ID=28825.

Wilkins, A. 'The knowledge within email', *AIIM E-DOC Magazine*. [Online]. Available at: http://www.edocmagazine.com/print.asp?ID=28876.

---

### WELCOME TO THE SEMINAR

**Julie McLeod**

This seminar will focus on the records management implications & challenges of doing business electronically.

Before tea, our panel of experts will explore this topic by taking as their starting point James Dukart's article ('Managing email – overview of issues') and Adam Wilkins' article ('The knowledge within email'). During the tea break I hope you can all reflect on the discussion and debate between the witnesses, and after tea, take up the Chair's invitation to join in the discussion and debate the points raised, the views expressed and add other views and opinions. There may be time even before tea to open up the discussion.

Now, I'm really pleased to introduce our first chairperson, my colleague Dr David Wainwright who is a Reader in Information Systems and also Head of the

Information, Knowledge & Systems Research Group in our School. David's research is in the area of organizational modelling for information systems adoption, planning and implementation. His current projects involve the NHS, the public sector and also small organizations, where he has focused on developing organizational analytic modelling and methods, and examining the transformational impact of ICTs on working practices. This makes him very well placed to chair the business perspective seminar. David is an elected Board Member of the UK Academy for Information Systems and a Member of British Computer Society.

The expert witnesses joining him for the debate are:

Adrian Cunningham (National Archives of Australia), Steve George (Iron Mountain), Heather Jack (HJBS Ltd) and Martin Sanderson (TFPL Ltd),

I will let David introduce them and say more about the topic. David and our first panel of witnesses, would you like to take your places at our table?

Thank you.

## CHAIR'S INTRODUCTION

### David Wainwright

Thank you for that lovely introduction Julie, and a big thank you to Julie for doing all the organisation for what will prove to be a very stimulating and interesting event. Standing up here reminds me that I've got a seat down there! I've a season ticket! That's where I sit, and also it reminds me that when we watch the match, we tend to watch the football players and we try not to watch the referee. And when we're watching the referee too much – like on Monday it was Steve Bennett - it means something is going wrong and the referee's taking too big a part in the match and we really want to watch football. So my role is really as a referee in the chair. I don't want to speak too much. But we have got a really good line up of people today. A good mixture of what I'd call consultants working for companies, independent consultant, and government and national representation as well. And we've tried to mix them up a bit in terms of order. There's no logic here. I don't mean that generally! There's no logic to my real choice of order of the speakers this afternoon. I just arbitrarily decided on the basis of **some** of the content. It seemed to fall into a sequence. So we have four speakers and Julie's ably introduced them. We will be running through in the order of Steve George, Heather Jack, Adrian Cunningham and Martin Sanderson. But we'll start off with our first speaker Steve George from Iron Mountain. Steve is a records and information management consultant with Iron Mountain working in the public and private sectors. He has got a **lot** of experience, including undertaking consultancy on the legal aspects of records, so I'm sure he's got some interesting views to do with compliance etc and whether we should be in control of our records or not. So let me introduce Stephen George, our first speaker...

## WITNESS STATEMENTS

### Steve George

Hello everyone. I ***did*** think, David that you meant that there was no logic to my presentation but I wasn't offended anyway, so not to worry. I did try and borrow a football earlier to get on the pitch but they wouldn't have it, so it's on with the day job. I've only given one witness statement previously, and that was in less

salubrious conditions than this… I'd originally intended to provide a title up front to this piece of work and to allow my ideas to develop from there. But it soon became apparent that it was quite impossible to do that without having allowed my ideas to develop more fully onto the page. So I'll come back to the title shortly if I may. It's always occurred to me at least since I started to be aware of the strategic value of records management, that information created by or held within new technologies - such as email - is no more or no less in need of management than information held in the traditional physical paper format.

It also occurred to me that I must have grown up with these technologies being reasonably young, until I realised I hadn't actually ***seen*** or used an email until c. 1997. What I am agreed upon in this modern age is that the rules of engagement have changed somewhat, and having spent the past few years telling clients that the public sector practice of declaring something a record is essentially unhelpful because it tends to suggest that other information is somehow less worthy, I now find myself coming full circle and asking clients to consider which of their emails provides evidence of business transactions and which provides evidence of more casual correspondence. So for example, which is ephemeral, without substance and can be more easily cast aside?

To my mind, records management is not rocket science. And to illustrate that fact I typically point out that the email requesting that you meet your colleagues in the pub after work is an example of something that can be comfortably deleted – unless of course it provides evidence of you being somewhere that you shouldn't have been, in which case you would need to make sure that it's deleted, purged from the deleted folder and overwritten, to provide some comfort that it won't return to haunt you at a later date. We mustn't forget here that by their very nature emails have already been sent to someone, so somebody else will have a copy. However, we shouldn't be afraid to delete such emails, providing that you do so in the normal course of business, in line with an approved retention schedule, the chances are that you will be deemed to have acted in good faith. Perhaps not in being in the pub in the first place, but certainly in having thought about the way that you manage your information compliance obligations. And what of that term compliance? Well, it's certainly raised

the bar somewhat, which is why I've termed the title of this piece…this statement 'Raising the bar' because it's given records management something of an image makeover. Not that it ever lacked worthiness, just the longer it festered in the administrative domain, the more readily has the excuse been to ignore it, because it didn't seem important, strategic or sexy. Now the C level executives and company directors can't get enough of it because compliance is tied up with ethics, which they know is important. Poor ethics equals poor reputation, equals fines ($850 million worth in the case of Morgan Stanley in punitive damages and some more on top in compensatory damages). So what that equals is somebody at the top not having done their job as opposed to the little people at the bottom. Granted some of those at the top might not have a clue about what they're required to do about compliance, but they at least know that they should be doing it. So ever so slowly the little people at the bottom are rising to the top to guide the beleaguered boardroom through the maze of records management. As our US counterparts at Iron Mountain always say, records management has moved from the back room to the board room. Interestingly enough in recent engagements in both the public and private sector which I've conducted, a number of company wide information audits have proved that to a man, staff agreed that emails may constitute formal business records. But when we set that in the context of a clear lack of robust infrastructure or procedures in place to manage email, it's perhaps not surprising that email is treated more casually than something that is physical, something that you can see, something you can make a determination about how much space that will hold in a filing cabinet rather than something that can take up virtual space. But the solution to these cluttered inboxes seems to be either the automatically generated warning notices sent from IT, which is likely to encourage nothing but rapid and random deletion, or the squirreling away of emails in .pst files located on local hard drives. These are of course subject to the idiosyncrasies of the user. Every user has their own filing secrets, which will have their own myriad tree structures with imaginative folder names such as 'Fred's folder' or 'miscellaneous.' The IT department ***may*** decide that the solution is to purchase more storage space for server based emails, which are then backed up to tape. The point being that none of these solutions offer the centralised control or the retrievability that is crucial to facilitate compliance and discovery or disclosure obligations. They are merely convenient and by default a lazy option. So how can we make it both convenient and compliant? Records management as I mentioned previously isn't rocket science. It's

just that most organisations are not in the position to introduce policies onto a blank piece of paper. We are all faced with legacy situations, righting the wrongs of the past. So my contention is therefore that we shouldn't panic but draw a line in the sand and move forward with robust policies and procedures delivered up front to ensure we do not repeat the mistakes of the past. And as the Dukart article stresses 'the ad hoc strategy really doesn't work.'

In the absence of policy up front, individuals will use their own discretion and operate departmentally, not at an enterprise level. The small percentage of official email records that are buried in an ever - increasing volume of casual emails causes major issues and risk for corporate IT, legal and records management. Corporate records management departments have to contend with the fact that email is under the control of the individual, not the organisation. Records managers themselves are struggling with how to ***extend*** the corporation's retention policy to email, to make it workable and to get employees to retain important email information and to delete the transitory information. As the Dukart article asserts, clear business rules are key. And I would suggest ideally applied within some type of email automated software. Those rules are key to the understanding of tagging what should and shouldn't be kept. The situation has to be addressed at some point, however uncomfortable or onerous it may seem when we peek under the bonnet. What other choice is there? Just to put the head back in the sand.

With increased demand for mobile email devices such as BlackBerries, - and I noted recently some 20,000 people a day are signing up for BlackBerries according to retail figures - I would argue that email is in some ways managing us, which I think Julie alluded to. Which is why we must challenge the ***perception*** of the need to manage email in the first place and individuals' beliefs that emails belong to them. We must recognise, if nothing else, that ***all*** records (irrespective of format), are corporate assets. An enterprise wide policy, allied to technologies or methods which add a degree of automation to email management, through centrally controlled repositories or at the very least, simplified email classification schemes which associate employees by their functional department will make it much easier for employees to classify email records. And perhaps keep them out of trouble. And email can get you

into trouble, as a number of casual users have found to their detriment, personally and professionally.

For the record, I would prefer that end users didn't have control over what is and what isn't kept but I am realistic enough to realise that a robust change management process must take place to persuade everyone of the values of relinquishing control. And in order to sell the virtues of transparency in email management, and to demonstrate that such a concept is not an invasion of privacy, firm-wide collaboration and communication is needed. Allied to Wilkins' contention that you need the 'right blend of technology and policy' - this suggests to me that what is needed is an active steering committee, comprised of senior management across all departments to proactively address the changing business climate and the ever-increasing regulatory controls for records and information management. But unlike Wilkins, I don't believe that his contentions can possibly sit outside of the domain of records management. They are intrinsically linked.

So to conclude, in the absence of policies, operating in functional silos is inevitable but by acting consistently you will not only demonstrate that you are acting in good faith, but provide a reduction in the complexity of business process, reduction of non-compliance and litigation risk and a reduction of storage and access costs. And yes, ultimately compliance (however ***complex*** or ***costly*** it may seem) is a good thing because it facilitates building solid foundations of controls and processes that support sound business decisions and management.

I don't think it's relevant to get carried away and to tell people in this country that they're going to end up in jail for not managing their emails effectively, as may be the case in the United States, because it simply doesn't happen. So we can use scare tactics if we like, but by demonstrating the benefits of stepping up to the bar and raising it through re-education about compliance in email management and the dangers of using it casually, we will be able to move forward. And remember again as I said, although you may have deleted something, by its very nature someone else will have a copy of what you sent. Thanks.

### David Wainwright

Thank you very much for that Steve. I'm sure there are lots of comments which will stimulate debate, a little bit later on. The way that I plan to run this particular session is we'll get all the witness speakers to make their statements and then if we've got time afterwards we'll have a few questions. If not we'll move on to the break and then we'll have all the questions after the break, to give each speaker a chance with the time allotted. If somebody has got a really burning issue, though, and they just can't contain it, in the spirit of debate please put your hand up and say something.

### Steve Bailey

Can I take you up on that?

### David Wainwright

Go on then, fire away!

### Steve Bailey

Point of clarification. You mention you have to draw a line in the line of sand and move forward. What does that mean you're planning to do? Are you suggesting that we just don't worry about what's there and just delete it?

### Steve George

You need to make a valued judgement about what part of that legacy is valuable information and what isn't. But I think it's important to draw a line in the sand and get people singing from the same song sheet. So you've got a robust policy upfront that everybody's complying to and then deal with the legacy information on an ad-hoc basis, if you like, going forward you can't just um.. because a lot of people look at legacy issues and think right, I've got loads of paper at the moment so I'm just going to scan it all in. But the actual ***value*** in doing that is – could be very little and it's a

very costly process, so you've ***got*** to look at those legacy issues in the right context. Some of that information, be it an email or anything, may not have been looked at for a long period of time. It may not actually be that valuable. So I think you've ***got*** to get people into the mindset of doing things properly, however that may be – upfront, by doing things consistently. A lot of people get problems in courts of law or something, simply because they don't act consistently. One department's doing things one way, another department's doing something another way. And judges don't like to see that inconsistency, because it implies you haven't thought about what you're doing and you're just doing it willy nilly. And therefore you may be acting with impropriety – you've got something to hide. But a legacy issue can often ***scare*** individuals. If I'm going in and consulting, they've got ***such*** a legacy issue and they're so hung up on this legacy issue that they can't move forward and I think need to deal with the legacy issue straight away. I think if you draw a line in the sand, move forward and bring the legacy issue forward at the right time, then that's the best way to do things.

### David Wainwright

OK. Thanks. Thank you for the question as well. OK, may I introduce the next speaker – Heather Jack. Heather is an independent consultant and also the immediate past chair of Scottish records management with lots of records management experience.

### Heather Jack

OK, thank you. Hello everybody. I'm not going to give you a snazzy title, I'm just going to bring you straight in there. The challenges we face today, in terms of managing email as records and indeed providing parental control for its wee brother instant messaging and future generations of potential electronic delinquents [laughter] are really no different from those related to the management of controls to all electronic records held by an organisation. I firmly believe we within the records management profession already know what has to be done as outlined in the two articles selected as a starting point for this session. We know the problems; we know how to resolve them – but we can't do it on our own. We have to put our money - and some sensibly directed funding - for finance where our mouth is. And influence others

from within our organisation, so together we can start to control the beast that so often seems to control us, putting ourselves, our companies and stakeholders at various levels of risk from wasted time to reputational and financial ruin.

So why are we all here today? Why on several client training occasions have I been met with a sense of shock with the revelation that '***yes*** – emails can be records too!'

The first reason is there's been a complete lack of clarity in terms of what kind of tool an email application actually is, and what processes it should support. A victim of its own success, it's not only filled a vacuum for communication information sharing, but for many has become their prime personal information storage system. Its purpose was a method of despatch, but it's perceived as a location. It was also perceived as an informal communication tool. And people now use it as a formal ongoing record of things those same people would ***never*** have said in a letter and certainly wouldn't want published. 'But of course it was just an email. Emails can't be formal records!' Oh yes they can! And they are.

We may have strict procedures for logging, actioning and filing incoming and outgoing paper mail, but we've not recognised the need to apply these same principles to our email. Had we clearly defined its role from the start, and applied traditional records management principles, in ways that exploited the opportunities the email offered us, maybe we wouldn't now be faced with this overactive volcano of uncontrolled information. Because it was so ***quick*** and easy to create, duplicate, receive and share information in comparison to its paper counterparts, we thought it was smart enough to manage itself. It can be no coincidence that this volcano erupted just at the same time that organisations were doing away with filing clerks and centralised registries. People have had to self administer and have never been made aware of the need or taught the skills to do this. This move from paper to electronic mail and its management is a key reason why people now regard the information they handle as personal, and not corporate.

We haven't been blind to these problems, but unfortunately organisations have taken a reactive, silo, format, technology driven approach; rather than a proactive, integrated content and business driven approach when it comes to imposing controls on their emails. Email policy and guidelines tend to be introduced to resolve problems rather than to meet records management requirements, or exploit creative and collaborative opportunities. Well, in practice and in focus, they tend to re-emphasise email as a format isolated from general information asset management, the business functions email content relates to and the process that it flows through. Email management in ***practice*** has been seen solely as the domain of IT in terms of both funding and control. The solution is often to throw it into a large repository and set a retention period for the format, not the content. While well intentioned, this has merely escalated the problems of managing emails as records. Auto archive and our email archiving solutions take no account of the business needs of security, search and retrieval, retention and disposal. Restrictions in mail box sizes forces us to make retention deletion decisions based on the short term value to them, and possibly their immediate team. And I haven't copied you here, I have a squirrel here in my presentation too.

Or they squirrel away emails they don't want to get rid of, making them even less accessible now even to themselves as well as others, and creating security, discovery and disposal headaches for the future. As a result, is it any wonder that users generally believe that when it comes to email, space is a problem – not the sharing of information and the role of email as records.

And this takes us neatly to ***another*** reason why we're here today. And that's training. As with other desktop applications, many staff often get no email training at all. You're self taught, bringing and applying yet another unique set of working practices to each new post and organisation. They also potentially leave in their wake an inbox, outbox and multiple private folders full of so much dross that even if there is a perception that there may be formal records in there, that need to be corporately managed, the sheer effort of sifting out these golden nuggets from the large vat of

slurry is too mammoth a task. So, click, the whole lot is deleted. Where training ***is*** provided, it tends to be offsite and focused on format – the hows of email functionality and not the whys of email and other areas of information management. There's no awareness of the needs, let alone training on how or why we need to manage email content – and associated metadata - as a record of the proof of the actions we have taken and the decisions these have been based upon. Where problems arise at the desktop, support comes from the IT helpdesk who fix the symptom, not the problem. Helpdesk staff are very rarely trained or deliver the information aspect of technology. Many records managers have done their best, with the little support and resources at their disposal. I have seen ***fantastic*** examples of good policies and guidelines, but sadly this is all too often left to the whim of middle management and support service areas in departments to apply. These same people have diverse pressures and so long as they themselves have little awareness of the relevance of good records management to their service, implementing these policies and cascading best practice through the organisation will never be top or half way down their 'to do' list.

So, after this depressing picture, now we've established some of the reasons why we're here, how do we gain control and develop an environment that can tame these delinquent email records? To do that, we must first go back to the point I made at the start of my statement. ***We*** know the problems, ***we*** know how to resolve them, but we can't do it on our own. We need to engage others in the organisation, but who are they and how do we get them to join us? We certainly need commitment and support from senior management – not just to get funding for the latest email archiving software (which is a case of instant gratification if ever there was one). They need to understand both the real and serious business risks that uncontrolled email poses, as well as the great benefits of properly harnessing the power of email and related technologies as aids to communication and knowledge creation. Senior management needs to be bought in not only as to the importance of best practice, but also the effort required to achieve the necessary changes in working practice and culture. Without teams of practitioners employed across the organisation who can practically implement records management policy and support users, records managers will be

restricted to issuing guidance, which will either be applied inconsistently, or simply ignored. We need to persuade HR managers to include information management within their staff competency frameworks. Induction courses must no longer pay lip service to these skills - with a 10 minute guide to FOI and records management and an email policy which focuses solely on preventing the sending of dubious email attachments to colleagues. Efficient working, knowledge creation, capture and exploitation, compliance with data protection and sector specific regulations, effective handling of enquiries and complaints – ***these*** are the persuasive arguments that we ***must*** bring into play. We need to get IT on board, for heaven's sake, ***we*** should be the "I" in IT. We can help them reduce performance pressures on their networks, and storage pressures on their servers. And in return they can help ***us***. And for all staff, let's get some mutual back scratching going. ***They hate*** having 4000 emails in their inbox, or being constantly at threat of receiving the 'your mailbox is full' email and the subsequent rushed job to delete, delete, delete. We need to help them embrace rather than avoid the necessary changes they inevitably have to make. The purpose of securing this cross - organisational buy-in is essentially twofold. To get users and decision makers to understand the risks inherent within email through uncontrolled email storage and poorly understood retention deletion actions and to attract the operational and organisational investment needed to properly change our use of email and our management of email record content, as well as minimising the threats from malware which may harbour spyware, viruses and the like. Together we need to analyse our use of email within the context of the broader functions and activities that these emails support and their records management requirements. Where ***does*** email currently fit within our processes and activities? Where is its use appropriate? Where can we improve current practice and where are there better, less risk - laden alternatives? Very simple steps can make a big impact and achieve some quick wins. For example, where appropriate, move from individual to group email to process common standard transaction-based requests and then build towards workflow, with record declaration built in. We also need to ensure that email technology is used as a business tool. Working together, records managers and IT staff can ensure technology tools are exploited to support effective email management – maybe through rule - based indexing archiving, or classification based on content, or to the use of standards of email templates with built in retention rules. Training needs to be done on the information used, what we use it for and the benefits to the individual and

the organisation that will justify the effort to change and to adopt best practice. They have to understand the implications of their current behaviour. For example, the risk of inadvertent exposure of sensitive information and simply the wasted time and effort. We need to give them practical rules that are workable and ensure that staff understand their logic – why a subject header is needed every time, why they should stick to a single topic for each email and why sending links rather than files internally is often a good idea. Also practical how to's, when to's and what to's. How to and when to manage a chain of emails to ensure it's a complete record. What emails to save ***as*** records – and monitor user behaviour after training to ensure they're actually applying it at the workplace. Give them a chance to provide feedback, and raise issues. Only in this way will people start to change their working habits. And I've found a really good hybrid approach which is a combination of kind of monitoring and training which actually has a really good effect in changing peoples' habits.

To be successful, we need to balance the control requirements of records management with ease of use. Otherwise, we can easily get buy-out from users who have been used to the freedom and personal habits that we've allowed them to have in the email environment. Ensure all who need to access a shared directory ***can***, otherwise people will quickly revert to sending attachments rather than links. Ensure that the file plan is workable, understandable and that staff are familiar with it and understand its logic and ensure that email folders map to that plan and provide naming conventions for email titling, which again are consistent with corporate naming conventions.

Email can become an ally rather than a challenge for records managers. People hate the thought of the effort of filling in lots of index fields to apply control, but do you know what? They're happily filling up to three or four fields of information for every email they send. People keep all emails 'just in case.' That just in case is about evidence of what they've done. Unfortunately, they're not keeping records in the corporate context and the 'just in case' is also to cover ***their*** back should someone suggest they did or didn't do something. Entirely self motivated? Not records management motivated, you may say. But have they had any choice, given the

complete lack of corporate motivation? They heavily rely on email but are aware of the problems this brings and they ***do*** want our help and this presents us with a quick win opportunity, so long as we support users, rather than obstruct them with carrying out their jobs.

So, my blueprint for success. We need awareness, buy – in, commitment and ownership from all, from the top down. We need to analyse the role that email plays and a ***clear*** agreement of what it should and should not be used for. We need clear policies, procedures and retention - consistent and part of an overarching information management policy, supported by training, support, performance monitoring. A continuous improvement cycle. And don't forget to test these things to ensure they actually work in the real world. Regular policy review to ensure policies are updated to take account of changes in email systems, business processes and so on. And practical support for staff to improve their practice, starting at induction. Better use and exploitation of available systems functionality to take as much of the records management effort out of the hands of users.

To meet these challenges and take the integrated service approach necessary to address them, records managers themselves have got to change too. And finally, we may say that hindsight is a wonderful thing, but no one realised in the early days of email the detrimental impact it would have on us all through lack of control. However, experience should be a great teacher. Let's make sure that we learn the lessons that managing email as records has taught us and ensure we apply them to future generations of records born digital.

Thank you.

### David Wainwright

Thank you very much for that Heather. I think we've got a common theme emerging – it's called past the squirrel.[audience laughs]

Our third speaker is Adrian Cunningham from the National Archives of Australia. He's come a long way (probably to see Newcastle United really!) I'm sure it's for this event. Adrian has got a great title – Director of Strategic Relations for the National Archives and he oversees the archives collaboration with government, industry and national partners. So Adrian has got a wide range of experience and an excellent profile. I won't read it all out. But it's quite impressive. Without further ado, Adrian.

## Adrian Cunningham

Thank you very much. And, thank you very much to the University of Northumbria for making it possible for me to come all the way here to Newcastle. It's my first visit to Tyneside and I'm very very pleased indeed to be here. I've been exposed to Geordie culture from a distance in Australia, through such wonderful British exports such as 'The Likely Lads,' 'When the Boat comes in,' 'Auf Wiedersehn Pet' and of course the perennially underperforming exploits of this great football club! [audience laughs]

And as a Spurs supporter, it was with mixed feelings that I was here on Monday night to see that your current manager Sam Allardyce seems to be turning around that culture of underperformance…but I wish you every success.

I'm particularly pleased to, and very honoured to, be on the advisory board for the three year research project that Julie McLeod is leading. Because the question that that research project is addressing is the number one strategic challenge that my organisation and I daresay most of my counterpart organisations around the world are faced with. We've developed all sorts of impressive regimes and policies, standards, guidelines and tools for good record keeping. But we're having a devil of a time getting organisations to implement them and deliver the kinds of record keeping outcomes that we're all looking for. And really today's witness seminar is a

microcosm of that. It's I think, as Heather said, we know what needs to be done with email. It's just how the hell can we make it happen in real life organisations. That's the topic of this witness seminar. But it's also the topic of the research project, bridging the gap between our beautiful frameworks and theories and concepts and actual practice on the ground.

Email has utterly transformed the way business is conducted. As Julie has said and others have said, it has taken over our lives. In my particular case, I've often lamented (not entirely in jest) to some of my colleagues that they could really just throw my duty statement out the window and replace it with two duties – Adrian is required to attend meetings and answer emails. Because there are times when that's all I ever seem to do with my life. Now that's a bit disingenuous because of course the meetings and emails are in fact generally the way business is conducted in a lot of organisations. My organisation is certainly not unique in that respect. It's the principal means not just by which communications occur and information is transmitted; it's actually the principal means very often by which decisions are made. So, just to illustrate, in my organisation – the National Archives of Australia – we implemented a fully electronic records management system back in 1999 and the statistics for the last 8 years demonstrate that over 80% of the records captured into that system are emails. So if people are doing the right thing with their records capture, what that suggests is that 80% of the business of the organisation is conducted by email.

So if email is the principal means by which business is conducted, then it stands to reason that email records provide the principal source of evidence and corporate knowledge of business decisions and activities. As such, achieving adequate control over business critical emails as key organisational assets should be the top record keeping priority for most organisations. Unfortunately the records keeping issues associated with email are all too rarely given the priority that they deserve. And when they ***do***, the response of the organisation is often totally inappropriate and unsustainable. So why is this so? Why is email recordkeeping so often given a low priority?

Despite the fact that email is so central to the conduct of business it is still very frequently seen as an informal, ephemeral and thus low-value source of business information and evidence. This view is exacerbated by the fact that a lot of email is indeed ephemeral and low value. Its ease of use is the reason for its popularity. As such, users naturally resist any moves by organisations to regulate or control email in ways that might impair its ease of use. Too often organisations live in a state of denial about their unmanaged email anarchy. Email applications give users unparalleled control over their personal space, their work space, and so forth, and I think the word or the phrase 'personal computer' is very apposite here, 'personal' computer, 'personal' tools, they're not really corporate tools…the software applications deployed on personal computers give individuals a great degree of flexibility and power over the way they manage their own work processes, and their own information spaces usually to the detriment of corporate control. Also the sheer volume and speed of email communication has speeded up the world in which we work and good recordkeeping has, as a result, often been squeezed out of the equation. So, why do organisational responses to email recordkeeping usually fail?

Usually by the time an organisation realises that it's lost control of its email recordkeeping, the human beings within the organisation have lost the habits and skills of good recordkeeping. Instead of working with its staff to re-inculcate these habits and supported by clever and friendly technology, too often the response of the organization to the problem is framed in solely technological 'blunt instrument' terms. More times than I can remember I have seen cases in organizations in Australia where the respond is one of three or a combination of three:

- The first is to institute technological rules whereby all emails are deleted after a certain period of time, ninety days, for instance, regardless of the value of the emails;
- Second response , increasingly commonly, buying storage technology (because storage is thought to be cheap) that stores all emails that are received and sent (regardless of their value) in huge, unmanaged storage area networks or the like - these systems give staff practically no chance of finding anything that they might need when they need it; so in effect really don't add any value to the

business, all they do is store away the smoking gun a discovery order might pull out because the lawyers can search for weeks or months to find that smoking gun.

- And the third approach which I guess is increasingly falling out of favour …you still see it around the place…is relying on a (usually ignored) policy of printing emails to paper and filing them on a paper file.

All of these responses are bound to fail. The print to paper response will fail because of the disjunction between the business process and the recordkeeping solution. But I'd like to concentrate most on the approach of storing all your emails in a huge storage system.

And to give you an example, of how this sort of thing can come about within organisations, over the past couple of years we've had an interesting set of stories in the Australian Immigration Department. Much to the embarrassment of the government and to the senior officials of that department, there were a few fairly celebrated and well publicised cases where people who were actually Australian citizens were either deported or put into long term detention in extremely remote parts of Australia like Port Hedland, because the Immigration Department couldn't find the records of the fact that these people were actually citizens. Now you would think a record of someone's citizenship would be a fairly business critical record for the government, but it didn't seem to be managed as such by the Department of Immigration. And there were two separate commissions of enquiry – the Palmer and Comrie enquiries into what exactly went wrong with some of these celebrated cases.[16] And of course, both commissions of enquiry found that in addition to the Immigration Department being a dysfunctional organisation with a fairly questionable corporate culture, one of the manifestations of that was dysfunctional information systems and poor record keeping. And interestingly enough, while the government played a fairly dead bat to most of the criticisms in the Palmer and Comrie reports, the one thing the government did actually hold up its hands and say 'yeah, fair cop we didn't do very

[16] MJ Palmer, *Inquiry into the Circumstances of the Immigration Detention of Cornelia Rau*, Commonwealth of Australia, July 2005; *Inquiry into the Circumstances of the Vivian Alvarez Matter*: Report under the *Ombudsman Act 1976* by the Commonwealth Ombudsman, Prof. John McMillan, of an inquiry undertaken by Mr Neil Comrie AO, September 2005.

well with record keeping. We will all try to do better in the future'. And it may be they thought that that was something they could safely admit to – that no one was going to string them up for bad record keeping. But anyway, the fact that they did admit to poor record keeping meant that they were, of course, required to do something about it. So the new senior management in the Department of Immigration called in - in fact paid - for the National Archives of Australia to come in as consultants to do a detailed diagnosis of the health of the record keeping of that agency and to submit a report on where were they going wrong, what could be done about it. We provided them with a very detailed report with something like 87 [actually it was 73] recommendations I believe, so that a lot clearly needed to be done. And to the credit of the new management of that agency, they publicly committed to implementing all 87 of our recommendations and published our report to them on their website, so that the whole thing was open and transparent.[17] So that was great. Of course it wasn't the only consultant's report into dysfunctionality at the Immigration Department. There were also consultants' reports into the IT systems, the corporate culture, the place and a raft of other reports, some of which were also made public. When they had the full suite of these reports, the senior management sat down and then tried to map out a strategy for implementing the changes that needed to be implemented.

So that's the kind of scenario that we're faced with, and that's the nub of the email record keeping problem that we're facing, I believe. Any solution that discourages us from thinking about managing our information assets is only postponing the problem, which will continue to grow and will come back to haunt us - ***worse*** than ever (probably much sooner than anyone expects).

First and foremost good recordkeeping systems are social and cultural systems. Good technology that makes it easy for people to do the right thing is important, but good recordkeeping cultures will keep good records even with bad technology – whereas

[17] http://www.immi.gov.au/about/department/perf-progress/dima-improvements/_pdf/naa/Recordkeeping_in_DIMIA.pdf

bad recordkeeping cultures will not keep good records, regardless of how good the technology is.

Interestingly though, following on from the immigration department exercise which was a cause of a certain amount of depression on part of me and my colleagues, the good thing that came out of it though, was that case, together with a number of reports from the Auditor General in my government, which highlighted poor recordkeeping in a number of agencies in the Australian government…the issue had clearly bubbled to the surface sufficiently that the most senior bureaucrats in the Australian government decided to take it seriously – a group called the Management Advisory Committee which is the committee of the most senior bureaucrats in the Australian government, instituted a study of recordkeeping in the Australian public service, and the results of that study were published in this little book, released in August. It's called 'Note for file' and I see this particular development as tremendously heartening, because for the first time, it's really got the issues centre stage with the most important people in my Government. And that's been the struggle that we've been dealing with for so long, is getting the key people to take the issues seriously. The head of the Australian Public Service, is in fact an ex-patriot 'pom', Dr Peter Shergold, at the launch of this on the 31st August had some very commonsense things to say and some commonsense things that are reflected in the report itself. And, most particularly about email. He concluded that most email traffic deals with matters of fleeting interest and importance and that "We shouldn't be cluttering up our record systems with such material. ***As in all aspects of our work, judgment is needed***".

He was essentially arguing that public servants are paid a lot of money to do the right thing by the people of Australia. It is not too much to expect of them to know what's a business-critical email, and what's rubbish that can be got rid of. Now you'd think that's not a particularly startling thing, revelation, but I've been astonished at how many times I've talked to public servants: They've said 'You expect me to decide what to keep and what not to keep?' How difficult is it to work out that an email about going for drinks after work is much less valuable than an email confirming the signing of a million - dollar contract? These are the sorts of things that public servants are paid to do, it's not unreasonable to expect they can make those kinds of judgement

calls, I don't think. And in fact, providing that the organizations give them the training, the tools and the support that they need to capture the right kinds of emails and the right kinds of corporate systems, I believe when public servants fail in that fundamental duty, the general public has every right to expect their head on a platter. So it's a call for common sense, if you like. A call for some basic support from organizations. Leadership from the top, and an expectation that people will apply common sense to that most important and critical means of business communication.

Thanks

### David Wainwright

There's lots of fascinating issues to follow up. I've written half a page of notes on various things I think we might follow up on afterwards. I think we'd better hurry on because we're running close to – very close to the schedule at the moment. So we'll move on to the final witness speaker who is Martin Sanderson from TFPL Ltd. And Martin's a senior consultant – again with considerable experience in records management and information management. And an advisor to government and private and public sector organisations and has also been vice chair of the Records Management Society. So we welcome Martin.

### Martin Sanderson

Good afternoon everybody. Looking at the football green it's nice to know that the centre of Newcastle has such a green agenda! [audience laughs]. Actually records management and this conference are like a football game. We have a place to play our game. Like a football team, you need to have a strategy for your game and good teamwork. Of course this leads to nothing if you cannot attract your customers or your sponsors. So forgive me today if I do a little bit of dribbling, [audience laughs] a little foul here and there but hopefully without drawing blood. No matter what, it's playing the game that matters. So…if I had a title for today, I'd probably choose 'You ain't seen nothing yet', because if you think that the records management environment is bad now, it's going to get much worse in the future.

Firstly I'd like to clarify that in terms of e-communications; I'm not restricting my thoughts just to email. In fact it will include ***all*** the new technologies coming into effect quickly changing the game plan. Web 2.0 technologies – the new social network and social media technologies - are going to have a significant effect and are proving ***far*** more difficult to manage from a records management point of view - even more than email has been in the past. In terms of e-communications, I'm therefore talking about anything that assists an organisation to manage its business between one organisation and another, between the organisation and its customers, between the organisation and its partners and suppliers. A complex mish- mash of communications, but with a very serious purpose. My other proposition is that actually just talking about email as a technology is not really going to give us the answers and I think we can only understand the problem and the solutions if we understand email in the context of the external world and in the context of the organisation. And in ***that,*** I would suggest it is very much a changing game. So solving the problems of today is not going to actually help us in terms of solving the problems of five year's time.

And of course e-communications are both the enabler of this change and also the consequence of this change. So it really sits at the heart of the problem, but not as a problem itself. So talking about organisations, I just want to paint a picture of what I mean by the changing organisation. Most of us are old enough probably to have (with some exceptions!) worked in an organisation which was still very much based upon the old Victorian business structure, a very self contained organisation, where an entrepreneur brings together the resources, the people and the finance to create products and services and then actually to act – to produce those into (and to provide those) to a very defined market place. And of course the whole characteristics of that organisation was round structure and control (as you see the models frequently in terms of…the senior management, who actually create the policy, give the direction; a ***big*** class of middle management who actually interpret those policies and make them into something; and then the workers on the bottom end who actually in a rather disciplined and subservient way carry out those actions). But not quite as it happens

today, I don't think. It would be very nice because, actually, clearly in terms of understanding that Victorian model, you actually see the same model for records management. I see in so many records management programmes this wonderful triangle. You know, policies, guidelines, action, discipline, and training at the bottom end. But I don't think our future actually gives us that opportunity. And I suppose at the heart of this is understanding whether the records management model that we all have in our heads today is really going to actually provide us with the right framework for meeting tomorrow's organisations' requirements.

I was in a conference earlier this week and I was quite impressed by a representative from Nokia– quite impressed in terms of what he was indicating was coming next – which will really change the game plan. But also in the fact that in that organisation model, within Nokia they represent their organisational structure putting the executive at the bottom of the triangle rather than at the top. On the basis that all they are there for is to facilitate the tensions between various components of the business in order to produce the goods and to make the profit. Quite an interesting change of perspective from a major international company. And of course e-communications was not only about the day to day running of the organisation, but it's a major part of their innovation programme and the use of the social media and email in terms of communicating with the world – rather than opening up their organisation to a mass of information and extracting that back into the organisation. Trying to put records management controls around that I think may be quite a challenge!

So what are the characteristics of an organisation that may represent a challenge to records management? First of all, many organisations, or the business processes or value chain in an organisation, actually do not usually belong to one organisation. You see more and more often today that value chains can cross over many organisations. My example, is in the pharmaceuticals industry where you may actually work collaboratively with universities and other research organisations during the innovation process. Many pharmaceuticals outsource their toxicology. Many of them actually outsource their IT support and various aspects of doing

business. Most often they have a whole range of suppliers for their manufacturing process and again, outsource their clinical research to lots of other organisations. So actually, we talk about accountability and gathering knowledge - well to gather the knowledge and actually manage the records across that value chain, you're actually dealing with ten, fifteen organisations. So the focus is not within the organisation. If you're only working to work to apply your skills within an organisation, I'm not sure actually you're doing the full job in terms of records managing. And of course there are various strategies to overcome this.

The second thing is of course the customer – or in an e-world – customer has become very dominant, in the sense that in an e-world, a customer can buy his goods from anywhere in the world, on any day of the week he likes. So that means, he can change his - he can go to any provider. If you're dearer than someone in another country perhaps, he can swap or leave him straight away. There's so much information out there he can soon find out there's a better piece of technology or there's a nicer dress or something in another organisation. So that increases the flexibility and the opportunities to the customer. What does that mean to the organisation? Well they have to build in a great deal more agility into the organisation so they can respond to these changes. A bit like the Stock Market. You know, when there's all that information, things can change very quickly. So they have to be much more in tune with their customers than they've ever had to have been in the past. Secondly of course in the nature of organisations, knowledge workers (unlike the Victorian times) knowledge workers today are probably the dominant part of any workforce. Most of the value out of the workforce comes from the knowledge and skills of the people who work in there. And I will later explain what that could mean for records managers.

And of course access to services are today both location and time independent. So actually, records management 9-5 five days a week may not be sufficient. Managing the e-communications does not actually stop at 5 o'clock on a Friday night in so many organisations today. Customer care extends well beyond that. And of course, a big

change in employee/employer relationship. In the past, people did as they were told. Very few people do as they're told today. If they did, it would make our job much easier. Employees are much more individualistic, are becoming much less corporate than they ever were - much more independent. Their value to the organisation is not how many hours they work in the day, but in terms of what skills and what knowledge they bring to that organisation. An organisation no longer promises you a career path or long term employment. The contract is much more around developing you to give you the skills and knowledge to make you marketable, but not necessarily in their company. A big difference in terms of the psychology. So that leads to people thinking 'Oh what's in it for me?' Not 'what's in it for the corporation'?

OK so what? What does this mean to records management? To answer ***this*** question, I think I'd like to pose ***three*** questions. First question is, who owns and controls the knowledge lifecycle and the related records across these organisational barriers or boundaries, facilitated by e-communications. Second question, is how do we separate records from information? Identifying and capturing what is important in an increasingly expanding and unstructured and complex, dynamic, growing information pool. Is it really possible? We talk about that but I mean obviously we can decide an email that agrees a fifty million pound contract is pretty important, but there's a lot in the grey area. And of course the volume is getting more and in social networking is going to grow even more. And the conversation in the pub, or the email in the pub in the future may be just as much about business as a social occasion because the technologies allow that. And the third question then is how is the changing employee/employer relationship likely to impact on records management?

So let's deal with the first one. Who owns and controls the knowledge lifecycle? And the related records lifecycle? In my scenario of the multiple organisations within a value chain, who are you working for? Are you working for one organisation, collecting records from all the others in a central collection? Or are you managing them across all those organisations? I don't think so. These organisations anyway could be around the world. You know, we outsource to India, we have international

organisations that work in the States and outposts anywhere. They may have people with different languages, different management styles, different practices altogether. So actually this essential structure and control becomes impossible in an environment which is as complex perhaps as that scene that we're explaining. So, does that traditional model of structure and control really give us the right tools and the right methodologies for dealing with that sort of problem? Perhaps in the future we won't be actually working for an organisation - that means most records managers would become independent contractors. And what we'll do is not employ you as an organisation, we'll employ you as an independent to manage the records and information across a value chain. And when that value chain changes, you'll be back in the pool to be employed to help with another value chain. Because actually belonging to one organisation may not be relevant any more in the future. No one's bleeding yet are they?! It's an interesting thought isn't it? We can be very good at writing policies and guidelines and suggest how to motivate people, but how do you do that? How do you get compliance across that sort of anarchic type, complex process? Not easy. Of course, I know that some records managers will respond then and say 'well what about the legal regulatory compliance. We've got you haven't we? Because we have to have that and we can actually build that.' Well that is true because legal and regulatory compliance is a big risk to an organisation. But senior managers are becoming very sophisticated in their risk management. And there is a risk to compliance but there's also a risk to opportunities. And that is still very much a balancing act. Compliance is not a given and don't forget, because of e-communications, there's no reason that companies cannot move parts of their business and their records to other countries, where there's a less regulated environment and we've seen evidence of that already over the last decade. Of course in terms of ownership, as well as looking at it from the other end, we're now beginning to see the emergence of the super record. The health record or the education record. Well actually, although that record may actually be in the hands of many organisations over many years, who owns it? You do. The individual owns the record – not the organisation. That may be true. That may also extend to customer records and all sorts of other areas, where actually the individual takes control of the record rather than it belonging to any one organisation.

Then there's the big question of separating records from information. I think I find that ***really*** difficult. I can understand the definition of a record – yes great, but in this complex mish - mash of electronic information, our users don't find it easy to differentiate with that. I think if we're too dogmatic in trying to define records, and trying to expand that definition to try and cover more records… more and more information, then we're going to get lost in that ***mass*** of information. It's undoable in my view. So there's got to be another solution. Tell me what it is and I'll charge you a lot more next time I see you!

So yes, in terms of in that situation, I mean one could actually foresee that the record manager's role in the future will actually shrink because organisation will not actually invest in trying to bring controls around that larger mass of information. In fact, they don't want it to be controlled. In terms of innovation, in terms of co-operation, control actually goes against some of the purpose of the e-communication environment, the social networking. They're looking at it in terms of a strategy for the future to change their organisation, to keep in touch with their customers. So is the future for records managers just really work on those compliance records, to narrow their scope of involvement, where companies may actually see the sense in terms of investing their extensive resource in actually ensuring those compliance records are in place? That could be – that could be the future. Do we have the right frameworks today for managing the future? How does a file plan operate in a cross-organisational value chain? Our file plan is usually specific to that. Where's our function going to be, without functional units and departments as part of a future organisation. The trend certainly in the corporate world, other than your legal and your finance, is away from this. After that, everything is becoming project based and flexible and moveable. So you don't have these functional departments to hang your plan on. Some real challenges there and perhaps the idea of our file plans will fall away. And the metadata model may be a model for the future, although that has its problems too, especially if you don't have a common language. And of course technology may come today, but we can't guarantee that. That usually comes and aids complication, but not solutions. Of course there are opportunities. There are opportunities for records managers, I see it, in actually trying to do better around that organisation

between customer interface, bringing information into market intelligence into an organisation in a way that it can be managed and directed and targeted to the right parts of that value chain, to have some effect on the business, and add some real value. So although I paint some ***bad*** examples, there are also many opportunities there.

So finally, the change - quickly coming to the last question, the changing relationship between the employees and their employer. What about the X/Y generation? The people who've grown up with technology - the people who're used to social networking already through various technologies. They're going to be a completely different group of people working in our organisations to the ones we know and love at the moment. There're even ***less*** likely to be corporate. They've seen people like us who've been through the corporate career path who've had their pensions moved to cash pensions, you know. Why, why should they be loyal to any one organisation? They're going to be loyal to themselves. They'll be building their own personal information knowledge base. So ***there*** could be a role in the future for records managers, as the go - between, between helping the individual manage his ***own*** information and records. At the same time, working for the organisation and making sure by doing both, you're extracting for the organisation the information and the intellectual property and the compliance records from the individual's collection, but at the same time supporting the individual to actually grow his ***position*** in that organisation and his worth for himself. So, that would be an interesting situation. So in the future, we may not just have the personal trainer, we may have the personal information manager.

So looking at the future then. Just one or two quickies then, just to do that. So, yes. Perhaps the future of records management is going to live in the contract – the social contract or legal contract between the people and the organisation. Perhaps records management won't be here in five years time. Perhaps we'll be seeing the emergence of the ***super*** information professional, which actually takes a much more holistic view, bringing together the KM, IM, and RM skill sets into one in order to solve

solutions. Perhaps we can just sit back and watch. Or perhaps we can help to shape this future. For me, I think it's all about providing records and information in the context of how people are working and how people are working is changing by the day. But, just like the football team, no matter how good your players are, how good your team is, what league you're in, a lot of effort and a bit of passion gets you a long way.

Thank you very much.

## OPEN DISCUSSION

### David Wainwright

So I hope you've all got really interesting questions but bear in mind the questions that you're firing at our panel (our expert panel of witnesses) you can carry on with later so the question is not lost if you don't ask it now. Does anyone want to start off with a question?

### David Bowen

The question really is, can you react to comments and suggestions. The comments are that records management needs not to think of itself as a specialist topic but as a topic that everyone needs to know. We're not the equivalent to brain surgeons or networks systems administrators. We're equivalent to teachers of citizenship or of English or of arithmetic. Everyone should know our topic.

A fundamental problem with emails I think, which was skirted round, which I'd like a reaction on, is ownership. Within an organisation there are certain things which are at least pro-tem, mine. My office, my chair, my pen, my pad of paper and you just don't come and take those from me. The other things are the things I know the organisation owns. The organisation's project, the organisation's shareholders, their conference room. Emails, unfortunately, are mine and in a very special way, because if you want an email that I have, with a paper file I would have to give it to you. I would – it would no longer be mine, it would be yours. With email, I just give you a copy. It's easy. So the ability to continue owning emails and share them is a major inhibition to our goal.

One possibility I think I'd like a reaction on for solving this is team email accounts. Take away people's personal email accounts, make them work on team email accounts, department email accounts. The other possibility which we've tried some with people in the Netherlands is to attach the metadata (the index terms) and then file the email in central filing according to document management and records

management principals, on the command 'send' or on the command 'open.' So before you send it or immediately after you open it you force the metadata to be added to the email, and put it into central (corporate) storage.

### David Wainwright

Ok thank you very much for that. So we have basically two groups of questions. The first one is a generic question (I think which is fascinating). Is records management everybody's? Is there a common core competence that everybody should be taught and that everybody should understand? So that's the first question. The second question relates to ownership and perhaps to trying to take control of email in terms of filtering and tagging and splitting it out into corporate vs. personal. So we'll take the first question first – is it everybody's job?

### Heather Jack

Can I maybe start with that? I am passionate about - and I mentioned it in my talk - about information management competencies for all staff. I think it's fundamental at the end of the day - It's their information and they're managing it…they're not. managing it very well. They need our help. It's absolutely in their hands and we're the ones that can actually go in there and help them. So I completely agree with David in that and I would also remove the word records when we're doing that because that gives people – they've got a very clear perception.

Records is 'after I've finished with it.' Records is just paper and archives. Records are 'not relevant to me.' Now if you say to them 'why are you keeping all your emails?' 'Well it lets people know what I did' and you point out to them 'Actually, that's a record you're keeping, then' - then they kind of get it, so the definitions are confusing. I think I would take on board also what Martin said which is it's not about records, it's about knowledge management, it's about the processes that happen around information and helping people to get the best out of that for themselves and their organisation.

### David Wainwright

Thank you Heather. Would anybody else like to respond to that?

### Martin Sanderson

Well I agree with that. It's not about records, its information management in its broadest sense. But actually how do you ***do*** that? You can't do that very easily from you as the records manager teaching them that. Because people are looking at this from how they're working, how they're living their life, their own environment. So it's quite difficult to match that sort of training to actually feed in to that. And of course, even the practicalities of that, because people – you can train people and make them aware of things, and they'll have forgotten in six months. It's a permanent process. So I think – you can disagree.

### Heather Jack

Can I disagree with you Martin? I don't think that it is as hard as you see it. I think the important thing is that those people who are doing the supporting, the training, have an empathy with the people they're actually training. So they're doing that information management training within the context of what that person does. And also you don't go and train them one day - you actually have it as a strategy of monitoring. It's tied into HR performance and appraisals. And potential – particularly with the kind of knowledge management side of it…potentially you actually give people maybe targets or some kind of rewards. There's much more to it than coming along to a records management training course where you have a wee snooze, enjoy the chocolates and go. [laughter] Although that is, I have to say sadly, what does seem to often happen.

### Martin Sanderson

I think, if it was going to succeed, I think the starting point is not in the workplace - it's at school.

### Heather Jack

Oh I completely agree with you too, yeah. But we also have to deal with those of us who are way…

### Martin Sanderson

Past it! [laughter]

### Heather Jack

Speak for yourself! [laughter]

### David Wainwright

Feel free to interject from the audience as well to join in the debate. Adrian?

### Adrian Cunningham

Yeah, well I would say that everyone who has a white collar job is a record maker and should be a record keeper and that is particularly the case since the abolition of filing clerks and so forth. There's been a devolution of record keeping responsibility up to action officers. But just because everyone might need to be a record keeper doesn't mean that everyone needs to be a record keeping professional. So the average public servant or white collar worker doesn't need to know the intricacies of developing file plans or disposal regimes and things like that. But they do need to understand when they've actually made a record so that they can capture that record into an appropriate corporate system using the appropriate procedures and that's not too much to expect of people. And thinking back to when I first joined the public service as a twenty year old, I didn't learn record keeping at school, but I did when I was twenty because I was introduced to the mysteries of 'the file'.

And not long after I was introduced to the mysteries of the file, I learnt that I had a director general who was inclined at the drop of a hat without any warning

whatsoever, to ask to see the file on a particular topic and he would want it right then, without delay. And if that file wasn't bang up to date, you would get carpeted and you would only have to get carpeted once and you didn't let it happen again. Now that was a really useful lesson in being a record keeper. And I've carried those lessons throughout my career. Now I think that was in the paper era. We need similar social reinforcements in the digital era. You need to have the record keeping systems that people can use, but you need to have the social and corporate expectations that reinforce the need for the human beings to actually do the right thing and to sanction them when they don't do the right thing. But on the other hand, the organisation has an obligation to make it as easy as possible for the human being to do the right thing. And I'm very wary when I hear vendors coming along saying we can automate the whole thing. We can take the human being – the human decision making process right out of the equation. I think it's a good thing to try and automate record keeping decisions and actions as much as possible, but I don't believe you can ever fully eliminate the human being from the decision making process.

### Steve George

Yes, I'd pick up on some of those points about devolved responsibility. I mean I fell into this profession, which at the time I fell into it wasn't actually seen as a profession. Not certainly in the legal domain that I was working – in that it wasn't treated strategically. So basically lawyers and fee earners were worried about the information when they actually needed to find it, rather than actually thinking about what they were filing at the time that the information was conceived. So the history of it, records management, is of people being ***re***active, to learning to be proactive in terms of setting robust policies and procedures in place. I mean, this could run and run. We're gonna get more questions than answers (which is probably a good thing). I don't think you necessarily have to be a specialist, but I think that records management is a strategic discipline, but by nature, like we say about the mysteries of a file, everybody is involved in records management at one level or another and has to decide how to – and ***will*** decide if there's an absence of policy up front. They will use their own discretion and make decisions about how to file those records. And their discretion might be fantastic. They might be doing something great. But then you move down to the HR department and they're doing

something else. And at the end of the day, we have to remember that these records and information are all corporate assets, they don't actually (OK, your pen might belong to you, your stationery might belong to you) but records created in the normal course of business are corporate assets for everybody to use. And if you take your filing secrets with you and you go and get hit by a bus, then if you haven't documented that information, then there's a problem. So then you introduce risk management. I could go on and on…

### Martin Sanderson

I think as an educationalist I should answer this one. Because actually telling people how to manage records is very difficult and this is why I said it has to start at school. Because we have to create a framework so people can accept those instructions. And I think that's what's missing because that socialisation process, or that awareness of (you know) this is something for ***you***: this is not something to meet your corporate requirement or your legal requirement, defined by the corporate. So I think - I think there's a real element there - I'm not sure what that is - but we've got to prepare some people to actually accept those messages. And the other challenge is as you say, that's about email, but if I'm involved in the blog (where there could well be records, knowledge records or others) who decides when it's a record? Because it's an interactive thing. A lot of people are developing the message or developing the record of content. So when does it become a record? Who decides that? What sort of record is it? And if it's a shared one, where does it go? And this is the social media that is, you know, opening up now and a part of corporate strategy to the use of it.

### David Wainwright

Maybe there's the concept of the dynamic record which I haven't got my head round before, but something that you can't just set in a point of time and that you actually have track.

### Steve George

You know, some of our colleagues in the public sector will probably take that conversation or that blog or that wikki or whatever, and try and declare it a record every day wouldn't they? So when business closes - that's a record for the day. You know, I don't find that helpful declaring something a record particularly, because to me it's all information., you know, But as you say, the debate is just going to run.

### David Wainwright

OK. I think we'll open it up. I'll come back to the other second question in a minute because I think that will be a generic issue about ownership

### Edith Pringault-Adam (Aberdeenshire Council)

I find it interesting that Martin talks about "it should start at school", because if any of you has been at school recently (at a college or whatever) the first thing they will say is 'you will open your folder and call it 'Edith' because this is ***your*** work' [laughter] and this is how it works. Now recently, I've just finished a master's degree here. No one told me how I was supposed to organise my files. Nobody explained what would happen to the records we create on the Blackboard which was a discussion panel thing. You don't know what will happen to any of that. And it's only available to us for the two years we study. It's not available afterwards. So all of this information that we have created and shared is not available. [Julie McLeod discreetly advises that it can be downloaded].

So I think there's been a lot of interesting points raised. I think education is essential, and as I was just saying, I think the personality of the records manager is essential. Because if you have a shy person doing records management, you will not get *anywhere*. You will not get known, your message won't get through. I've changed jobs recently and I met a former colleague who still does records management for me and I say 'But I am not there any more.' 'Yeah but I still do it for you'. And I find that very complimentary, but I think well that means that the

new records manager hasn't shown her face yet, hasn't been round, saying it's important.

So, something else that was mentioned. I think it is – you mentioned, it is my desk and my chair. When people work from home now, they work on the train, there's no more 'it's my chair and my desk' and I think email is maybe not very good, but wherever you are, somebody can contact you through email, or through texting, or maybe through the phone, but sometimes it doesn't work like that. So you no longer sit at a chair all day, everyday. You're moving around all the time. Or if you're a good records manager you should be moving around all the time and never sit in one place. Sometimes the only time people can communicate with you is through electronic means. Adrian, you mentioned beware of bad technology. Well, yes. Beware of bad technology and I'm in an organisation that works with Lotus Notes version 6. [audience acknowledges] You can't do anything with email. It stays in your box and that's all it does. You cannot extract it to anywhere. So all this thing about records management and sharing information and this, well – if you have bad technology, it doesn't happen at all.

### David Wainwright

Well thank you. I think that's a general question and comments about education linked to who owns this particular problem. And I think that's something fundamental which I think again is a topic for general discussion. You know, where does it start at school? Do we all do it? Are there enough records managers in the world? Are there enough people interested in this generally in the world? I think probably not, from my experience. But we'll come back to that

### Rachel Binnington (Freelance archivist and records manager)

I'm Rachel Binnington, freelance archivist, archivist manager. I was recently at the Society of American Archivists Conference in Chicago when I stopped at the big Borders at North Lakeshore Drive and was encountering a barrage of books on the personal organiser and how to organise yourself and how to be über - organised. And I'm going through these and I'm thinking 'wow, not one of these people – not any of

the people on the editorial boards are records mangers or archivists or knowledge managers.' None of these people have ever heard of a certified records manager. They've never heard of the CIDAA, they've never heard of a file plan, and yet they're dictating to a very captive public, who are very receptive at least in the US it appears, because there were five publications just in the periodicals section alone about how to organise yourself personally. And then you branch on to different business publications. I just think if their personal organisers are encroaching on our territory, then at what point to do we say, actually, you know it may not need to be a specialised profession but you should have at least *some* training and you should have to work within organisational contexts to then turn around and say to an individual 'this is how you do it and I'm going to tell you *this* is the way forward.

### David Wainwright

Can I come back to you in a minute, Rachel, ok? I'll throw that one back to the panel quickly. I think that relates to barriers to entry, to the profession. So if we ignore records managers now and any personal trainer can come in and say 'I'll help you organise' - how does that impact on everything, because there's encroachment going on and the message is going to go missing isn't it? Because anybody out there will set themselves up as a consultant to come and tell you how to manage your email in the way that in the past they've come in and done time management courses, and that is a chance for a cosy chat and a cup of coffee and a tea and half the day off work.

### Martin Sanderson

Well I think, basically it's not something I think we can control. The world is a complex place and a wild place and the idea, you know, that we can say only records managers can give you records management advice about your files is just – is a non starter really. We're just a part of the big world and anyone who sees an opportunity will do and the fact is, as you say, there aren't enough records managers, so if other professions and other people are actually contributing - probably that's a good thing because it means a bigger message is getting out to more people. So there isn't a black and white, a right and wrong in how to manage your information. There are many

ways of doing that. You'd see that in one organisation where people can identify a hundred different ways of how people manage their information and the only judgement is 'does it work?' Not 'does it fall in with a records manager's view of the world'.

### Heather Jack

I think it's going to be results based and if those people who are out there who are writing those books and they're doing a good job, then good on them. And I imagine there are as many doing a rubbish job as a good one. And to be honest, there will be great records managers and poor ones. It's actually about the quality you bring and also I think we have been in danger of being quite an isolated profession and I think we actually have to start as I've said in my statement that we have to start embracing other people's positions and things and actually go out there and then I think we'll make a much bigger impact.

### Adrian Cunningham

Actually I think the issue of personal record keeping is tremendously important. It's actually something that's been close to my heart for many years. I've spent most – more of my career working in personal record keeping - type spaces than in government and corporate record keeping spaces. And from an archivist's point of view in terms of documenting society, most of what goes on in society actually goes on in peoples' personal spaces, not in corporate or government spaces. And I think there is an issue there about how individuals capture and manage the essential information running their lives, how society as a whole might want to value that material and carry it forward for future generations. And the very first thing I ever wrote in the area of electronic record keeping was back in 1993 and it was on this issue of what archivists could do to influence and improve data, personal electronic records keeping. And I was saying just as in government and corporate spaces , we've said we have got to get involved in the front end, I actually said well collecting archivists, who collect the private records of individuals need to try and get involved in influencing the front end… I agree that we can't control it but we've got a responsibility to try and exert a positive

influence to help individuals…make them keep good digital records. And if that means that maybe we should be writing those kinds of books, or at least contributing to those kinds of books, I think that would be something that we ought to be doing as part of our mission, and I think we shouldn't be neglecting it just because it's not in a corporate or government space.

### Rachel Binnington (Freelance archivist and records manager)

Sorry, I have just another anecdotal interjection. There was an article that came out in the New York Times about personal archiving and mapping out how one should go about scanning documents and creating file ware. It was circulated round one of the records management listservs, and there were about forty-five responses that all said 'nowhere does he cite that there's a profession called 'records management' that does this, and that help you with these questions'. Nowhere is he citing any Best Practice, he's just kind of created a 'willy – nilly, scan everything that you want to save and then buy a server to store it'. And everyone who replied said 'Somebody should write a letter'.

And I'm just as guilty as everyone else because I sat there and I got incensed and I heard him say 'just scan everything'. It's the last thing, you know, I'd encourage clients to do sometimes. It doesn't solve all your problems. So I thought, somebody should really write a letter and I don't think the letter ever got wrote. There is a point where we have to stand up and sell this business to professional organisers or personal information mangers, and say 'You know what? Let us help you define what the message should be and then help you sell it, and then market ourselves better as a group of professionals who aren't stodgy and stuck in the background or even change the way that records and archiving are defined to fit in with what the public writ large see them as being defined as. You know, my Mom didn't know what an archivist was until I went to Grad School, and she fell in love with genealogy. You know, and it took falling in love with genealogy for her.

## Rachel Hardiman (Northumbria University)

Hello there Rachel Hardiman, University of Northumbria. I was thinking a little bit about what people were saying and I wonder how, to what extent do people think that the problem with managing email is a general problem really (a) with managing collaborative and dynamic records or environments, and secondly, really, this kind of blurry area between what is a record and what is information. Because I mean email itself started out as a method of communication and a collaborative tool. And I think that's where some of the real ambiguity arises, because it's a conversation and people don't think of a conversation – you know, if I stop anyone here and say "I've had a fantastic idea for what we're working on, let's have a discussion about it by the water cooler", – no one's going to suddenly come up with a microphone and say 'right, this is a record. Let's get this down.' [Laughter]

But when we're discussing it in email, that's what we're essentially doing…that's what we *think* we are doing. And as Adrian said, that's a social and cultural thing, and it's quite jarring and quite disjunctive to suddenly have someone saying 'no, that *conversation* is to be recorded and held up in a court of law.' And I think this is a big problem – it's a problem of perception. But I wonder how much it is also just a difficulty in a discipline that really has come - was born out of quite a bureaucratic registry system, where a thing – you know, a file was a file. There was a place for a thing in a file. You might have to copy it onto that file, but in a far more dynamic area, where it's not that simple and not that straightforward. And also an area if you're talking about, say, a collaborative project or whatever, where not everything is a record that should be captured into a record system, a recordkeeping system, and that is a record as defined by ISO 15489…but is nonetheless an extremely important record in the more general sense of the processes involved, of the dynamics, of the culture, of the ways and means of arriving at the decision. It's a very important intellectual record and I think this is an area….you know…that does…

### David Wainwright

What I'm trying to capture is when is a record not a record? It's back to this same question of translating from (or morphing I suppose is a more trendy word), from a conversation into a record. When does that transition actually occur?

### Steve George

Can I just take that point? If you're – as soon as you put something down in an email, you're effectively – you've got an audit trail. It's there. You've sent an email to somebody and someone can turn round and say 'you've said this.' And it's there and it's clear, unless you've somehow manipulated the email to say something that you haven't. Whereas if they rely on the conversation by the water cooler, you'd often have a situation where - and it happens in court - 'he said this', 'she said this.' You know, you're relying on what somebody said and somebody having to, you know, vouch for what somebody said. I like email because there is an auditable trail and, you know, I've got a record of what somebody said and the work that I've done. And I can prove that I've done something. Whereas if I conduct all my business dealings by the water cooler or something like that, then unfortunately I've only got either my own memory or somebody backing me up on what I've said, to go by really.

### Adrian Cunningham

Yeah actually, you mentioned ISO 15489 and I actually think it actually provides the answers to those questions because it talks about your need to identify your record keeping requirements and put in place suitable systems for capturing and managing the records that you need to capture and manage. And in a sense, appraisal from a 15489 point of view is not deciding how long the record is you've got ought to be kept for, it's actually deciding what records you want to create in the first place and in what form.

And so to illustrate that with an example, another major public administration scandal in recent times in Australia has been the so-called 'children overboard' affair. Which is where there was a boat load of refugees heading towards the Australian coastline.

There were reports coming through naval circles that these refugees were so desperate to be picked up by the Navy that they were throwing their children into the water. The government got hold of this, demonised these people and then there was a taskforce set up for the Prime Minster and Cabinet to look into the whole thing. It became a huge public issue and subsequently an enquiry - after a federal election, not before - [laughter] and of course the enquiry was saying to the task – the people on the taskforce - 'Where are your records of your deliberations?' And they weren't able to produce them and in fact oral testimony before the enquiry from a very senior public servant said 'Oh well that was a conversation by the water cooler', strangely enough. And the commissioner of the enquiry took a very dim view of this and said 'It's not good enough for senior public servants to make important decisions or convey important information in water cooler conversations. You need to keep a record.'

And so getting back to 15489, if you ***know*** that's your record requirement, you put in place the systems and processes to ensure that the records are made, kept, captured and managed. And that's not rocket science but it is the message that so often is overlooked in the real world.

### David Wainwright

I'm very conscious of the time. These conversations will evolve over the next day (especially in the other two groups of technology and people). Oh, a last word from Suzannah.

### Susannah Hanlon (Northumbria University)

I won't be here tomorrow. I want to ask this question. I was interested in your response to New York Times. You said 'write a letter' and you didn't say 'write an email.' Yeah, so that was the first thing that came to mind. When studying and going back to education (I think it was more along the lines of 'thinking back to school education'), I learnt how to write a business letter, I learnt how to write personal letters. When I study a language I still learn how to write a business letter in that language and how to write a personal letter in that language. But we don't make that

difference with emails and I wonder if we need to think about the content of the email in order to help the person we send the email to know how to store it. When I correspond with Julie, I always know where to store Julie's emails. Because anything personal is sent in a separate email to anything that is to do with business. So this must be what records management training does for you! [laughter].

### David Wainwright

Yes I think the issue as well is that there are a billion people out there who don't have these thought processes, so I think that's something we've got to think about. OK. Julie?

### Julie McLeod

Sorry, I'm going to cut off these marvellous conversations and discussions. Can I just thank David, for chairing the first seminar – which is the most difficult - and all four witnesses for doing a brilliant job of getting the conference off to a great start. So can we thank them first? I'll just quickly get my last penny in and say - I've written down 'shouldn't we be writing a book, with or without Google, with or without Microsoft, about how to manage Google docs and all the rest of it'? So I think there might be some co-authors in the group.

# EVENING RECEPTION
## BALTIC Centre for Contemporary Art
### 5.25-7.30pm

**Gary Malkin, Librarian & Archivist, BALTIC Centre for Contemporary Art**

Quay TV and other keys to Baltic's memory

View of current gallery exhibitions.

Delegates gathered at the BALTIC Centre for Contemporary Art, a gallery housed in a former flour mill on the south bank of the River Tyne for an evening reception courtesy of the conference sponsor Iron Mountain UK Ltd. It was held in their new educational space on Level 2 which is adjacent to the Library and Archive and has views of the River Tyne looking towards its mouth. The lights sparkled in the darkness of the autumn evening.

BALTIC, renowned for its distinctive and ambitious exhibitions, it has no permanent collection. With delegates sitting on the variety of 'funky' low-level seats, **Gary Malkin**, BALTIC's Librarian and Archivist, explained how the gallery captures its 'memory' through video interviews with artists, freely downloadable podcasts (www.balticmill.com/podcasts) etc and its latest innovative service – Quay TV. Quay TV provides access to the gallery's previous exhibitions at different levels of detail, from short videos of the exhibition as it was staged, to video interviews with the artists, to impressions from visitors.

Delegates were then able to mingle and discuss the day and BALTIC over drinks and canapés.

# SEMINAR 2:
# The people perspective: People and email – the problem and the solution?
## 9.00-10.30am

**Chair: Zoë Smyth, Northern Ireland Office**

Witness: Catherine Hare, formerly United Nations, New York
Witness: Teresa Waring, Northumbria University
Witness: David Gibson, Crutes
Witness: Ian Wooler, TFPL

The starting point for the debate:

Caplan Grey, M. 'Mitigating the risks of messaging', *The Information Management Journal*, Nov/Dec 2006. Used with the permission of ARMA International (http://www.arma.org).

Stebbins, L. 'Email is evolving – are you?', Searcher, Feb 2007. Used with the permission of *Information Today* (http://www.infotoday.com), all rights reserved.

---

## WELCOME TO THE SEMINAR

### Julie McLeod

Good morning and welcome back. I hope you enjoyed yesterday and last night at Baltic and have had much to think about and discuss; and are looking forward to more discussion.

This morning we have our second and third witness seminars and this afternoon we have a final panel discussion. The schedule for the seminars today is slightly different from yesterday in that there won't be a break between the witness debate and the audience involvement.

So, without further ado, our second witness seminar, entitled 'People and email – the problem and the solution?' focuses on the people perspective.

Starting points for the debate are Maureen Kaplan Grey's and Leslie Stebbin's articles. I'm now delighted to introduce the seminar's chair, Zoë Smyth, who is Senior Records and Information Manager at the Northern Ireland Office in Belfast. Zoë manages the Belfast Records Team who have the primary responsibility for EDRM and Intranet Content Management, and I've no doubt they are busy preparing the records for devolution next year. Zoë was awarded a Winston Churchill Travelling Fellowship to study the management and use of electronic records in North America, which took her to NARA [National Archives and Records Administration], the Library of Congress, the National Archives of Canada and, prior to joining the NIO, she worked at the Public Record Office of Northern Ireland (PRONI). I'll let you read more about her career in the notebook.

With Zoë are four expert witnesses from very different backgrounds – Catherine Hare, Teresa Waring, David Gibson and Ian Wooler – whom she will introduce. Zoë

## CHAIR'S INTRODUCTION

### Zoë Smyth

OK, good morning everyone. Yes I did enjoy the reception at the Baltic and hope everyone else did. This morning, just to make sure everyone enjoyed themselves and to wake those up who went on out after the Baltic, and because we're beside a football pitch, I'm going to ask 3 or 4 questions and if the answer to the question is yes, I'd like you stand up, do your exercises, and stand up. [laughter]. So the first question is 'How many people do not have email at work?' Sit down – it's easy. The next question is 'How many people only have work email at work? And to clarify that, you don't have a Blackberry, you can't dial up wirelessly at a hotel, you only have access 9-5 at your actual workplace. So anyone wants to stand up? OK a couple of people. So, if you can dial in or have a Blackberry or whatever, have you taken any measures to restrict that access? i.e., have you made a conscious decision not to have the Internet or email at home? [laughter]. Two people. Most people have access 24/7. If you have access, when you go into work first thing in the morning, has anyone in the room decided that for at least the first 30 minutes each day, or longer, you will not turn on your Outlook or Lotus Notes or whatever the email system you have? You actually open first thing in the morning at work? Sometimes [laughter]. This time I'm standing up because I've made that decision.

OK. Wasn't too strenuous! [laughter]. As I thought. So email is pervasive. There was some interesting discussion, as Julie [McLeod] said, yesterday afternoon. And hopefully when the witnesses talk we'll pick up and develop some of the issues from yesterday. The business perspective certainly is connected to the people and peoples' views and use of email as a tool. Some key comments or phrases I picked up from the witnesses yesterday, and hopefully the discussion will continue, are: 'My inbox is my own', 'I like keeping email because it's an audit trail. It shows what I've done. It is evidence.' Julie's point was that she went away for a week, five days and she ended up with 303 emails? And it took her 10 days to cope with that. I took away from that some key points that she mentioned after she gave that example – i.e. the volume that was the 303 emails, the timescale (the 10 days it took her to cope with that). But more so, she then went on to talk about prioritising. The tool let her down, in a way. She couldn't dial up wirelessly in the hotel when she was away. So therefore she couldn't

cope with the volume, or mitigate or manage her email. And that affected the timescale when she returned to work. But also, then she mentioned that it wasn't just the email that she was prioritising. She'd other tasks and other work. So she didn't let the email prioritise her.

Some other comments: 'Emails will be sent to someone so a copy exists.' 'What can we do as records managers? We can't do it on our own. Other professionals, other users, we need to get them involved.' 'We should be the I in IT.' 'We're only postponing the problem. It will come back to haunt us sooner than we think.' There were a lot of people issues from the session yesterday.

We've four witnesses this morning and it's my job to facilitate the discussion. It is a witness session first and then we'll try and let people from the floor get involved in the discussion and let the comments and discussion build up so that hopefully we come up with some issues addressing some of the challenges.

So my witnesses have said they'll keep to their allotted time and begin their opening statements. I'll be waiting to give them the red card if they don't have time! What I have said is once they've finished their statements, they're free to start commenting on the other witnesses' statements or bring other issues to the discussion once they sit down. So they will have more opportunities to get the discussion going.

So without further ado, I'd like to first of all introduce Catherine Hare. We're going to have ladies first. And she has recently returned from working at the United Nations for about 18 months. So Catherine.

## WITNESS STATEMENTS

### Catherine Hare

Good morning everyone. I'm really pleased to be here and have a chance to make my statement. What I want to do is make a few observations and then focus on one

particular group of people who have a very important role to play within email management.

So I started to read the articles as I was told to do, because I'm a very compliant person. [laughter]. And I felt they provided a good summary of the nature of email, how it's evolved and some of the key characteristics of the situation that we're trying to deal with and it was presented as an organisational and personal tool. And as a tool then, it's only as useful or as useless or beneficial or dangerous as the skill or knowledge of the user allow. OK. So it's obviously not quite as dangerous as a chainsaw being wielded by a drunken person in a crowded shopping mall, but it is a powerful tool (and I think we're already had a number of examples – a number of negatives, particularly the negatives). And it can damage your productivity (obviously from Zoë's introductory questions). We began to sense that and we've got Julie's specific example. It can damage your health. We heard yesterday how stressful email can be. It can hit you in the pocket – not us perhaps individually, but we heard of the fines that had been levied against Morgan Stanley yesterday. And that it can also damage a firm's reputation.

So that therefore means that the users need to understand what it is for and how to use it. And I hope that as the discussions emerge we get a clearer idea about that.

Now there's just a slight aside, but I am going to come back to the point. I've just recently moved into a flat (downsizing as I've retired). And we've had great challenges in managing our books. But as we were sorting through our books – and in fact I've forgotten (I'll just go and get it). I came across a book from my teaching days, Alvin Toffler 'The third wave' published in 1980, which I'm sure some of you already know. So I thought I'll just look in the index. See what it says about electronic mail and lo and behold, there is a reference to electronic mail. And I just want to read a couple of quotations from there. 'The first wave was the agricultural revolution. The second wave was the industrial revolution. The third wave, the high speed revolution.' And there he described 'the compression of office tasks'. 'Instead of the manager having a secretary to whom he dictated his letters and so on, those intermediaries were removed and with the combination of the new communication technology, it is the individual executive who did their own jobs and the postman and his heavy post

bag were being replaced by an electronic postal system.' And I always remember when I taught the students about email, I started by saying, what we're dealing with here is a postal system. It's all about transporting things from A to B. And in fact Heather [Jack] yesterday mentioned that it was a system designed for despatch, and it's now being used as a location. And electronic – 'the electronic postal system was pioneered by the advanced industries' and reading between the lines (because he didn't exactly say who the advanced industries were) but it was the IT companies who were developing their own technology. And then his quotation which I think is really interesting. He's said 'instead of transporting paper, the new system moves electronic pulses. It is the electronic impulse that effectuates a transaction with a paper bill or receipt or statement going out afterwards merely to validate it. How long the paper will be needed is a matter of dispute.'

I'll just leave that with you [laughter]. He also talks, as I've said before, about the demise of the secretary and the executive doing their own word processing. And then he says 'the coming word quake' (which I thought was an interesting word) 'means much more than just new machines. It promises to restructure all human relationships and roles in the office as well.' So this was in 1980, so a good man.

So after that little aside, I just want to sort of come back to my own thoughts from reading these two articles. I'm not sure if you've had the same experience as I've had but in fact it was hinted at again by Heather yesterday, I was never taught how to use email. I was taught how to use email software, but I was never taught what the role of email was within the various organisations within which I've worked. It was just assumed that I would know. So I'll just leave that one with you and see whether that's your own experience. And I think actually if we consider emails as just an electronic postal system, is it possible to be an emailer? I don't know. I'll leave that with you. But as the article by Stebbins confirms, email is used for multiple purposes for which it was never intended. For example, archiving and workflow. So we're trying to use something which was developed for one thing for various other things. And I emphasise this point because I want to come back to it in relation to the group of people I want to talk about.

So... Email's now becoming old hat. It said so in one of the articles. It's for old people, so I feel very at home [laughter]. And particularly as the new technologies of instant messaging and SMS take over in the world today where the instant 24/7 communication is the goal. As Zoë's just demonstrated – we're all falling into that trap. But I was interested to see some statistics recently and apparently there are 1.6 billion email boxes in the word today. Again, lots and lots of noughts. And the rate of email traffic is expanding three times faster than the number of mailboxes being opened. Now I didn't understand what the implication of that was, but I share that with you anyway. But there are only 250 million instant message accounts. So it's a well established technology. It's been going for at least since 1980, but it's still relatively young. But what I think is really interesting for us, and relevant to what I'm going to say next, it's been adopted as the preferred method for formal communications within business. So this is obviously of particular interest to us as records managers, as it implies that email messages are the outputs of formal transactions, and therefore are (or could be, or should be) records.

But does the email creator and receiver know this? And what about the systems administrators and the IT staff? And I want to focus on the IT staff.

So we need common understanding and rules about what email is and how it should be used in the specific context of the organisation within which we're operating. But what should that common understanding cover? I think yesterday it was mentioned that often email policies cover acceptable use, rather than as a transport mechanism for records. And who should set the rules? Should it be us – the records managers? Should it be senior managers who are going to have to carry the can? Should it be the legal advisors? Should it be the IT staff? Should it be all four? And are there others besides?

So as I said, I'm particularly interested in the IT staff and I noted the almost throw away comment in the article by Stebbins which said 'even IT staff only use a small fraction of the bells and whistles that come from Microsoft Outlook.' We heard yesterday again from Heather (sorry to keep quoting you Heather, but you obviously made a great impact) – our records managers can't do it all ourselves. Zoë mentioned that again this morning. And then having seen that quotation, in that statement by

Stebbins, I came across something else which again I found really interesting, which was in the media section of The Times last week an article by Ron Condon entitled 'Are you prepared to cope with the data explosion?'[18], a whole supplement devoted to business information management and it actually had an article about coping with data explosion', which said "The IT department cannot achieve all this by themselves". Which I thought was very revealing from my recent experience working at the UN and I want to focus, as I say, on the IT staff. They're in the strongest position – I don't know what it's like in your organisation, but in the organisation where I was recently working, they had the biggest budget, they had the biggest staff. They had a big job to do so one could say that that was appropriate. And they managed the system and they keep the tool in working order. But what are they trying to achieve? What are their objectives in managing email? So I went back to try and think (in the light of my experience there) where, you know, there were a number of comments yesterday about how we've had run ins with our IT staff. I think we all can probably share examples of that. But they're probably just trying to do their job and what do they think their job is in terms of email management? So we had issues with them because they're all powerful. They dictated that all emails would be removed from staff's email boxes (the sent emails) after one month. And all emails would be removed from received emails after three months. Now I think that's at minimum the wrong way round. But we had no control. We tried to say to them, you know, not all of the records are of equal importance – but there was nowhere to put them after that. They then unilaterally decided to remove those limits. Didn't tell anybody. So you just found, you know, you're dutifully moving them so you don't lose your emails and then all of sudden, you know, they're still there. And then recently they've instated some new rules.

OK. They're all powerful. So their mindset is – well what is their mindset? And I think their mindset is they're dealing with an electronic postal system, they're wanting to keep the post flowing, they're wanting to keep these bits of information flowing. They think about bits because that's what they're dealing with. They deal

[18] Condon, R. 'Are you prepared to cope with the data explosion?', *Media Planet Business* Information Management, The Times, 17 October 2007, pp.2-3.

with bits and bytes. They're not dealing with groups of units of information which have been produced by business transactions.

So we had this problem. But then things had begun to change. The UN are in the process of introducing an enterprise content management system. The group of people who were evaluating the proposals – there were people from IT, there were people from records management, there were people from the business units. And when it became clear that at the base of the enterprise content management infrastructure, there needed to be a business classification scheme, there needed to be a taxonomy, the IT staff came to the archives and records management section. So there was this move, this sea change, this change in direction. So I was trying to understand where they were coming from, their (as the French say) their 'déformation professionnelle' – they see the world through their professional perspective. And I think there is this shift – there's seeing information as being more important. Again from the media, business information management section last week, there was an article by Professor Chris Edwards (Professor of Management Information Systems at Cranfield University) entitled 'The power of transformation'[19] and this leads me into my concluding point as it stated "any IT decision needs to focus on business information management. IT is bound to be a component of any transformation programme." He seems to have moved from change management to transformation as what's happening in organisations. And has identified this new role as a transformation director, where the power of information for transformation is at the heart of the organisation moving forward and this transformation director is going to have the key role. And he's proposing that it's the IT manager who should have that role.

At the UN, information and records is now on the agenda for IT staff. They're not just dealing with bits of separated, disaggregated electronic pulses. They're seeing groups of information and records and data from the business and they're seeing that they have a role.

[19] Edwards, C. 'The power of transformation', *Media Planet Business Information Management, The Times,* 17 October 2007, p.4.

So I think now is a good time for we records managers to be working more closely. I don't know how we get the interface. There are a whole range of factors involved, and I'm sure we'll get some ideas from you but I, having been very negative about IT staff, I think they are seeing a change and I think there is a good opportunity now for us to work more closely. And I'd be interested to hear of other people's experience.

Thank you.

## Zoë Smyth

I'd now like to introduce Teresa Waring and she's from the Business School here at Northumbria University.

## Teresa Waring

Teresa Waring's text is reproduced from the witness statement submitted in advance of the proceedings.

***[Internet Abuse – it is not just about email***

***Introduction***

*Email has been a facility available to many organisations and businesses for well over fifteen years and if one traces the history of email it can be seen to emerge in the 1960s through the scientific use of mainframe computers. However it was when the Internet actually took a step change that certain issues began to arise. This short paper challenges the two articles in as much as they are too narrow in their outlook and appear to be covering ground that has already been explored by the Human Resource Management literature and the Information Systems Management literature. I will argue that ICT research in this area has moved on to such an extent that email is only a small part of what organisations should be concerned about and the real issues lie in developing policy that addresses crime at work, organisational misbehaviour and litigation.*

***The Bigger Picture***

*For many organisations it is becoming increasingly clear that the Internet is now a critical component of their business and is shaping behaviour of many employees. Both in the public and private sector, organisations that operate at the forefront of the Knowledge Economy greatly benefit from the enhanced communications and extensive research capabilities brought by Web technologies (Cohen, 2001: 70). From an employer perspective using the Internet can also generate undesirable outcomes – loss of intellectual property (documents sent via email outside the organisation), sexual and racial harassment (e.g. through email, SMS, Facebook) productivity loss due to excessive use of the Web (too much time surfing the net, writing blogs, playing on-line games, gambling) and crime (Anandarajan and Simmers, 2001).*

*Computers and associated communications technology are ubiquitous in businesses in both the public and private sector. Authors have hailed access to the Internet "as a great opportunity for business development and enhancement of employees' productivity" (Scheuermann and Langford, 1997:847). This medium has made global, regional, national and institutional communication not just cheaper, but also faster and much more efficient. Companies can access the most up to date information at the click of a mouse, making it easier to be on the cutting edge in their particular industry and remain competitive. It is also a valuable way to communicate with employees, particularly in large multi-plant companies with many employees. Many organisations have also developed intranets that allow employees to communicate with management and each other quickly and easily. The Internet has not only boosted productivity in the organisation, but has also created a sense of empowerment among workers and it is probably this very sense of empowerment that has contributed to what has now become to be seen as a dangerous and indeed costly trend in the non work-related use of the Internet. (Sharma and Gupta, 2003).*

*With the advent of the Internet organisational misbehaviour has taken on a more insidious aspect and a new term has been coined -'Internet Abuse' (Griffiths, 2003; Muhl, 2003). In some countries personal use of the Internet by employees may be*

*excessive and new terms such as 'cyberloafing' and 'cyberslacking' have arisen (Lim at al, 2002:69; Davis, 2001).*

*Siau et al. (2002:76) classify potential employee Internet abuse into eleven specific categories:*

| ***Internet Abuse*** | ***Description*** |
|---|---|
| *General email abuse* | *Including spamming, harassment, chain letters, solicitations, spoofing, propagation of viruses/worms and defamatory statements* |
| *Unauthorised use and access* | *Sharing of passwords and access into networks without permission* |
| *Copyright infringement or plagiarism* | *Using illegal or pirated software that cost organisations millions of dollars because of copyright infringements. Copying of web sites and copyrighted logos.* |
| *Newsgroup postings* | *Posting of messages on various non-work related topics from sex to lawn care advice.* |
| *Transmission of confidential data* | *Using the Internet to transmit or display trade secrets.* |
| *Pornography* | *Accessing sexually explicit sites from the work place as well as the display, distribution and surfing of these offensive sites* |
| *Hacking* | *Hacking of web sites, ranging from denial of service attacks to accessing organisational databases* |
| *Non-work related download/upload* | *Propagation of software that ties up office bandwidth. Programmes such as Napster that allow the transmission of* |

| | |
|---|---|
| | *movies, music and graphical material.* |
| *Leisure use of the Internet* | *Loafing around the Internet, including shopping, send e-cards and personal email, gambling online, chatting, game playing, auctioning, stock trading and doing other personal activities.* |
| *Use of external ISPs* | *Using an external ISP to connect to the Internet to avoid detection* |
| *Moonlighting* | *Using office resources such as networks and computers to organise and conduct personal business* |

***Table 1: Categories of Internet Abuse (Source: Siau et al, 2002:76)***

*The types of Internet abuse outlined in Table 1 are indicative of the behaviour an organisation may wish to monitor and eliminate (Siau, 2002). Organisations are generally concerned about lost productivity of staff, misuse of resources and illegal activities in the workplace that might lead to loss of organisational reputation and litigation from plaintiffs who may have suffered due to management ineffectiveness in controlling employee behaviour. In terms of time spent making personal use of the Internet, Lim et al (2002:66) quote a survey by SurfWatch which suggests that this may be costing the USA up to $1 billion per annum and this suggests that there may be a loss of employee productivity of as much as 30-40% in some organisations.*

*One of the most difficult aspects of investigating Internet abuse at work is in determining how much misbehaviour or crime is taking place and its effect on the reputation of organisations. As more Internet related laws are introduced globally organisations are finding themselves increasingly vicariously liable for the activities of their employees. From the perspective of their reputation it is in their own interests, where possible, to deal with dysfunctional behaviour internally and not to go public and involve the law. Unfortunately some cases are so high profile that media*

*coverage is inevitable. In the US the Chevron Corporation was caught up in a major court case involving sexual harassment in the workplace mediated through email. They were forced to make an out of court settlement of $2.2 million to four plaintiffs (Hartman, 1998:16). More recently a world wide criminal investigation into child pornography, known as 'Operation Ore' in the UK press (e.g. Sunday Times, January 26th, 2003) has highlighted a database with credit card details of 250000 individuals accessing this type of material on the Web, 7272 of whom were UK residents.*

*It is access to pornography in all its forms that employers appear to be most concerned with preventing through workplace computers (Panko and Beh, 2002). Research by NFO and Elron found 62% of US organisations surveyed had caught employees accessing sexually explicit web sites on company computers (Boehle, 2000). A survey carried out by Vault.com found that 4% of respondents admitted to downloading pornography from the Internet in the workplace (Cohen, 2001). Lim et al (2002) surveyed 188 adults in Singapore and found that 9% browsed 'adult' sites at work a few times a month, 3% reported that they did so a few times a week and 2% stated they did so a few times a day. Similar work by Siau et al. (2002) and Young (2001) have produced comparable results. Stanton and Weiss (2002:435) suggest that the loss of organisational reputation and hence loss of business is now at the forefront of management's mind and state:*

> *"It is possible that this individual focus on sex is a reflection of corporate emphasis on the subject. Companies may put more emphasis on prohibiting these sites over other because of potential damage to the company's reputation should the pattern of web site visits become public"*

*Clearly concern over access to pornography in the workplace is a major issue for organisations whose staff need to use the Internet. However, no matter how distasteful and high profile this abuse is organisations must also be aware that other misuse and crime may be going unnoticed or unreported.*

*Many organisations have Internet Usage Policies (IUPs) and I would contend that these policies should be the framework through which employee behaviours are developed and monitored.]*

### Zoë Smyth

Our third witness is David Gibson. He's from the Crutes law firm, so we'll get another perspective.

### David Gibson

Good morning everyone. I've got three very brief confessions to make at the start. First of all I am a lawyer, so therefore the next 10 minutes are going to be quite dull. I do apologise for that. [laughter]. I can't help it, it's in my nature. Secondly, I'm an absolutely massive Newcastle United fan, so if I start staring out the window and it starts captivating my interest, I'm just reliving boyhood experiences. And thirdly, and most importantly, I've left my Blackberry on my desk at work and I've been sweating for the last 10/15 minutes thinking 'oh my goodness, what's going on in that blessed machine?' What emails could be coming in? What work could I be missing out on? What could I be doing rather than sitting here? I could be playing with my little system under the desk while we talk, which would have been very, very rude. But unfortunately I've done seminars very recently where people (senior executives) have been playing around with their Blackberries and going on the Internet and doing whatever they do when they should be listening to me. And that's very rude. It just shows a general malaise in our society. I would follow Teresa here because the situation is that we are facing a crisis here within the workforce. We've got a number of key, emerging problems that people are not addressing because they haven't got good communication policies, because the IT people are not talking to the fee earners or the business people. They're not having transparent communications to solve an emerging problem. And I've headlined it into three major areas.

The first one is what I call 'The email gossip trap' that's occurring. The email gossip trap. And, you know, the issue of harassment is a very, very serious one within our workforce. If I stood at the front of this seminar today and made a number of

inappropriate comments about people with disability, maybe about peoples' race or religion, or their sexuality, you'd be rightly outraged. They'd make complaints about it. But silently that's going on within our office spaces on a regular basis. People are making derogatory comments about other people. They may be doing it via nicknames, which some people find to be funny. For example, for about 20 years or so, people have often referred to the fact that I'm losing my hair. OK? [laughter]. Baldy, something like that. Now with the onset of the age discrimination legislation, October 2006, comments such as baldy, silver head, grey head, Thora Hird, could be seen as items of abuse. Because they're demeaning about people's age. Yeah? Now we all laugh about them. You can have a bit of a laugh and a joke about it. But if that's on an email and it's put in quite a derogatory way. For example, 'I see Thora's still struggling with Joe's new management reports' it's an atmosphere, a culture of abuse. And please, don't think that just by deleting that email communication that you're deleting it from the system. We've already heard that the IT boys and girls are there storing it up. That can be used in evidence against you. And then all of a sudden you're in an employment tribunal and you've been cc'd into these emails about correspondence and someone's bringing a claim against age discrimination saying there was an attitude, there was a culture of harassment within that workplace. And we've got a printout of all the emails. 'David was saying look at old Thora Hird over there, wrinkly fingers, grey haired. Couldn't cope with the new technology. That was all demeaning me in the workplace and I wasn't getting the opportunities to be promoted. Therefore I've been discriminated against on the grounds of my age.' Thank you, there's £10,000. Also it's very, very embarrassing for the people who've been sending those emails as well because you can be sure the Journal – the front page of the Journal – or your local newspaper will be picking up on stories like that. And employers will take disciplinary action against employees for sending that email, for contributing to that action of harassment.

So it really is a very dangerous – it can be a wonderful tool in communicating – but it can also be a very dangerous tool as well. So banter and shorthand comments can get you into problems. Obviously it can also bring your company into disrepute as well. We've seen some of the articles. The examples of salacious emails about peoples' sexual activities have been forwarded from one organisation to another. I can tell you the worst offenders of doing that – the worst offenders are law firms. Yeah? For about

8 years I've had the unfortunate experience of working in London, and you can bet your bottom dollar that on Monday morning you would have a funny story that was doing the rounds of one law firm. And somebody had a friend in another law firm and said 'hey have you heard about this one?' And vroom, all across that square mile of the city you were talking about Miss X, the secretary in the litigation department. Yeah? And because this would then get onto the Web, or elsewhere, or be discussed, disciplinary actions could be taken against the individuals that were circulating that email.

It can also bring about defamation claims. I can say something rude about my partner. I say it to my other partners, I send it by email. There's a potential defamation angle there as well. So you can see how we've got (well it's not a new tool anymore) a new type of technology brings a whole range of new legal issues as well. So it's not just face to face communication that now is the attention of the employment tribunals. But getting into the IT systems and the use and misuse of IT can lead you into discrimination claims as well.

It's also a great source (and we're seeing this more and more) of employees bringing claims for stress. Invariably what we see (are there any GPs in the room?) No? They'll be no GPs in the room. I don't want to be offensive about GPs. They've got a very difficult job. Far more difficult than I. Sitting in their rooms with about 4000 screaming kids outside, they've got to get through their lists as soon as possible. But what we increasingly see from GPs coming to us is 'employee sick and depressed due to workplace stresses'. That's what the GP will put on the note. And invariably that can be the case of the employee who's coming into work and receiving about 40/50 emails from the line manager saying 'have you done the report yet?' And then 30 minutes later 'have you still not done it?' 30 minutes later after that 'Where is it?' In bold, caps, underlined, red. Now if you think of me coming into the room and saying 'where is the report?' 'Where is your report?' And then shouting at you more vociferously after a period of time. What type of management is that? It's lazy management for a start, it's bad management for your workforce and it's hiding, hiding, using the technological tool to abuse a member of staff. And it's very – we all joke about them. We go away on holiday and we come back and there are 300 emails, something like that. I don't have that problem, because I take the blessed thing with

me [laughter]. So there I am, in Austria with my children saying 'daddy, daddy, daddy.' And I say 'I've just got to answer this really important email' – it's not important at all.

I actually sometimes feel very, very stressed about the volume of email that's coming across to me. And people who want me to answer emails straight away. But I don't want to answer it then because I've got something else to do. That adds to my stress levels as well and we see this in evidence in employment tribunal bundles. You know, you'll maybe have a bundle of papers like that at an employment tribunal and that much of it might be email communication of a manager stressing out his employee because of their [own] inadequacies I think.

Poor management is another key issue as well. I'm delighted that you raised the issue of seeing it in its totality – the Internet etc and you mentioned Facebook. Facebook was in the headlines recently. There was a chap who worked for Argos and he had a Facebook entry and he said 'working for Argos is poo, poo!' and I've got two very small children so I've got to use that word. [laughter]. So Argos found out about it and sacked him. Yeah? They sacked him because he was bringing the company into disrepute. Employers are trying to wise up to these things. But seeing as it is a total problem, it's not just about email, it's about Internet abuse and Internet misuse. I think that has a massive impact on office discipline and office productivity. For example people 'chatting' via email. Now it's great to have a cup of coffee and a chat and I'm not knocking that in the workplace. It's good. But the problem is, people are misusing it and it does need to be challenged. It does need to be monitored. It does need to be controlled, because I do think it has a massive impact on productivity and general office discipline as well. Now you do have to be consistent as well in your policies. It's no good having one rule for the MD and one rule for everybody else. So if you say no access to x, y and z site, it's no good therefore just saying, oh well you're an MD for the organisation so you can have access. Because an employment tribunal will say that's totally inconsistent – totally inconsistent. But you do need to be very, very careful. Confidential information, confidential information can be whizzing around different organisations. It's the key to your organisation – your IP, your confidential information – and it can whiz at a moment's notice like that. Because people don't follow the email trail. They get a bit lazy. They don't create a

fresh email do they? It could be something right at the very bottom and it says, 'oh by the way, Crutes law firm are targeting x client', and then there's a personal chat and then you send it on, and someone says 'hey that's really funny that personal bit. Bah, bah, bah, bah, bah' – and that gets sent on somewhere else. And then that gets sent on to Law Firm X. Now that firm is a rival and all of a sudden they see, hey Crutes are targeting that particular sector. Now that employee has actually been guilty of one of the most heinous crimes – a breach of trust and confidence with its employer – to maintain the confidentiality of their information. But there it is just whizzing around like nobody's business. So again, a key issue.

Now the lawyers have (I'll just finish off on this). The lawyers or course have reacted to this with great speed. (Oh right, we'll try and get on top of this business!) We'll try and get on top of it and I think in many ways failed. We've got data protection legislation which you'll all be familiar with. There's RIPA [Regulation of Investigatory Powers Act] legislation as well which means the employer must have consent of the individual to monitoring the email usage, the Internet usage etc. They must have a legitimate business purpose.

But, you know, lawyers being lawyers they have so many definitions and sub clauses, it's very, very difficult to put into practice sometimes. And that's why I think really I'd extol the virtues of listening to people like Teresa, seeing the issue in its broader context. And really just plug for the three degrees. You know those Three Degrees – the group? Now I've said this before to audiences and I'm not being rude, but in younger audiences [laughter] (I can't say young), I've said the Three Degrees and they've all gone 'the three degrees?' But the three degrees are important – first of all having a good, workable, transparent communications policy. And really talk to all of the people involved. Talk to the secretaries, because they're as important as any fee earner. Talk to the IT staff. They're quite human, sometimes, when you get to speak to them. They're good people, they're knowledgeable people. I think you were saying, we all view our world through our business perspective. We do as lawyers. We are so narrow. We can't help it, that's just the way we are. We need to talk to people and feed off different ideas. Talk to the academics, talk to your community as well and then prepare a workable policy. Once you've got people bought into it and they

realise why you're saying don't send 250 emails in a morning, they might start appreciating why it's so important to have a good policy.

The second degree is basically having a good grievance policy in place. So if people do feel they are harassed in the workplace, they can say 'hey, stop' and not be ridiculed about it. You know, I might feel embarrassed about saying I don't find it funny if you refer to the fact that I'm losing my hair. You know, I might find that difficult. But if there's a private and confidential grievance procedure you can go through, you can try and solve problems on a day to day basis and you can get both parties to recognise why you don't like being referred to as that, that is important.

And the final degree is having the bravery to go through the discipline procedures with those people who have breached the policies as well, because too often people turn a blind eye. 'It was just a couple of Facebook entries, you know.' 'It was a bit of an inappropriate site, but you know, we're all boys together.' I get a lot of this 'all boys together,' we've all laughed at stuff like that. No, not appropriate, not acceptable to be looking at that type of material in the workplace. And, we're going to dismiss you on the grounds of that as well. We'll go through procedures and we'll dismiss you. Sounds harsh but it set a very, very effective tone within the organisation. Because if one person loses their job for looking at offensive material, then everybody else shapes up. Everybody else shapes up.

I'll leave it on that note.

### Zoë Smyth

Thank you. And our final witness is Ian Wooler. He's a consultant with TFPL.

### Ian Wooler

Good morning. The question – when was the first email sent? When was the first email sent? Wikipaedia says 1971. It's the @ symbol that links suddenly us, our emails and distinguishes ourselves from servers and the like. And the reason I start with that point is because email – what is it? When thinking about what to say, I was

thinking well, I think one needs to stand back. One needs to step back and ask the business question 'email, what is it?' So what is email? Well originally it was an instant message. A one way, or maybe two way communication. But increasingly in organisations, as we've heard from some colleagues yesterday, email might now be an electronic filing cabinet. It might be the way in which we store and recall all our work activity. It's also perhaps for many a work planning tool. Many of you in this room, and certainly a lot of colleagues that I work with in different organisations, use email for its full functionality – and their diaries, their workload, their scheduling, their activities, their agendas, their risk management is all done through a sort of email blend. And yesterday we were talking a lot about email, i.e. the message is a record. But I also think there's the question about when I send a meeting invite and I attach the agenda and I do the responses and collations through that. All these things are potentially records, sitting in an organisation. So for many it's a work planning tool as well.

What else is it? It's also a social networking tool. People are using emails - as we've heard over the last number of speeches - they're using it to interconnect. They're using it to make the world smaller. It's also an information and a knowledge asset. What do I mean by that? Research – this piece of research is a couple of years old now, but the quote in here says 'analysts firm Gartner believes around 75%' – repeat 75% - 'of a company's total knowledge exchange occurs via email.' [20] That's a huge information and knowledge asset for an organisation that perhaps isn't managed strategically. Perhaps the organisation hasn't got the management time – the effort, the energy, the push behind it for what it is. So it's also an information and a knowledge asset.

We've also heard that maybe it's a regulatory and perhaps a legislative ticking time bomb and it can cause big problems in organisations.

And we also heard about stress. Same study. When Catherine talked about IT managers, here's one for you 'a study of 850 IT managers by dynamic markets, found

[20] *Information World Review*, Feb. 2005

that a third thought that a week without email was more stressful than a minor car accident or divorce.'[21] [laughter]. What does that tell us?

What else is email? Email for some is an addiction. I can't live with it and I certainly can't live without it. In the business world in which I live, the consultancy world, email is often the heartbeat of the organisation. In going into an organisation, if one can understand how the company email is used, how it works, how it flows, it does indicate to some degree the heartbeat – how the organisation works and how it operates. And for many email is the business, email is an absolute way of life. It's just the way thing are around here.

Now Zoë started by giving you a little bit of exercise, a little bit of a task. So what I'd like to do is repeat that sort of cycle and say well, would you like to stand up if you hold one email account? If you've got one email address.

### Zoë Smyth

Just one

### Ian Wooler

Just one. Stand up if you have two email addresses. Three? OK, more than three! [laughter]. Isn't that interesting? More than three? What would the top number be? Four? Any advance on four? A bid for 12.

12! 12 email addresses. Think about the way in which that is changing the way we work and operate. Have another go. Stand up if you feel you are in control of email. [some of audience stands up] And therefore I guess a number of you feel you are not in control of email. It is controlling you, rather than you are controlling it. And lastly, if I may, stand up if anyone here has taken an email health check for themselves. What do I mean by an email health check? Have you used one of these online checklists that say things like 'do I look at it quickly in the morning? How long do I – is it stressful for me?' Has anyone in here done an email health check for themselves?

[21] *Information World Review*, Feb. 2005

[laughter] You can ask Zoë over coffee about an email health check, but my suggestion is perhaps one should.

So email, what is it? I think one needs to step back and say what is it for my organisation? And ask questions like: What measures and metrics could be applied to it? It's an organisational tool. It's an information knowledge asset. I think one needs to step back and ask questions like – for what business purpose? Does email and the use of email add any value to my business? Is there a business case for email?

Remember joining an organisation. The first thing you do is get an email account. Many years ago I learnt to drive a car. And learning to drive a car, I had to pass a test and then if I failed the test, I didn't get the licence to use the car. I would suggest to you that when people join your organisations, they should take the email test. They should not (repeat not) be allowed to use email until they have passed the test. I would be quite draconian in this and unless people have the right behaviours, the right approach, the right filing structures, the right folder structures, the right use etc, etc, etc, they should not, repeat not, be allowed to use email. It might sound harsh, but email is an incredibly powerful tool. You don't get allowed to go in a car because you might cause yourself an accident, or someone else, but at one press of a button you can totally destroy an organisation's reputation. We are letting our staff have access to probably the most powerful tool in the organisation without a licence to use it.

Why do organisations get worried about email and what are the motivations around it? A sort of motivational model that you might want to look at and consider in organisations is the 'away from' and the 'toward model'. As records managers, are your organisations 'away from' – are they trying to move away from risk? Are they trying to mitigate issues and concerns? If so, align the email policies and the approaches to those sorts of things. If an organisation is perhaps motivated in a 'towards' sort of way, toward the possibilities if I could connect all these emails, if I could map them, if I could do the social network analysis, if I could tap into the information and knowledge asset, the 75%, the Gartner research I talked about – is that competitive advantage? I think it probably would be. So one way of thinking about the email policy guidelines and structure is to attach it to the motivations of the organisation. But what about the motivations of the individual? Email is a very selfish

tool. As I said earlier, I can use it when I want to use it, I can send to who I want to send, I can do it at any time of the day, I can read things that I like, I can delete things I like. I don't know if anyone in this room uses this sort of 'read/receipt' type technology that exists in email and relies on the fact that when the response comes back that someone says that they've read it, I mean have they read it? Have they just clicked the button to say they've read it? What sort of proof does that say? So it's a very, very selfish tool.

And for many in the organisation – I think for most employees – email is deemed to be free. There is no cost associated with it. But there's lots of cost in lost productivity, potentially. There is lots of cost in storage as we were hearing about yesterday and there's lots of cost, I would suggest, wrapped up in the fact that it is the key information knowledge management tool, space, which you have in your organisations.

So something that I think records managers, information managers, knowledge managers, IT folks, HR folks can do about this is to value and appreciate email as an organisational asset. Firstly, by thinking about what it is within the context of the organisation and then thinking about if it is an asset, which I believe it is, what should be done about it? How do you mange it? Putting in place guidelines, health checks, training and all these sorts of things (as we've said before) – all just part of the bigger jigsaw puzzle. One needs to think strategically, more holistically. One needs to think about synchronising email with other channels of communication. Email is but one of the channels of communication. In some of the training that I get involved in as a consultant, we use a communication chain model and that says that the default for many is email. People seem to have lost the power of getting up and walking and talking, or using that thing called a telephone, or discussing things in meetings. Email is the default. Email, as we were hearing about a moment ago, for many is often the place that they hide. They hide behind the email.

So what is required is a more strategic, holistic view of email as an organisational asset and I think records managers have a key part to play in that. One of the questions from the floor yesterday was about books and things that are written on email management by 'gurus' and I thought I'd look in my little pile and found this

one. Now has anyone seen this one? Managing your E-mail – thinking outside the box by Christina Cavanagh.[22] Now it was interesting looking at it last night. Was there anything that talks about retention or records management? There is and I've highlighted the pages if you're interested in that. But there's an awful lot of stuff out there that exists but it's been written by business type people without the necessary application of records management for what business purpose.

So lastly I leave you with a thought and a story. Are we losing the ability to communicate? It's an organisational asset, but are we losing the ability to communicate? I travel in and out of London on a regular basis and I tend to use the train. And here is a true story, it is an absolutely true story. I came back from Paddington on a train journey recently and as I sat down, the lady sitting opposite me (and there was a little table in between) got out her Blackberry. And as soon as the train left the station she started pounding this palm thingy for all she was worth. And she was really hitting it very hard, very aggressively and you could see the tension in her face. And I thought that seems a bit sad to me. Anyway, she carried on bashing away at this thing for a good 20 minutes or so and after that sort of period of time, we arrived at a station. Some people got off, some people got on. And another lady got on and sat opposite us on the other side of the carriage. And as soon as the train left the station she too got out her Blackberry and started bashing this thing for all it was worth.

And then suddenly it dawned on these two ladies that they knew one another [laughter]. They had met before and one turned to the other and said the following: 'You haven't responded to my email' [laughter]. The carriage started to go a little quieter at this time because the lady was quite vocal. The response was 'what email? You never sent me an email.' 'Yes I did, I sent you an email the other day. Why didn't you respond to it? Where have you been? What have you been doing?' 'But I didn't receive it.' 'What do you mean you didn't receive it? Look.'

[22] Cavanagh, C. Managing your E-mail – thinking outside the box by *Information World Review*, Feb. 2005

And then suddenly, the lady turned to her Blackberry and started questioning the Blackberry to see if she could find the audit trail. [laughter]. What did her colleague do? She went to hers [laughter] to see if she could find her respective audit trail. And for the next 10/15 minutes or so these two individuals just went through this – and they were holding these things up to one another – [laughter]. Look it's here. Anyway, to cut a long story short this went on for quite a while and absorbed a lot of the carriage's time and it's quite entertaining in its own sweet way [laughter]. But if you like, the punch line, or where the story ends, is that eventually the lady who was quite accusing at the outset said 'oh it does appear that I didn't send it to you. I thought I did but I didn't', so you know, etc, etc. And then they put their respective Blackberries down and one said to the other 'well, how are you?' [laughter]. To which the response was 'I can't talk to you now. I need to get off the train which is coming into my station. Oh by the way, I'll send you an email.'

So are we losing the ability to communicate? To summarise, then. Email – some thoughts. Email is everyone' job but no one's specific responsibility. Does anyone in this room own the responsibility for email in their own organisation? Who is that person? Should there be a person? Is it a group of people? Is it on the top agenda, if you like, of the organisation?

Good use of email is common sense, but it's probably common sense that isn't common practice. How many of us send the auto response when we're on leave that says something like 'I am on leave from this date to that date. In the event of an emergency, contact this person. I'll catch up with my emails on my return.' Anyone do that sort of stuff? And have you ever thought when I come back to the office and I see the 300 emails, how many of those have actually been urgent ones that have already been dealt with? How do I know? Do I clear them out? What do I do? A little personal war story – I went on leave for a couple of weeks in an organisation and my email response, auto response said I am on leave and I will not read any of the emails whilst I'm on leave, and/or when I return I will come round and talk to you. If it is that urgent, wait for my return. And quite interestingly, walking the floor for a couple of days, suddenly connected one with all of the issues.

So good email – good use of email common sense, but not common practice. And I think people in this room have a role to play, I would suggest, in making this common practice. People are both the problem and the solution.

I would challenge each and every one of us in this room, why not be exemplars of email? Why not start to walk the talk? It's not them out there, it can start with people, so set the standard, raise the bar. As the Lottery would say, not 'it could be you' – it is you. I'm part of the problem – you're part of the problem – we're all part of this. Are we losing the ability to communicate? I hope not. Email should be there as a tool, as a technology and as an enabler and as an organisational asset. It shouldn't be this millstone, this burden around an organisational neck.

Thank you

## DISCUSSION SESSION

### Zoë Smyth

OK. Now that we've heard the opening statements from all of the witnesses, I'd like to ask the witnesses do they have any comments on the other statements and then open it out to people in the room? Can someone start the discussion?

### David Gibson

I think it's been quite interesting professional really, that from across different sectors, from the more academic and practitioners, all recognise that there are some key fundamental problems there within organisations that need to be addressed. So it's been refreshing from the lawyer's point of view to think we're not the only ones who think of it from that angle.

### Ian Wooler

I think for me it's the theme about who takes ownership and responsibility. In many organisations, the information, and the knowledge flows and the IT stuff but the responsibility is dispersed. But people like records managers, knowledge managers, IM managers, I think have a role to play in joining this stuff up. You can't be totally responsible for every email and every piece of knowledge in the organisation but you can be a conduit, a sticking place where this stuff gets thought about and considered.

### Zoë Smyth

Yes Steve? Again, I should say if you are asking questions or commenting, please say where you're from.

### Steve Bailey

Steve Bailey from JISC infoNET. We heard yesterday about the smoking gun, as it always is when it comes to email. And certainly having heard David Gibson's description of the kinds of horrendous things people say and do with email, and

our own professional view, I'm sure (and our instinctive reaction) is that's why we delete emails, or we should destroy it as quickly as possible to make sure that we don't have any of that smoking gun within our organisation. But the thought occurred to me the other day, that maybe that's completely the wrong way round because we as records managers often put ourselves up as the guardians of good, corporate accountability, but destroying the evidence doesn't actually prevent it happening. All it does is destroy the evidence. It actually makes us accessories after the fact. Surely the best way of ensuring corporate accountability is actually to say we keep every email and every email is pretty much viewable by everyone within the organisation. If you write something that's irresponsible, if you do something that is fraudulent, you will be found because we keep everything and it's viewable. It just struck me that this whole view, you know, we've been thinking about for 20, 30, 40 years, we do our services, our organisations a service by getting rid of stuff that might be controversial. But it kind of seems to me that the wrong way round. I mean, maybe I've suddenly lost the plot. I'd be interested to hear what people think.

### Other

And one of the things you've got a problem with when people are downloading stuff onto computers and organisations get involved in it, is the legal aspects of whether you are contaminating evidence in relation to a case that might be brought against somebody.

### David Gibson

I totally concur with that. If there is any obscene information or images being viewed, then certainly our advice to clients is that the police are notified to investigate that promptly. Secondly on when you've got a stressed employee scenario, employment tribunals now will be saying, 'so the email was deleted? Who deleted that? Why did you delete it?' They will still listen to the aural evidence of the individual that's bringing the claim. And that fact that it's been deleted will really put the company in a very very difficult position in defending claims, because they'll be saying 'well this company was just covering up', which

all goes to the conspiracy that something was happening and that you do not take harassment issues seriously. And it just creates a very, very bad atmosphere within the tribunal and they will see you in quite a negative light. So you do need to be very, very careful about that.

### Ian Wooler

Can I add to that? I think it is something also about who owns, or what happens to an email record when somebody leaves an organisation? A lot of work that I get involved in is to do with elements of knowledge transfer. And one of the key things we look at when someone's leaving an organisation is their email record, their email archive. Can it be passed on? Can it be given to someone else? Is it the organisations record? Is it their record? Are the contacts their records? Are the contacts the organisation's records? I think it is a big issue. The other thing I'd add is (using the football stadium analogy again) my two young nephews who like football - so I got them a card (a postcard) to send them from Newcastle United's shop, and I was reminded of the story that says an email is no more different from a postcard in the sense that anybody can read a postcard and anybody can read an email, so you don't put anything on the postcard that you wouldn't want to have read by somebody else.

### Catherine Hare

Can I just come back to Steve- did I understand you Steve, when you were saying you would keep all emails forever?

### Steve Bailey

I'm increasingly coming to that view.

### Catherine Hare

Right. So where's our job?

**Steve Bailey**

I mean, absolutely. I'm someone who's got 3 emails in their inbox and none in their sent items OK.

I don't say that so you can hold me up as some sort of exemplar of great practice but as a kind of counterweight to where I'm coming from. But having heard all of yesterday, and more so yesterday than today, it just seemed that the default position as records managers was we should work out what we need to keep, and destroy absolutely everything else. But at the same token, that just raises all of these questions that 27 years after that book was published, to which Catherine Hare referred, we still don't have answers to.[23] What is information? When does it become a record? How do we define which is which? How do we know now which information is going to be important for the future? What happens if we destroy the wrong thing? Well all of those disappear if you say, let's keep them. We can now, pretty much. I know this is going to sound really simplistic. I can be picked up on any point indeed and over dinner some people did correct me because when it comes to the personal data, that under data protection is the only time that you have to keep things for as long as it's required. That would be easy to resolve with a bit of tact. So it seems to me that the logic of our argument is sound. You know, we should focus on business processes, we should focus on identifying what we need. But what we heard yesterday from our colleagues in Australia , is that when an organisation has two choices in front of them – they can either tackle that issue and get to the bottom of it, or they can spend a million bucks on a new server – they will take a new server every time.

You know, I was going to say this in my introduction to my next session, but I'll say it now. It can't be often that the Archbishop of Canterbury is quoted in a records management context [laughter], but I was listening to him on the radio the other day – admittedly he wasn't talking about email – but he said we have to learn to accept that we live in the world as it is, not as we would wish it to be. And the world as it is, there are organisations that would rather keep everything because it's easier. Our IT staff would rather keep everything because it's easier. Our users would rather keep everything because it's easier. Here we are 27 years later, having for the last 27 years

[23] Toffler, A. *The third wave.* 1980.

said you're doing it wrong guys, there comes a point at which we need to say actually the logic of our argument might be right, but we're going to lose. We need to start thinking about this completely differently. In fact 27 years ago the development of the Betamax (they knew they were right [laughter], they knew they were the best). But somewhere along the line they had to realise that VHS was going to win the war. And I just kind of increasingly find myself coming back to this thing that says actually, all those problems go away (yes we create new ones), but all those problems go away that we've been tackling and been failing for the last 30 years if we keep everything. So let's look at what the problems are of keeping everything.

### Steve George

I desperately wanted to say I had a question for Baldy, but [laughter] I couldn't think of one. I didn't want to get sued [laughter]. It's a point really about common themes of harassment, misbehaviour, personal communication, personal use. I read an article last week, probably in one of the free London papers that they're bombarding everybody with, that said that organisations – or the organisations that will survive in the future or flourish in the future – are those that will embrace the new technologies such as Facebook, personal use of email and so on. And that the best staff simply won't join organisations that don't allow them to look at NUFC for example. Because people are so used to doing these things. That was really a point. I just wondered what people thought about that. I was not expecting actually any answers, I was just raising the point.

### David Gibson

I think also it depends on the industry sector. I do a lot of work with media clients and that would be true of them. If they were saying to their members of staff 'you can't go on Facebook', 'you can't do x y and z', then as creative types they'd say 'flipping heck you cutting off our life blood here'.

You know, a law firm, I don't think it would work at all if you had that type of openness. You might have it restricted to lunch times or pre-office hours, etc, but joking apart, we do have a lot of demands from clients, corporate entities who want

stuff done now and if we've got that flexibility there, I'd be worried about time, their deadlines being met. I'd be worried about possibly focus on a particular task and that type of thing. It can work in certain industry sectors but certain industry sectors, I don't think it would, I don't think it quite would.

### Ian Wooler

Can I challenge that a little bit through the motivation because I think it's a really important thing. David raised the x y generation stuff. You know, again referring back to my two young nephews, I mean they, I think, see a world in which everything is fluid, everything is flexible, and they've got free access, etc etc. And then, as and when, they come into this employment world they see these constraints, these barriers, etc. So the law firm that says, in the war on talent, you can have access to this staff, versus the law firm that says you cannot, I know where I would vote in that sense in terms of the war on talent. So I think you need to look at some of the motivations behind these things.

### David Gibson

It's something about having a sensible policy in place.

### Catherine Hare

But isn't it all about being explicit as well? You know – nobody ever taught me how to use email and it's all about the rules. You know, what kind of tool is it? What is allowed and what isn't allowed. We're allowed tea breaks and we're allowed to go off and have a cup of coffee. Can we not have an Internet break?

### Julie McLeod

Can I ask a question? One thing that's really struck me about the conversation this morning is bringing it back to the bigger issue. Strategy in the organisation, the culture, the rules by which we live. And something that you said, Ian [Wooler], that fitted with something yesterday– a question that David [Wainwright] raised that we didn't really get into - was this personal/ group/corporate view. And whether you

want to break that down or whether you want to be very flexible you still need that strategic view and those rules of engagement. We do observe, implicitly, certain rules. We've been taught to say thank you or please, or stand up and give an old lady a seat on a bus or whatever. So they are implicit, it's just sometimes rules seem heavy handed and very constraining. So, just a comment really, that I think there's a lot of research possibility here and I liked your point Ian, that records managers have a role in joining up for this strategic, bigger, holistic view. But what I really wanted to do was come back to Steve [Bailey], because he mentioned , 'keep everything'. And I had this shock horror look on my face [laughter] because I'd said yesterday, 'I can't be the only one in this room who thinks we shouldn't keep everything'. And since it's on the record, I can't really retract that [laughter] statement. So no, I've just got to come back and be slightly controversial, which is not my normal persona, I think it depends. If we decide to keep everything, is that because that's the easy option – which is what Adrian [Cunningham], you were I think implying yesterday? Is it to penalise people? Is it to say we've got the evidence and big brother is watching you? That is what happened with the high street bank employee; the email evidence was there to actually sack that person. So is it the stick rather than the carrot? And I was going to say, what does it cause us in terms of problems? But of course, you came in and said 'well we'll have new problems to answer'.

So here's a few. The rate limiting step in any system using information or knowledge, for me, is the number of grey cells in my brain; how much I can cope with, how much I can usefully use. If we keep everything, I'm going to have that 303 emails problem that I had before. I just can't cope with that – even though we might have this fancy software. So there's a rate limiting step here. Also, I was trying to think of an analogy here and the Archbishop of Canterbury thing about living in the world we live in… I will hold my hand up and say I'm more conscious about green things now and I recycle my paper and my plastic and my this, that and the rest. (My mother did it a lot earlier than I did.) But it's because I read somewhere that in the UK we have less than 10 years of landfill left. Now we can outsource all our bits and bytes to Google or somebody else, but somebody has to manage that. Now Google might not charge us for it yet, but I bet you they will at some point. If our organisations are managing all that back up and all the rest, a lot of which might be dross (or not really important), then aren't we wasting resources in our organisation and taking away resource that, if

it's a public organisation I'm going to say 'I'm a taxpayer and I'd like my bins emptied more often' or 'the village green cutting more often'. And if I'm in a private sector company I might say, 'but I want more CPD money for my team of staff'. So are we really just not being responsible in terms of managing it?

### Jonathan Downes

Jonathan Downes, independent consultant. I'd like to come back on that. I've had a bit more time to think about this having spoken to Steve about it yesterday. For me the jury's still out. I'm still thinking it through, but in terms of some of the issues that you've raised, one of the things that you'd have to do is to manage the information that you've got better. So if you're keeping everything, you need to manage it better. But we need to be managing it better anyway. And actually to work out what you need to throw away, you need to be managing it better too.

So if you get to the point where you're managing it sufficiently well to work out what you should be throwing away, you may then say, why not keep it? Because there's perhaps 10% that we know will be no use at all. There's this 20/30% which we might call "records" and therefore we should keep. And then there's this 60/70% in the middle (and we're talking about the long tail) where you don't know which bits of that information might be useful at some point in the future. So if you have got the management around it, then it's there at your disposal. It feels wrong to be keeping everything, but there's also a very big difference between the physical world and the virtual world. The analogies work so far and then they just completely break down, in that it is possible to keep everything in the virtual world. Whereas, if you're clearing out your loft or you're keeping things in your garage and you're using other storage, you are taking up physical space and that's not the same issue. With virtual information you can access it from multiple directions, whereas with physical stuff you've got one place that you go to for it. So, that's just to add to the debate.

### Steve Bailey

Just a quick response. I'm just madly scribbling Julie's points and trying to think of answers on the fly, so these are not well formed responses I hasten to add. The rate

limiting step that I can't cope – the immediate analogy that sprang to mind was the Internet. You know, we don't say I only want six pages on the Internet because I can't cope with 4 billion. People often criticise Google for saying 'well I do a search and there's 80 billion pages' – reference was made to that yesterday – but that loses sight of the fact that 9 times out of 10 the information you want is on pages 1 and 2. The fact that there's another 4 billion behind the scenes is kind of irrelevant. It's there or it's not there. We can choose to ignore it or not. So if we can find similar ways of actually doing the same with email, it's not that we're going to lose necessarily the wheat and the chaff, it just happens to be the chaff's there as well in case it turns out to be a bit of wheat. If see that rather tortured analogy [laughter]. And in terms of intention and whether it's a positive or a negative intention, and whether it's big brother or whether it's opportunity, I kind of thought my instinctive reaction was it's the only option that's intention neutral. If you're keeping everything, there is no bias involved. Its selection that has to inevitably include a measure of bias when you start to say 'are we going to keep this but not that?' You're doing that for a reason and that, I think, could be done for very virtuous purposes, but those purposes can actually be wrong in that selection is obviously by definition selective. So I think it's the fairest option. There can be no accusations of an agenda by keeping everything.

### Julie McLeod

Or keep nothing.

### Steve Bailey

Or keep nothing. I would go back to the fact about the world that we're in and the fact that people see this and the fact that 75% of an organisations' resources are in their email. Do we want to lose that? You know, I don't think so. And the last one about cost, I mean I've got absolutely no figures to back this up but I'm wondering about the cost of re-invention of the wheel – that is a hidden cost if we destroy information. I've been a natural pruner of email from day one, but on more than one occasion I've had to go humbly and cap in hand to a colleague who is that squirreler that we talked about yesterday, saying 'I remember 3 years ago we talked about a product that you'd seen that looked really useful and I destroyed it

because at the time' (OK, I should have managed my information better, but it didn't seem important at the time). But they were able to go back to that PST file that they had from 4 years ago and say 'there it is'. And that probably saved me about 3 hours on the Internet trying to remember what the heck the product was, what it was called, who made it, what it did. They had it to hand and I was able to say 'mm, yeah, on that occasion you got it right'.

### Adrian Cunningham

Adrian Cunningham, National Archives of Australia. But the reason you were able to do that was because you still had the individual there who knew how the idiosyncratic filing system worked [laughter]. It wasn't a corporate asset, it was an individual idiosyncrasy and you were just lucky that the person was still at work in your organisation. But I think this is actually a really important point, that can we keep everything forever? Well instinctively I'm inclined to think you can't keep everything forever. First of all, there's the laws of thermodynamics that mean things will eventually disappear sooner or later. There's keeping – despite the fact that storage costs are always going down – keeping everything forever always carries a cost. Now there might be some risk analysis that might highlight that in certain circumstances, certain organisations might want to keep everything for a defined period of time and you might perhaps say it's a year, two years or whatever. If there's any malfeasance that needs to be investigated, it'll probably come to light within a given period of time and you might want to trawl back through everything. I think the answers to those very sensible questions have to be couched in terms of risk analysis, sitting back and sensibly analysing what's the nature of your business. And what is your need to keep information and what are the costs versus the benefits and sometimes you might actually make a cost benefit decision and say, 'well, after this period of time we'll get rid of this stuff' and maybe occasionally an instance will come along where you'll say 'oh god I wish we'd kept that, but weighing up the costs versus the risks I can understand why we got rid of it'. But they're rational decisions and ultimately someone does actually have to pay the cost of keeping this stuff and to what extent in the public sector are taxpayers willing to pay these ballooning costs of storing all this stuff? To what extent is society prepared to wear the costs of keeping all this stuff when we've got greenhouse, environmental issues where actually storing stuff on

servers that are overheating the environment, it comes at a cost. These are very good questions and I think maybe it's another research project that could be applied at some stage [laughter]. You know, there's lots of assertions that get made and some of them appeal to people's common sense in one form or another but actually doing some rigorous research into this where you can then promulgate the answers, the scenarios, the approaches in a compelling way to the business people that ultimately make these decisions would be a good thing. Because yeah, sure, the people who run organisations are not going to listen to the heartfelt assertions of records managers, but they might listen to some more objective evidence perhaps.

### Zoë Smyth

We'll take a few more comments and then perhaps the witnesses can sum up some points.

### David Bowen

David Bowen, Audata. The cost question Steve raised is very interesting. I think, just doing the calculation quickly in my head, that the cost of storing last year's, all of last year's emails is a small fraction of the cost of storing this year's emails. The reason being, the number of people using email, the number of things email is used for and the size of emails is growing so fast that – there is a ceiling to this growth – over the next 10/20 years, Steve's question is essentially cost neutral. The cost of storing emails from 10 years ago is insignificant compared to the cost of storing the emails we're getting right now. So it's a cost neutral question and then I think it brings us back to the issue of democratisation. All of these ill behaviours we've been hearing about this morning have, in effect, nothing to do with email. I've been working with email for nearly 25 years now and I saw all of these kinds of misbehaviour before email was around. What email has done is to democratise misbehaviour. It's made it easier for more people to misbehave in more ways and for more of us to see it and catch it and have evidence of it than it was before. But all of these things are essentially irrelevant in terms of what email's about. And so the question of whether we store it comes back also to democratisation and probably there is a fair argument that we should be storing, if

not everything, most of everything and perhaps leaving intention neutral processes. The Dutch National Archivists have a saying that every archivist needs a fire or a flood in their lifetime. Maybe what we need is simple; accidents will happen to servers and a group of emails will, in an intention neutral way, disappear.

### Zoë Smyth

OK. Just to give the witnesses a chance for any final comments they want to make?

### Catherine Hare

I've listened with great interest to the debate and I just want to come back with one very brief point. And I think it sort of underpins a lot of what's been said. I think each email exchange needs to be a conscious act with explicit implications. You know, we need to know what we're doing when we send and we need the organisation – well whatever context we're doing it in, has to have a clear understanding of what's going to happen to that email and people need to be aware of what's going to happen to that email. So a conscious act with explicit implications. And a final rider to that comment, do you think people, if it is a conscious act, with explicit implications, would people not create the emails which are going to be kept forever?

### Ian Wooler

Just to continue on the storage thing, a couple of comments if I may. I think one is that it isn't that long ago that people had laptops and things and the storage capacity etc was x, and so storage is growing at a fast rate. There's an interesting Website that talks about young innovators of the year and people say there's more storage capacity on someone's nail varnish than there is in a server. [laughter] So, you know, technologies can do wonderful things if you want to store the stuff. But I think for me it's the 'for what business purpose' question, what is it that you're storing and why? Recent work in an organisation said over a third of everything in an organisation was a duplicate. Do you want to store all that stuff? And in a way I would argue from a

non technical perspective, emails are very light to store – it's the attachments and everything that goes with them that's heavy.

### Zoë Smyth

OK. Thank you, first, to all the witnesses and then to everyone else that has made comments in this discussion.

# SEMINAR 3:
# The technology perspective: Technology – problem or panacea?
## 11.00am-12.45pm

**Chair: Steve Bailey, JISC InfoNet**

Witness: Dr Ishbel Duncan, University of St Andrews
Witness: L. Reynolds Cahoon
Witness: Jonathan Downes, Prokata Ltd
Witness: Dr David V. Bowen, Audata Ltd

The starting point for the debate:

Antony, Adshead. 'Systems to resolve the e-mail crunch', *Computer Weekly*. [Online]. (19 June 2007). Available at: http://www.computerweekly.com?Articles/2007/06/19/224883/systems-needed-to-resolve-e-mail-crunch.htm.

Auchard, E. 'Yahoo to offer unlimited e-mail storage', Reuters 298. [Online]. (March 2007). Available at: http://www.reuters.com/articlePrint?articleId=USN2720604020070328.

and Yahoo blog comments at http://yodel.yahoo.com/2007/03/27/yahoo-mail-goes-to-infinity-and-beyond/.

---

## WELCOME TO THE SEMINAR

### Julie McLeod

So ladies and gentlemen, our third and final perspective on the email issue before we look towards the future this afternoon. It's the technology perspective. It has been raised in a number of different ways already, but I'm sure we'll all explore other things. I won't go through the seminar questions, they're in your notebook and I'm sure Steve [Bailey] might say something about the scope of the seminar.

It will be chaired by Steve Bailey, who is senior advisor on records management issues for JISC infoNet, an advisory service for managers in the higher and further education sectors. Steve needs little introduction. He has asked a number of questions already so we know who he is, but he's a very well known speaker and writer on records management issues. We've done a lot of work, or we've got close association with Steve, not least because JISC infoNET actually has a physical base, as well as a virtual one, at the University. Prior to moving to JISC infoNET Steve lead JISC's own internal records and information management activities and I think was probably a prime mover in the *Supporting Institutional Records Management*[24] funding initiative back in 2002, which was the first research funding money available in the UK in our discipline. So it was a really great move. And there are other things on the cards in terms of good developments. Prior to that he was also Assistant Records Manager for the pharmaceutical company Pfizer and Team Leader (Archives and Records Management) for the University of Gloucestershire, so he's worked in different environment. Steve has his own blog on the future of records management, so again, he's well placed, I think, to chair the seminar on technology.

We chose two articles by journalists for this seminar - one on systems to resolve the email crunch and one on Yahoo offering unlimited email storage, and the related blog comments that amounted to over 300 I think[25]. But we didn't insist that the witnesses read all 300 comments, I hasten to add! To provide their views on these articles and the question *'Is technology the problem or the panacea?'*, from an information and records management perspective, I'd like to welcome the four expert witnesses - David Bowen, Reynolds Cahoon, Jonathan Downes and Ishbel Duncan. Steve and panel the floor is yours.

[24] JISC Circular 9/02 Supporting Institutional Records Management

[25] Antony Adshead ('Systems to resolve the e-mail crunch', *Computer Weekly*, 19 June 2007) and Eric Auchard ('Yahoo to offer unlimited e-mail storage', *Reuters* 298 Mar 2007 plus the Yahoo blog comments)

## CHAIR'S INTRODUCTION

### Steve Bailey

Thanks Julie. Having used up my Archbishop of Canterbury quote already, I've been madly scratching my head for a higher authority, but given that I'm not up to date on the recent Papal teachings on email, I've kind of shot that bolt I suspect, unfortunately. It may seem a bit odd in a sense having the strand on technology third, last in effect, of these three strands, but I suspect that was actually a very good and wise move. Because otherwise it would have been very easy for the whole day (or two days) to be taken up by discussions about email technology, rather than actually teasing out those thorny issues we've already talked about with regards to the organisational and the human element, before actually getting to grips with the nature of the beast itself. And certainly the two articles we were given to start off this topic I think have really (certainly in my own mind) raised lots of questions and perhaps confirmed some things that we were already thinking about and led to some other challenges.

And certainly one of the things – building on from something that was mentioned yesterday – that was very obvious straight away was that there was not a mention of records management once in any of these articles, which perhaps speaks for itself.

It's probably also worth mentioning that this is a session about technology, and that doesn't necessarily mean we really need to restrict ourselves, I would suggest, to email technology. It's inevitable that that world will, I'm sure, form the focus of our discussion, and quite rightly in the circumstances, but doesn't mean that it should constrain it. There is an awful lot more, and some of these things have been alluded to already, with regards to technical developments. Particularly at the moment with the whole rise of Web 2.0 and social software, and elements around that, that may well feed into some of this as well. It's been interesting to hear some of the varying views about Facebook and whether it's a good thing or a bad thing. Certainly within Higher Education there are already examples of where universities spend an awful lot of money creating a formalised virtual learning environment where academics can communicate with their students, and what academics are doing instead is using Facebook. So there are some real issues coming out of that.

The other point I took from this morning is, very briefly, about Catherine Hare's reference to the fact that this email is over 27 years old and yet there is still a need within our profession for days like this, events like this, where we're discussing what we're going to do about it. And I have a sneaking suspicion that email's going to become obsolete before we've even got off the starting block [laughter].

So back to the topic in hand. Is technology the big bad wolf or is it the fairy godmother? I suspect one thing is for certain, and that is it is inevitable; but I will leave it up to my panel members to give their own views as to whether it is the big bad wolf or the fairy godmother. And to start us off, I'd like to welcome Dr Ishbel Duncan who's a lecturer at the School for Computer Science at the University of St Andrews.

## WITNESS STATEMENTS

### Ishbel Duncan

For those of you who don't know St Andrews, it's a little town about 200 miles north of here. We also have big green patches like that [points to St James' Park football turf] but they're full of sand and divots. [laughter]. So you've mentioned fairy tales. I'm going to tell you a little story. So are you sitting comfortably? [laughter].

Alice is a young employee of a large financial corporation. According to recent research from Carnegie Mellon in the United States (and I think you might find this interesting, for just a sheer reduction in numbers) she receives an average 41 emails a day, reads 32 of them and sends 21. There's only 311 in her inbox. Find that strange? She's an email spring cleaner as opposed to someone who frequently cleans out or someone who doesn't clean out her email at all. And she sees email as reasonably important to her work, whereas her friend Deirdre, who's just been promoted, has suddenly discovered that her email has enormously expanded, as have her weekly meetings. Meetings are actually relational to the number of emails (I'd think it would

work in reverse but it doesn't). Deirdre also has an increase in subordinates because she's just been promoted. And again, increase in subordinates means increase in emails. So she's suffering from email overload.

But back to Alice, our young employee. Alice actually has a slight social life. She's previously joined an online dating agency, and in line with all online persona, has sold herself as a gorgeous records manager [laughter] with flowing red hair and more than a passing resemblance to Rita Hayworth [laughter]. Not so much economical with the truth as stretching it to its limit. Alice has started emailing (let's call him) Bob, but during her coffee break. She's very sensible, during her coffee break. And she turns her screen away from her co-worker Eve, so she gets that little bit of privacy when she's emailing during her coffee break. She's got her back to Eve. So she's using Gmail, she's not using the company's web server, and she agrees to meet Bob at the local Ikea the next night, as it's close to where he lives. And obviously she's selling herself as being young, pretty, attractive and an intelligent gorgeous redhead. Bob, meanwhile, is saying how much like George Clooney he looks [laughter]. Before she disappears off for the end of her coffee break, she then decides to go and do a Google search because she's got a slight skin problem. So she goes onto Google, looks up skin complaints and funnily enough jumps from skin complaints to cancer melanoma sites and on to breast reduction or increase sites, because they're all sort of inter-connected. She then shuts down, goes away.

Eve, her local co-worker, is the office eavesdropper. Get it? Eve? Eavesdropper? [laughter] Now Eve has a motto on her desk - 'knowledge is power.' And she likes to gather information because she's very much aware of the misuse of resources in the company. People Googling away, people doing Facebook, all the rest of it. So she's quite interested in what Alice is getting up to. She doesn't necessarily have to log on to Alice's' email server to find out what she's doing because there's a lot of information incidentally left lying around. And if you think, if you walk through an office space and somebody's got a magazine lying there about trips to Sweden … oh, somebody's off to Sweden. Right that's a bit of information. Somebody's got a

birthday card lying on their desk. Again, information gathering. Knowledge is power. But she can actually log onto Gmail, because she knows roughly 60% of people use very, very simple passwords. So she knows that Alice has a pet dog called dog, therefore [laughter] chances are her password is either very simply called password or is the dog's name, or her brother's name, or local to her family and friends. She also knows that people use the same password for multiple sites. So if you've got a password for your Gmail, chances are it's also going to be your password for your bank; it's also going to be the password for your work computer, because people are basically very simplistic. We can't remember 20 different passwords. We tend to remember one or two or three. And they tend to be incredibly simple.

So Eve, as I say, is a little bit annoyed that Alice is actually using the company equipment, even though she's using Gmail. So she's having a sort of a look around and she sees this email to Bob –bobsingleton@hotmail.com. And she knows from the email he is local to Ikea. She jumps to Multimap, she jumps to local census data, and she can also do things like 192.com just to check how many Bob Singleton's are in a 10-mile radius of Ikea. She finds there's 32 of them; 23 of them are also actually football supporters because she can recognise that from the football website. There's 23 Bob Singletons. She also discovered that by looking at local press details that at least two of them are criminals. So she's a little bit worried now that Bob Singleton is either a criminal or a football supporter [laughter], or perhaps both. So she's a little bit nosy. She doesn't think she's doing any harm, she's just looking after Alice.

Meanwhile, we have malicious Mallory. Mallory was, shall we say, allowed to leave the corporation and now works from home as a contract programmer. Now Mallory still has a back door into the company because she has access to a systems account from one of the systems guys who's off on long term sick, and his accounts haven't been frozen. Her accounts have been frozen, his weren't. She knew his password, she has a back door into the system. So she can actually get into the email servers and send out emails purporting to come from the company.

Now we scan a lot of emails coming in – 70% of emails are reckoned to carry viruses. But how many companies actually scan outgoing emails for viruses? You can ruin a company's business, reputation, by simply sending out viruses, subtle or unsubtle. Viruses cost $60billion worldwide in 2006 and it's generally considered that spam will take up $75billion of time this year [http://www.spamclam.co.uk/email-threat-statistics.html].[26]

So Mallory is sitting there at home vindictively sending out spam and viruses from the company's account. And this gives our security manager Sarah a headache. She has actually imposed secure email using S/MIME[27] and she's got things like Verisign[28] – pretty good privacy. All these sort of certification things that everybody's told to use, they're basically a web of trust – notice the word trust. They're not that secure – they can be cracked. So she's aware that if all email ids of staff are stored on the company's server, there is one big risk; one big corporate risk, if you keep all the company's data, all email, all personal id information, on one big server. I'm sure you've all heard stories of how companies have had fires, water damage, what have you. One server means one big pot of risk. That server comes down, your company comes down. So she's suggesting that everyone keeps a lot of data on their client machines. In other words; the machines that they're actually working on, which means you've got to pass your data back and forth across the network. As soon as you start passing data back and forth across the network, you have people looking at that data. It is going to be logged across the network. It also means, effectively, that people have to carry electronic wallets of information so they can go from one machine to another. So you've got this risk. One big machine that holds lots of data, or lots of little machines with multiple data. She's thought about putting bio-informatics on access rights, but that's costly and it's still not a high enough level of recognition, despite what the government says with airports.

[26] The Radicati group estimate that 70% of email will be spam in 2007 and projected associated losses is estimated at $75B for the US this year.

[27] "S/MIME (Secure / Multipurpose Internet Mail Extensions) is a standard for public key encryption and signing of e-mail encapsulated in MIME" http://en.wikipedia.org/wiki/S/MIME

[28] http://www.verisign.com/

What models of security can Sarah impose on the company? There's lots of models of security. Things like Chinese Walls where you separate out your concerns, Bell-La Padula[29] where information only flows upwards. But what effect does that have on the information in the company? What effect does that have on electronic records management? Because you will see different parts – effectively you've got problems with the separation of the records. You're only seeing small cells of records. You're not seeing a sort of temporal line. She can put in things like access control lists, so that people with a certain level of access can get access to certain accounts, or that certain files are kept for groups of people, but again you're effectively dividing and conquering your data. Again problems with records management; problems with security; problems with access. And don't let's go near firewalls for the moment.

She has been asked by the management to look at tracking data, and as we know we've got a lot of internal network data passing. And she's been talking to network Nat, the guy who looks after the network and who's the one that everyone shouts at when the network drops on a Monday morning. The problem is management want to see what data is out there. They know they can look at files. Sometimes they are encrypted, sometimes not. They know they might have a legal requirement to show off records, but what record is important? What record is not important? Sarah and Nat have to work out how they can control that access and how they control the network. Trouble is, as soon as you're emailing back and forward, or you're using any sort of network access, you are sending packets of information across the network. It's what's known as an IP packet - Internet Protocol packet. It won't look like anything that you or I can understand, but somebody somewhere can de-encrypt that and get all the information you're passing. You can delete a file, but the information is still there somewhere out in cyberspace. There's also keyboard monitoring going on so we can look at files; we can also look at keyboard monitoring from the point of view of seeing how well people are working.

[29] Computer security policy model. See for example http://en.wikipedia.org/wiki/Bell-LaPadula_model

Now there's also the guy who looks after the servers. Sam the IT man is also very worried, along with Sarah and Nat. He's worried about the storage of data. He knows he can compact email, he can compact a lot of files down to 10% of the original storage size. But again, there's a problem. Where do you store the data? Is it on CD-ROMs? What is the lifetime? It's not just the hardware, it's also the software. How do you access something that's 10-15 years old? We've all got tapes out there; we've all got the old floppy disks. How do we access them?

There's also Mike the maintenance man. This is the bearded solitary, shabby soul that everybody knows wanders round the basement corridors late on a Friday night when everybody else has got a social life [laughter]. He's another one who's worried about storage, but he's the one that everybody will come to when they say 'I need that file, I think it was 1975, it'll probably be on a tape drive somewhere'. And he's also got to be able to keep those old media active and be able to get the access, remembering that millions of dollars of pounds has been spent on companies trying to keep old data active and also being able to provide that information under subpoena.

So meanwhile back to Alice. She's completely oblivious to all this headache that Sarah and Nat, Mike and Sam have got. And she's wandering around quite happily, gone off to Starbucks to get her coffee, all the cameras watching her – especially Newcastle city centre – one of the most watched cities in Britain [laughter]. She looks at her emails, she sees she's got a few pop-up windows, all because she has been looking at cosmetic sites. Google, Gmail, they all do profiling. Profiling is worth £103 billion in 2005. A lot of companies now in Britain – 30% of companies actually - all use the Internet for sales, so we've got this massive business-profiling going on. So therefore any action you're doing on your computer is being logged somewhere, by someone. Also, because it's a Thursday, she's more likely to open emails that are trying to sell products. For some reason, we like to open product emails between Tuesdays and Thursdays, but not on Mondays and Fridays.

So to finish, naive young Alice sets off on her date with Bob, hopefully discovering he is actually her George Clooney lookalike. Meanwhile leaving Sarah, Nat, Sam and Mike all with massive headaches trying to work out how they can control data without giving away private information. What we really have now is Big Brother has arrived by stealth, and it's been welcomed into our lives by these wonderful things called email and the Internet. We're all using it all the time, but the amount of information that is collated by anybody out there is phenomenal. We cannot hide.

So delete is not often really a delete, it's just a place to shunt to another file; the computer and the corporation actually knows a hell of a lot [more] about you than we would like to know. So to finish, Houston we really do have a problem and it's a massive one.

## Steve Bailey

Thank you very much Ishbel for that rather sobering but amusing introduction to this session. And the first thing I picked up was that Bob was obviously a real romantic. He chose a local furniture store for their first date! [laughter] Which is a sure way to romantic success, I'm sure. OK, we're now going to move on to our second speaker, Reynolds Cahoon from Lockheed, who will undoubtedly have a very different perspective from the business corporate angle.

## Reynolds Cahoon

I hope what I have to say today will be in some way useful. I'll take a totally different kind of perspective on the world – a very systemic kind of perspective. We've talked a lot about being holistic and what I hope to be able to do in my 10 minutes is to talk a little bit about how we get our hands around all that we have talked about today. How do we look at it from a systemic, kind of holistic point of view? What tools can we use to actually do something about all the things we've been ringing our hands about in our conversation?

A couple of stories. A young man, a wealthy young man, wanted to own the finest car in the world. So he set out to get that car by renting a very large warehouse, found himself the finest 100 automobile engineers in the world that money could buy. He found himself the finest 100 automobiles, bought them all and put them in the warehouse and told each of the engineers I want you to find me the finest engine, the finest transmission, the finest suspension, the finest air conditioner, the finest stereo system, the finest tyres and brakes. And so the engineers set off to do that. And they did; they found the finest parts available on all those cars. And they brought them together and put them in a pile in the middle of that warehouse. So they had a pile of the finest parts, but did they have an automobile? No. But they did have a pile of the finest parts. And why? Because the parts wouldn't fit into an automobile.

So when we think about how we solve this problem of applying technology, either to ease the email problem or to provide additional functionality, we've got to think about the bigger picture, the systems perspective. The system being, in at least one definition, one or more parts; the parts interact together, the performance of a single part affects the performance of the whole. How any part affects the performance of the whole depends on what the other parts are doing. You can group those parts together in a number of ways – the performance of any group of parts affects the performance of the whole. How any group of parts affects the performance of the whole depends on what the group of parts is doing.

Point – the system is ***not*** the sum of its parts. It's the product of the relationships, the interactions among those parts. And until we can understand the interactions among the parts, we can't understand how intervention in one part of our system (an email system or an instant messaging system or our implementation of YouTube or whatever we intended to implement) – whatever technology we're going to insert in our infrastructure - we can't understand what difference that's going to make, what the implications are.

Story number two. An organisation decided that because the pressure on its email system was growing it would apply a series of constraints, and we've talked about some of those constraints today. One of those constraints is to limit the size of the email box. When it hits 50Mbytes, you're cut off; you can't send another message. You're done until you clear out your box and drop it below 40Mbytes. The policy was implemented really without thinking about what the implications were. What happened? In the short term, the financial pressure on the storage infrastructure dropped because the email box size was capped. But what did everybody do? They found a way around it. They started storing email on their hard drives, started storing it on their thumb drives. They would put it on their iPods; they'd find lots of ways round this capping the email problem. So then what happened?

As a result of these workarounds, these infrastructure independent workarounds, e-discovery became absolutely, incredibly expensive. It costs one *very* large organisation in the US (whose name I will not mention) more than $20 million every time an e-discovery request was made to the company. So, e-discovery costs *far* outstrip the cost of storage that IT folks were saving. Another problem obviously occurred. The infrastructure became more and more complex. And with its increasing complexity, it became more and more difficult for the organisation to figure out how in the world they would *ever* get their arms around all this content. The records can't be re-purposed and can't be exploited, because they are in places that can't be reached.

The third story involves a very large automobile manufacturer whose leaders thought they could defer action on their records management and email problem. And in fact, they did defer and they got sued. Rather than attempting to defend themselves because they couldn't respond to the discovery requests, they just settled out of court. And they were sued again. And they settled out of court. And they were sued again and they settled out of court. Now, what did the local attorneys figure out? [laughter]. That's exactly what happened. They were sued more and more and more and more. Finally, they ended up spending (and they're not finished yet) scores of millions of

dollars to try to begin to build the infrastructure that would enable them to defend themselves effectively in court.

So how do we deal with all this? Three ideas…First, we need to treat our enterprise as the living system that it is and apply systems theory to understanding the inter-reactions of the parts of our enterprise. And I'll show you a graphic of that right now:

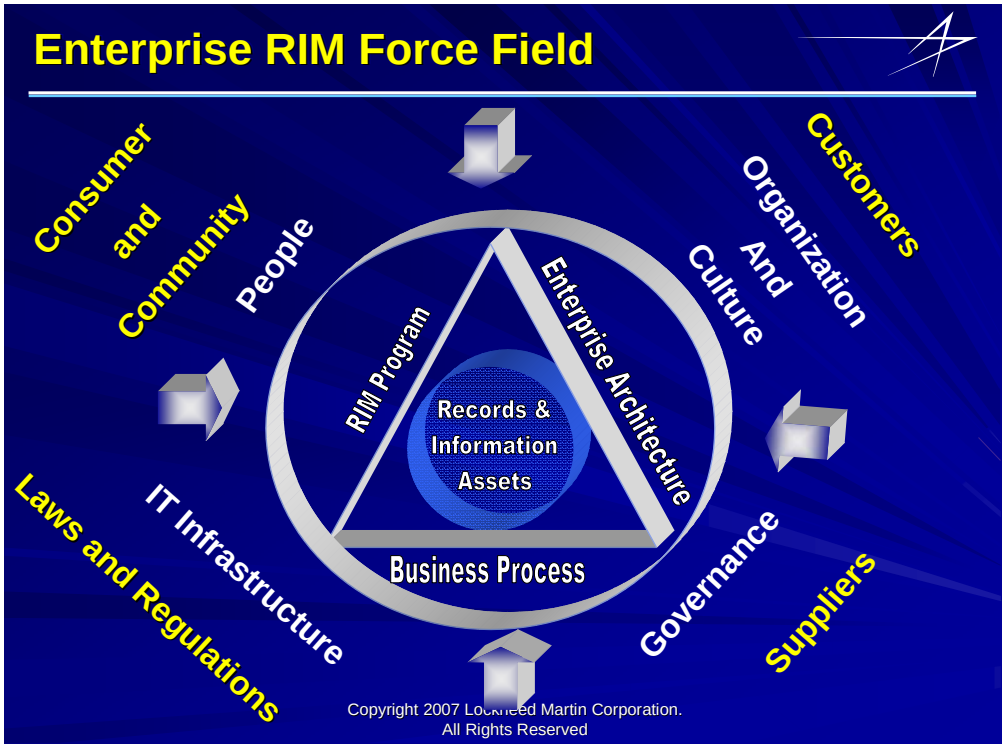



Figure 3.1

If we think of our enterprise as an eco-system, and this is obviously just a highly simplified, notional perspective, and a perspective that looks at records and information assets kind of as at the centre of the world, and we know that it isn't the centre of the world. But for the sake of our argument, say, let's just take this perspective. Anything can go in the middle, any one of those or other dimensions of our enterprise eco-systems could go in the centre and each of the other components would reconfigure themselves around that. But with information assets at the centre, we believe that enterprise architecture, business process design and management, and

a records and information programme influence most directly how records and information assets are created and managed. But influencing those elements are obviously, as we've talked about today, the people, the culture, the organisation, the governance processes that support how information technology is inserted and used, and obviously the IT infrastructure, which is what we're, in this panel, talking about. How do we apply technology? How is technology applied effectively to help us manage this problem of email?

In the outside ring [Figure 3.1] of course, a little bit more distant but still critically important, are the laws and regulations that affect ***us***, the consumers in the community, obviously our customers and suppliers all have interaction. We could draw arrows of effect among all of these elements to understand the eco-system. The point that I'd like to make is that until we take this enterprise perspective, any intervention that we make in any particular part of this system is going to affect parts of the system in ways that we won't understand if we don't think about them. And far too often technologies are inserted into our organisations, into our infrastructures without that kind of thought.

Now one could argue, and I believe rightly so, who could have foreseen how email would be used when we began to implement it? But how was it implemented? Who decided that email was a good thing for our organisations? It became sort of the thing to do. Everybody had email and so we began to adopt it and then how we used it began to evolve. And the people part of the component here, that I think we've talked about at length, had a very significant effect on other aspects of this eco-system. So as we begin to apply technical interventions, we need to understand the implications on each of the other elements of this eco-system.

The second idea I want to explore is I think that in order to get a handle, once we begin to take this holistic systems perspective where we understand the relationships

amongst the parts, we begin to create a structure that I've depicted here as enterprise architecture.

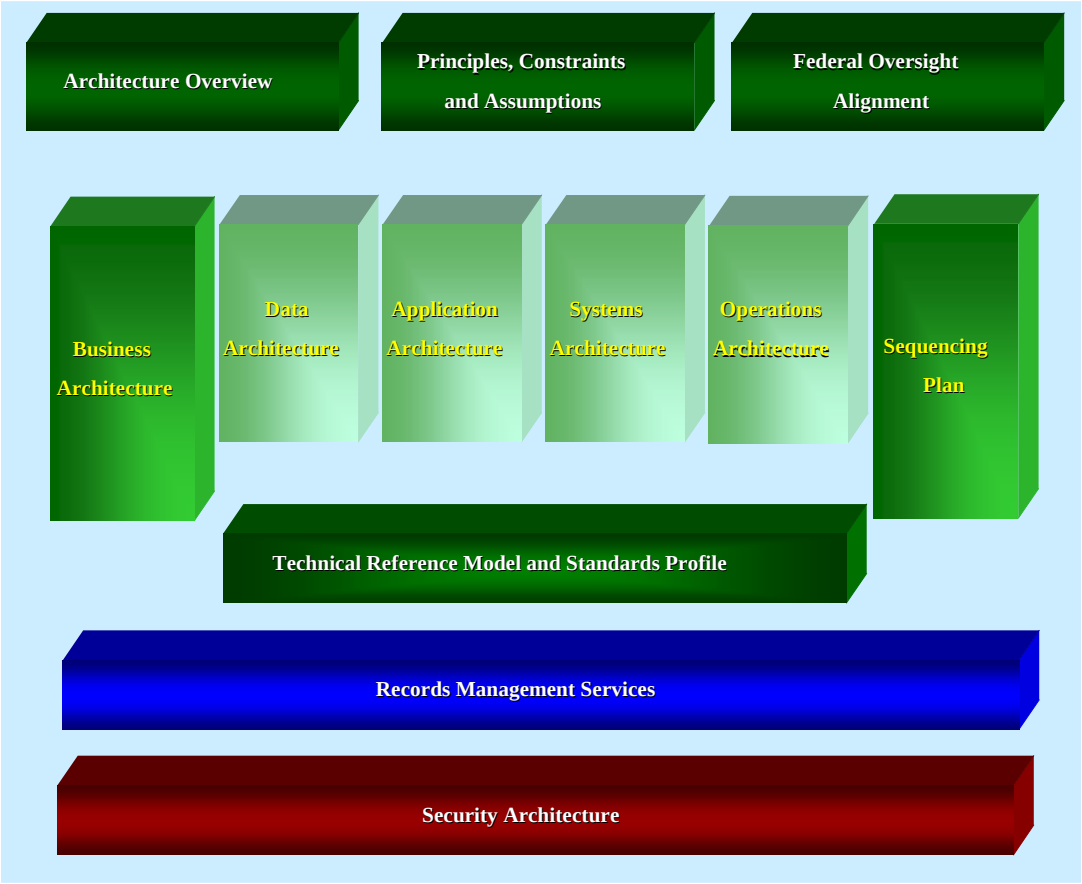



Figure 3.2

Is there anyone here who is uncomfortable with that notion of enterprise architecture? Being the assimilation of the business processes, the goals, strategic objectives of an organisation that find their way into business processes, that find their way into data architectures and information architectures and process architectures, through application architectures and system architectures with a technical reference model that supports all of that. And what I'm proposing is that there be a records management layer in that enterprise architecture, that ***deals*** with the records management policies, processes and appropriate technologies to support that enterprise architecture. And just as security architecture cross-cuts all the other elements of enterprise architecture, I'm proposing that records management services also cross-cut the whole architecture. So that those services are available to any other application, to the infrastructure, are available (if you take records management

services for example) as a set of ***policies***, services that can be applied to a business architecture, that they help drive the way we implement any kind of communications and messaging system, not just email. So that's what I propose.

Third: A couple trends. Some of you may be familiar with the Object Management Group's work on records management services. These services will be a set of open, standard services that will play in that records management services layer, which are part of a service oriented architecture. These services would allow us to declare a record, establish its authenticity and establish its provenance[30]. These nine basic services can be embedded in applications that create records, can be embedded in email systems, can be embedded in any service oriented architecture based application. I think these Records Management Services will play a very significant role in the future.

You're also seeing records management services embedded in applications available from suppliers – Microsoft is doing it with Share point. You're seeing it with Oracle products. You'll see it, I think, spread into other Oracle products as time goes on. Autonomy just bought Meridio, a fine Irish company that will combine their efforts and provide a very sophisticated search into records management and bring records management capabilities into the set of search features. So I believe all these trends combine to say 'is technology the problem?' No - technology is not the problem. Technology ***can*** be the problem if we don't manage it productively and effectively, but technology by itself isn't a problem. It's how we implement it, and how we implement it too many times without thinking systemically about it.

Thank you.

[30] Object Management Group. Government Domain Task Force (GovDTF) *MDA Models for Records Management Service*s. See http://gov.omg.org/gov-rfp-rms.htm

### Steve Bailey

Thanks very much Reynolds. It's fascinating to hear email management put into that broader organisational context and I think really bringing together the three themes that we've heard over the last couple of days, putting technology and actually integrating it into both the business ((the organisation) and users, and the way in which they work. And certainly from the Higher Education perspective, service oriented environment architecture is something we're really actively investigating, something called the e-framework, at the moment, and how we can actually add records management functionality to that. So I think we're beginning to see real evidence of that happening.

Right over to our third of four speakers now Jonathan Downes, the founder of Prokata Ltd. So over to you, Jonathan.

### Jonathan Downes

Hi, just a little bit of background. The last two years I've been working in local government, implementing records management good practice, information management good practice and EDRM systems. And before that I spent 18 years in industry, in the automotive industry in particular, around knowledge management and information management areas more latterly. I'd like to draw on that industry experience to start with an analogy.

Is technology the problem or the panacea for the email management issue? I suppose we could ask the same question, is manufacturing the problem or panacea for road traffic congestion? Well it's true to say that without manufacturing we wouldn't have any cars, we wouldn't have very good roads to travel, we wouldn't have good buildings and places to travel to. And the number of reasons for travelling in the first place would be somewhat diminished. So perhaps in that respect manufacturing is the cause of road traffic congestion. [laughter].

And perhaps we can say the same with email, you know. Is technology the problem or the panacea with email? Well without technology we wouldn't have email, we wouldn't have networks for electronic communications travel, we wouldn't have computers for them to travel between. And we'd have fewer reasons for communicating in the first place. So as much as manufacturing is the cause or the problem for road traffic, so technology is the cause of the problem for email. But the problems we have with email are just a symptom of change. And often when we go through change we get growing pains. And I think what we're suffering from with email and e-communications at the moment is one of those growing pains of growth.

Now with a disease, a disease in need of a cure, what you would normally do is try and diagnose the disease in order to come up and resolve it from the root. But if the patient is particularly sick, and I think we're in that situation at the moment [laughter], you have to take some very immediate action. You have to try and sustain the patient long enough to be able to do the research that you need, to get to the root of the cause. And I think that's the situation that we're in at the moment with e-communications and email. That some of the solutions that we looked at in the research papers, the solutions that offer massive storage, they're just prolonging the agony. They're not getting to the heart of the problem. And I'm not talking about here how much we keep or how much we throw away, but thinking more about the fact that these are just creating enormous buckets. And our challenge is to manage the information that is in those buckets. Can we say that, and I'm simplifying for effect here, a date stamp and a full text search… is that sufficient to manage the enormous amount of information that's contained in the emails and attachments that go with them?

But there are solutions to deal with the symptoms. So let's have a think for a minute how we get to the root cause. And here are a few suggestions about current and needed direction of travel to get a better grip on email management. I'm going to go through six suggestions and four observations about future directions.

So the first one is about ***diversification and enhancement***. Email as a default mechanism for communication has started to diversify. So we have got instant messaging, we've got things like RSS feeds, where you can be notified of something that's happening. So diversification is happening and I think that needs to continue. We need to look at the ways email is being used, and we need to stream those usages and control those usages better. One of the problems at the moment is that so many things go through email, we need to categorise its use and do more with that. Workflow is another good example of how that happens and shared working environments in particular (and I'll talk about those more in a minute). There needs to be more diversification, but then more enhancements on the solutions that we do have. I think more sophisticated, but simple to use collaboration environments – a very important way forward.

So this is the second point and I've entitled it ***your place or mine?*** So, instead of sending an email file which starts here and then I send it over to you and then you receive it, wouldn't it be better if we just go to the same place and read the information there? And there are sites that are doing this. There are things like Flickr and Facebook where you can logon and you can meet people. And there are more sophisticated versions of that coming up. I don't know if anyone's come across Pownce[31], but this is a new networking site and in it you can send different grades of permissions if you like. So it's not a case of everybody or nobody, you can start to send (like you would in email) permissions to a subset of people to certain documents. So it's starting to get those areas of grey developing. This is one of the important things to think – the difference between the physical world and the virtual world is we ***can*** do things differently in the virtual world. whereas it might be difficult to meet a multiple set of groups of people down at the pub to have a conversation, you can do that in the virtual world. You can add people in, you can take them out, you can limit their permissions. It is possible to do, but the tools we have at the moment don't make that very straight forward.

[31] A social networking and blogging site from Megatechtronium See http://www.pownce.com/

The next point I wanted to make is this point number three, I've entitled ***business or pleasure***. And this is looking at the difference between the tools we have available to us at work, and the tools that we have available to us outside of work. Things like Facebook and Flickr and how we use those differently. And there are different overheads. I mean there are security issues, particularly around the business ones, but there are also things about interoperability and user training. You can be quite flight of foot in your personal use of the Internet. It's only you you're being responsible to and, if you start using Google Mail one day and decide to go over to Yahoo the next, then you can do that. It's a bit of a headache, but you can manage that yourself. When we're looking at an organisational context, there are many more factors that need to be taken into account. And I think user training is quite a big one of those. So there is a difference between the ease with which we can adopt tools outside of the organisation and those that we can use inside. That doesn't mean that we shouldn't be tackling those problems. I don't think it's going to be good enough and we've talked about this for the next generation, just to say "I'm sorry it's too difficult" – when there's a compelling business case for doing so. We need to be dealing with those difficulties. To throw an idea open here, perhaps one of the opportunities is through open source technology. A lot of the tools that we use for free on the Internet have been developed by people for us. Perhaps what we do is invest in open source technology, but instead of putting the money that we've saved in the pocket, we invest in a developer community. So we don't pay licences but we do have our own developers. And we encourage those developers to work across organisations to solve the real problems that you have to develop the technology that you've got. One of the great things about the Internet is you can solve or say something once, and it's then potentially solved or said for everybody.

My fourth point I've called ***keeping the cat (categorisation) among the pigeons***. Email reminded me a little bit of a carrier pigeon in the way we send information. So we've got what it is we want to say, we wrap it up and we put it in the little barrel and then whoosh, off it goes – it completely leaves the context. So when it arrives, you don't know where it came from, and a lot of the information that was available to you

when that email left has completely been lost. And that is really valuable information and for me, what's becoming clear is we need more metadata and we need a better way of managing it, I'm not saying it's easy to get – but good quality metadata, well managed metadata is important. And I think we throw it away. There's information there that's available and we're not using the tools and technologies to capture it and take it forward and to make it work for us.

The fifth one I've called ***the mega munching multiple metadata ? maching machine***. [laughter].We need better ways of managing metadata. I think we need more metadata, we need to be capturing it in very sensible ways. I mean simple things you could talk about - information (perhaps an email) gets sent. If you sent that email from a group email account, we talked about group email accounts I think yesterday, you've already got the context of who it's to do with. If you're sending email or if you're posting a discussion board in a collaboration environment, you've already got the work context for that. And these are things we can pick up and we can use. A powerful example for me, and again this is how the physical world is different from the virtual world, is an example on the Dabs website [www.dabs.com]. If you want to buy some piece of equipment, if you're looking for a new flat screen monitor, you search for it. What you get come back is a whole series of parallel lists. It's basically what a categorisation is. So you can now narrow that down by brand or by cost or by size or by other users' comments. So these are streams of metadata. These are almost virtual file plans of information. And these tools are out there and they're working. As you started to narrow down your selection, those others respond in certain ways. This information, all this capability is there for us to use.

And I don't think we should be embarrassed about the quantity of metadata that we have. And let me take this to an extreme. For me there's a big parallel between the enterprise resource planning systems like SAP and People Soft that have captured the market around the last 20 years of operational development - the operational business side. And we're now dealing with more enterprise – with content management. But if you think about something in its simplest form, in a structured database, you have

perhaps the "number one", or the "number two" or a "yes" or a "no". That information is vital to the company, but its value is in the context. So it's in a field, in a table, in a record, in a system, in an organisation. But that number one means a car or a product or a book. At its very essence you've got a very small amount of actual detailed information, but the ***context*** gives it its value.

The sixth point - ***I shall tag this only once***. One of the great things about the Internet is you can tag any information only once. Just a quick footballing story, I play football a bit. I don't really follow the sport, but I did want to know when the main football matches were. I think it was 2006 when it was the last world cup? So I went onto Google Calendar. I searched and some kind person had put all of those fixtures in for me and I loaded it up. So one person in the world had put in all the fixtures for the world cup football and it was there at my disposal.

Now my four observations. Those are my six proposals. Is email the **tip of the e-berg**? [laughter]. It's a bit of an anomaly in a way. Sometimes I go to phone somebody, they're not there. What do I do? Do I leave them a message? Sometimes I send them an email. So now the conversation I was going to have is captured in email. Why is it more important that it's captured in email, when I could have had that verbally and it not be recorded? Or I could have left it as a voicemail and then it would have been deleted. Perhaps this is going to become more pervasive as we've got more technology to capture audio and capture video, and that's more available to us and we've got bigger storage capacity. Is all of this going to be stored? Are we going to end up with a record of everything in every way?

Second observation was about future proofing. Information legislation gets applied retrospectively. The 2005 Freedom of Information Act[32] was applied to information

[32] Freedom of Information Act 2000 (Public General Acts – Elizabeth II). Chapter 36. The Stationery Office

that was held beforehand. So we need to be ready and be prepared and be flexible for the information that we've got today, to apply the rules of the future.

The third observation – the death knell for email? Are we going to see the death of email? Did we see the death of paper with the paperless office? Have we seen the death of wires with the wireless office? No I don't suspect we'll see the end of email, but I do expect (with diversification and enhancement) for it to even off as we spread the way we use it.

And finally, before I sum up – in perpetuity is the last point. And what an opportunity for historical and educational benefit. A massive amount of information is being captured and held now. And perhaps the question isn't so much what is missing, but what do we chose to leave out?

So from a technology perspective, we only use a small percentage of the functionality we have and we only have a small percentage of the functionality that we need. But a lot of that functionality is out there, it's not perhaps, just as in Reynold's context of the systems, not brought together to work together. And I think records managers should become the heroes of helping this change. We should be able to facilitate it. We've heard about big brother and the ugly sisters, the big bad wolf and the fairy godmother, perhaps records managers should be the fairy godmothers who turn the beleaguered Cinderella of email into the beautiful princess of well managed information, delivering business value. [laughter]

### Steve Bailey

Thank you to Hans Christian Anderson there [laughter]. Thanks very much Jonathan. I think that built very well on Reynold's previous presentation, emphasising the context of email and the fact that the need to embed it within the organisation being critical. I also took from that that there is hope out there from different technologies,

from other technologies that are out there for different purposes, that perhaps we should be looking at as part of our management role within email. So, to our last session and Dr David Bowen, Managing Director of Audata Ltd. David needs no introduction to me, anyway, because I used to work with him at Pfizer Central Research before David started up his own company, quite a few years ago now? So it's over to David.

## David Bowen

Thanks. I played football when I was young. I don't really follow it. So I want to turn your attention to this side of the room [i.e. away from St James' Park football pitch… laughter] and to notice that we are being assembled and sponsored here by a School of Computing, Engineering and Information Sciences. So very much rooted in reality and in physical things that work, rather than in things that we either wish would work, or things we say we won't do because they'll never be perfect. If engineers waited for the world to be perfect, we'd never have anything built, let alone the grand stadium like this.

Following earlier speakers, I'm going to take records management as a shorthand for information management, knowledge management, the way we manage all the stuff that is around us and I don't want to get tied up on the differences between information, knowledge or records. I'm also going to take email as a shorthand for all of the different e-communications. So instant messaging, keeping in mind of course that some people these days actually dictate spoken words into systems that automatically convert them into written words. All of these electronic things. And again, just in passing, one of our hidden themes has been large numbers. So I want to give you what I hope is a piece of comforting news and a health warning. The comforting news is that there is probably a ceiling to the number of emails and the amount of space they'll take up. If you assume that everybody in the world is processing something in the region of two million emails a year, and that emails begin to top out around 100 megabytes, and I don't think any of those are terribly bad assumptions, (you can fight about the odds here or there), we end up with 10 followed

by 16 zeros as the number of emails a year. And we end up with 10 followed by 24 zeros as the number of bytes we'll need to store. And these are not terribly large numbers. And that's the other thing. Whenever we start talking in all these 10s and zeros, divide them by the number of people using email now. I assume, incidentally, 10,000 million people as the top population, so one followed by 10 zeros. So divide them by the number of people, and £75billion spent on some aspect of email management sounds pretty bad. It's only £75 for each of us. And it may not be worth £75 to try and deal with the issue.

These are systems problems and one of the issues that's come up here, that I'd like to suggest a systems view of, is the question of policies. If you want to improve information management in organisations you do need top level support. You need policies, but you also need monitoring. You need reinforcement, you need constant concern. The picture yesterday of the manager who actually says I want to see the file, I want to make sure the file is good, applies to e-operations as well as to paper files. But you need a triangle. Why do systems people always come out with circles or triangles? [laughter] Is it just that they're easier to draw? Or is it that our minds naturally come into threes? Or unending things?

We have a triangle here as well. We need technical and business process people involved. IT are often seduced, of course, by fancy technical solutions, but IT need to be involved in our discussions – information governance, need to be involved in our discussions. And we need everyday users. I really do believe very much that our job is not to be a separate profession, beavering away in secrecy. But our job is to evangelise. I ***really*** wish that we were talking to that stadium full of people. That's who we have to influence. And the suggestion yesterday that we should be out in schools, teaching this to children and to teenagers and to people in university and teaching it to ***everyone*** in university (not just to a specialist group) is an important suggestion. Even if we do that, we won't succeed, so for heaven's sake stop worrying that things will never be perfect. Of course they'll never be perfect. People have been teaching English for years and you can still see misprints in newspapers and you still

see bad grammar, you still see humorous things that are made from misunderstandings and badly worded stories. So of course they'll never be perfect, but that doesn't mean we shouldn't be trying.

The technology embodied in the total archive is a terrible thing. And even if we take Steve's solution of saving everything, I really do hope we find a way of doing it other than a total email archive. I think those are an abomination. And the reason is, email should not be separated from other information objects. An email is not a standalone thing. We treat them that way, because the email software has been made so convenient that that's what we use. But an email for a particular business process or business matter will be associated with some database entries, with some paper entities, maybe even with some physical entities. It may refer to the strength of a beam that's holding that roof up and stopping it crashing down onto the grass. Something that just puts all the emails in one place is an abomination and it comes about because of the ownership problem. The organisation has sat there. It's looked at all of you people and said 'you've got your email, you've got yours and you've got yours, and each of you keep them private' and I can't review them all, because they're all in these separate PST files held on your sticks or whatever. I, the organisation, want to express my ownership for these emails so I'm going to make a copy and keep all my copies in this great bin, which I own. So you can see – intellectually you can see - economically how it happens; but in terms of information management, it's a bad thing.

Technology, however, more often that not helps us. We're increasingly able to automate the capture and management of metadata. And I want to question the number of metadata; there's a tendency in some organisations I've worked with to say oh, we need hundreds of metadata items. Go home and play – I think you call it animal, vegetable, mineral – I used to call it 20 questions when I was little. I think of any object (real or fictional) and you have 20 yes/no questions to guess it. And most of the time, if you're good and we know each other well enough that you can understand my mind, you will guess it in only 20 yes/no questions. Now in our real

metadata world, we have much richer questions than yes/no. We don't have to say yes/no. We have to say the date was between October 2006 and January 2007, or something. So we have much richer questions and answers. You don't need that many pieces of metadata to narrow down from a very large field into a very specific thing.

Some discipline, some training for email and some technological things like, forcing the metadata on creation, or on receipt, will help. They'll encourage us to do single subject emails. I have to say in terms of moving emails into information management systems, multi-subject emails are a terrible thing because you really are either stuck with copying them into each of the different appropriate folders, or what? Who knows? Single subject emails are a great idea.

Information sharing outside of distribution lists. Email, because it's the software we like, because we all get shown by our mate how to use it, is being abused in that we're using it to make announcements, we're using it for group collaboration, we're using it for broadcast questions and answers. And increasingly other tools now are coming into use for these things. Either document management systems with their structures, or social networking sites with their structures. So email won't disappear, but we can begin to put some of the burden that it's carrying improperly and inappropriately onto other systems.

The key bit of technology that was mentioned earlier that's going to help us is searching and labelling. Again, the metadata are useful because then you can search and it's interesting. We did a searching course recently for what was expressed as a naive audience, a group of people who hadn't a clue about how to search the databases they were working with. But ***every one*** of them knew Google and EBay backwards and forwards. Searching, again, is out there spreading in the population. And our job as information professionals is to help them see that that skill translates into work and then to help work build the infrastructure and the parameters that allow

them to use that skill productively. Because searching is the key to Steve's world in which everything's been saved. That's how you find the bit you want at this instant.

Another key to Steve's world that was mentioned several times in the coffee break, and for which I really do think technology is beginning to become available is ***de-duplication***. The social networking will of course help with de-duplication, because instead of sending an email and receiving one back, I can post something in one place and you can read it and post something else in one place. Now we have ***one*** copy instead of two or a thousand copies of that thing. This has also been worked in collaboration with science and the construction industry, for instance, for years. People build a collaborative site, and post things and consult them, so they have one copy shared by many different companies who are building a project.

De-duplication of historical things is also becoming possible. I still think that the anti-plagiarism industry in the academic world has a lot to offer in terms of de-duplication. Take that plagiarism software and turn it over to saying are these two emails so similar that they can be merged into one? Or are these two emails so different that they really are expressing different things and need to be kept?

We are also increasingly good at mapping things. And another issue with email that technology has created for us is that an email conversation quickly becomes multi-dimensional. I send an email to these people, they reply, but they also copy in these people, who now reply some to them, some to me, some to you, who now reply some to me, some to each other, some to you. Before you know it, an email conversation cannot be effectively expressed on a collection of pieces of paper. It's too rich, too diverse. And if you want to know who said what, when, and who knew what, when, how did this social interaction work… we need three-way mapping. But we have ***good*** three-dimensional mapping software. Let's begin to apply it to information.

The final thing I think I would like to mention, to leave in your mind, is ***ownership***. A lot of these solutions seem to take away my email account, which I see as my personal thing regardless of who pays for the servers, and force me to use some more public, more shared, more group thing. And democratisation - because what I think the summary of what we've seen happening in companies and in the world with computers and email is, is democratisation. Where I used to have to get someone else to do something, I now do it myself and everybody can do it themselves. Democratisation has made us all very individual and we have, as part of this very rapid evolution (and think of this entire information process as rapid evolution), too fast for us to evolve and keep up. We know have to evolve back towards a way of group thinking. So yes, now I can do everything, but what I do has to be to the benefit of the group.

Thank you.

## Steve Bailey

Thanks very much David. I really like the idea that perhaps at half time at the next home game, getting out there and grabbing the mike and, [laughter] rather than giving the fixtures for the next season, evangelising about records management and email management. It would make a great highlight on Match of the Day, I suspect, that one [laughter].

Also I was very interested with David really picking up on that thing about looking at other technologies and perhaps the way in which they do have a role to play. You know, there's a ***huge*** canvas now of technical development that's just expanding in so many different directions. You know, the de-duplication, I love the idea of thinking about plagiarism detection technology – does that have a role? There's so many ways in which we could help seize the technology and I think the panel members today have really helped to give that impression of both a lot of the problems, but also the way in which (OK not a panacea) but again referring to David, you know, let's be realistic. We're never going to be perfect and if we keep striving for perfection, then I

suspect there's going to be a lot of naval gazing for a long time whilst the world moves on fairly rapidly without us.

## DISCUSSION SESSION

### Steve Bailey

Firstly I'd just like to invite any of the other panel members to pick up on anything their colleagues have said around the table, there's been a lot of points raised, before offering the opportunity to people on the floor. Is there anything that you were burning to say, or object to, or add to at the time.

### Jonathan Downes

I'd like to answer David's point about people training themselves outside of work and how you can relate that training to things inside of work. I think there's the two sides – one is the transference of the technology that's being developed, and the other is the transference of the skills that are being developed. Because it used to be you were lucky if you had a computer at work, but you never had one at home. And then you get one at home and at work, and then find that you've got more up-to-date software at home than at work [laughter]. And the whole thing turns on its head.

### Steve Bailey

Yes, and we can benefit from that –sorry, we as organisations can benefit from the skills users are bringing from their home. OK, I'd like to open it up to the floor. Martin?

### Martin Sanderson

Some excellent presentations, witness statements there. And two things really shout out at me from those presentations, mixed in all four I think. One is the idea of an information architecture, which talks about a technical architecture and the systems where inputs and outputs affect each other. We don't see so much around information architecture, and if we do, it's often outside of the records management field. Knowledge managers and information managers concern themselves with information architecture, and I think records managers need to do the same. And alignment of that information architecture with the technical architecture is absolutely crucial. The

other thing is, and I think it would be nice to see a School of Computing, Engineering, Information Sciences and Cognitive Psychology, because why do we like email as a desktop? Because, as we say, we've got 24 hours a day, our brains are limited, and we like things simple. We can only cope with so much. And I think the cognitive processes, our better understanding of that, there's a great area of research that needs to be added into the pool. Because that actually governs peoples' behaviours – how they cope with things and what they do.

### Steve Bailey

Thanks very much. Anyone like to come in on that? Especially anyone from the panel?

### Reynolds Cahoon

I'd just like to comment that it seems to me that as records managers become more and more familiar with technology and are ***trained*** more and more in the areas of technology and information architecture and information management, that we will remain relevant. And I think if we don't, the ***profession*** of records managers could begin to diminish significantly if we can't raise the bar in terms of our capability to play at the table with the process people, all the IT people and be able to speak knowledgably from an information architecture perspective. I think it's an integral part of the profession.

### Steve Bailey

Picking up on Martin's point about the cognitive side, one of the thoughts I had when Ishbel mentioned at the end of her presentation about profiling and yes, there are lots of moral and ethical issues around where that might be heading, but on a purely selfish level I also thought, that could be a really useful tool for records management actually. Starting to profile your users and what they do and how they use information and where their searches take them, so that it may start with email x, but it actually leads onto document y, that leads on to database z and actually starting to capture that

sort of knowledge, and then starting to use that, to start managing the information better, there could be some real opportunities there.

Anyone else like to chip in with any thoughts, observations about the **mass** of things that we've heard in the last session?

### John McDonald

I was really interested in Reynold's diagram - that is, the information architecture placed within the context of not just the systems world, but also the business itself; and, of course records management is a very integral part of that. However, it presumes that you've identified areas of the business which require support from systems. Examples that come to mind include benefit delivery, licensing, taxation and that sort of thing. Systems supporting these kinds of business activities are highly structured in design and subject to an accountability framework that ensures (or is supposed to ensure) their integrity through time. And yet here in this seminar we're dealing with a different sort of world - the world of email and other electronic documents and records generated by processes that are poorly defined or seemingly non-existent. So I'm interested in reactions of the panel about the extent to which the diagram offered by Reynolds can be extended to help us model and address the email environment that seems so different in character from what we are used too in the applications systems world. Can it be extended to help us address the work activities that are either explicitly or implicitly resident in the email world? If so, how? And if not, what structure should we start considering in terms of understanding and modelling that environment more effectively so that we can inject records management into the so-called email world?

### Reynolds Cahoon

I think it's a very interesting point, John. I've done some thinking about the notion of knowledge worker, work process and I'm wondering is there a knowledge worker work process? If so, what is it? Is there some even thread of consistency in it or is it a

very ad hoc kind of process. It seems to me that as we evolve our thinking about a knowledge worker work process, we may find either that there will be ways of attaching the knowledge and the information and the records – the data that come out of that work process - to appropriate business processes, to other appropriate categories of work, and find ways to enmesh the results of our knowledge work into this architecture. But I think the whole knowledge worker productivity question is one that we could do some research on and find ways to more effectively apply a technology to support the knowledge worker, and then be able to glean the knowledge and information that derives from that kind of work process. I think there's a lot of 'ad hocrasy' that goes on in our knowledge work, right? And I think as we get better at it that we might be able to more effectively apply what comes out of our knowledge work into our knowledge infrastructure.

### Steve Bailey

Would anyone like to pick up on those at all? David

### David Bowen

Yes, the service oriented architecture thing is interesting and I think the real key in that diagram is to make sure that the information management policies under girth the ***entire*** architecture and not present just in individual pockets. And we've seen that some with systems like SAP and Siebel which was mentioned earlier. We talk about unstructured information, but of course an email, generally, is structured. You ask a question or you make a statement. It may be structured in multiple pieces, but emails have an internal structure as do most of our other, what we think of as unstructured information. The advantage of unstructured information is that it falls very naturally into records. I sent you this on this day and in it I said these things. And you received it and you saw these things so we have a transaction between us, which is documented. The problem with systems that are much more purely database run, like SAP or Siebel, is that they think they have records because they think that a row of stuff in the database is a record. But their records are ***not*** in general well captured and often if you ask them to roll back, they can't. Interesting exercise, go to a database person and say can you roll back a year or 6 months or something, and they often

can't. So what you need to do in those systems is to make sure that they drop out the appropriate records from the structure into an unstructured but properly defined and captured way. And this is really what service oriented architectures do, is to take the old databases and bring them into the processes that people need to do to run the business. And also to make them suitable both for the daily processes but also (this is probably harder but even more important for record keeping) for the ***rare*** processes, the monthly reports, the annual reports. These are the things that produce really ***important*** experiences, in many cases in processes and for which processes are often very badly structured.

### Ian Wooler

The suggestion that the architecture should be underpinned by organisational culture and behaviour. Organisational and cultural behaviour can either underpin or undermine it, even destroy it. And I think in all organisations, don't underestimate the people, which I guess is the point here. And a thought that stems from that is that in many organisations I work in, you get people called intranet managers, or the like, and they spend all their time, their effort, their energy trying to get people and encourage people, to use intranets. I've yet to see anyone that needs any encouragement to use email [laughter]. So what can we learn from that? And how can we apply that to our other tools and techniques?

### Jonathan Downes

Can I respond to that as well? I think there's a lot to do with usability and it's very easy with all of the technology to forget who's important here. And it's us! And it's what we're doing and we're doing things for other people. Ultimately we're the workers and we're the customers. And it is the cognitive behavioural research. I mean, that's how we work – both as workers and customers. It's being able to understand the flow of activity and how people work best and keeping things simple. That's one of the things about the Google search; it was a page with a search box that you type something into. I know it's moved on from there but it's about responding to some of that simplicity. The other thing is about where things are going. If we look back over the last 20 years, where we've seen systems like SAP come in and

formalise a lot of things that perhaps we wouldn't have thought could be formalised, I wonder if we'll be looking at the same situation for email?. I don't know whether it's the next step, whether it's the fourth wave or whether something else comes next...

### Steve Bailey

Tidal wave?!

### Jonathan Downes

Tidal wave, yeah! [laughter] You know we'll find that as we start to formalise the way we do things and the workflows etc, that we ***will*** find that easier to do. And then we'll be moving onto the next thing.

### Edith Pringault-Adam (Aberdeenshire Council)

Can we just come back to the point that Reynolds made that records managers must have knowledge of technology. Well again, I find it very interesting that certainly there have not been many questions at this juncture. So do people actually understand about the technology and the back of it? I remember that at the Records Management Society Conference in Brighton[33], somebody [Euan Semple] talked about Flickr. He talked about all the new technology, and everybody went 'whoa! It's great, it's great'. And everybody also went 'oh my God! We've got so much to learn'. Do we have so much to learn to yet take on board something which was traditionally what IT would know about. But suddenly we need to know it as well. There was also something I found very interesting and that is we're talking about the records manager, IT, the users and if you have a corporate communication group, what do they do in here? We haven't talked about the corporate communication unit. And I've got one in my organisation and I've been asked 'who is responsible for email?' And it's like a hot potato. 'No, no – nothing to do with us.' [laughter]. So it's IT. 'Well not really, but

[33] Euan Semple 'Once Information is a Low Cost Commodity How do you Add Value?' Keynote speech on 30 Apr 2007 at the Records Management Society 10th Annual Conference and AGM, 29 Apr-1 May 2007, Brighton. *Records Management Today: Celebrating Our Successes.*

I'm glad you've been appointed because it's really ***your*** thing.' [laughter]. And I would say 'no, it's ***every***body's thing.' But it's interesting – maybe you don't have a communications unit in your organisation, but they need to be involved as well, because they're the ones who will state the corporate communications strategy, that's their bit as well. That's what I wanted to say.

### Russell Joyce

I just wanted to pick up on the point that John made and one that's been going around the board about records managers changing in the profession and the way in which business is done. In the 13 years that I've been a records manager, my career has almost seamlessly progressed from being a record *keeper*, to really a process *owner*. And that's essentially what my job entails now. I deal much less with paper and even the management of electronic records, and really I am the point of contact for people needing to understand the processes, to capture those records. And looking at workflows and the way in which documentation is supposed to be shared amongst people. And I think that's one of the ways in which (almost unknown to me really) the profession has changed over the years. I just wondered if anybody had any views on that?

### Zoë Smyth

I just wanted to make a comment on that as a records manager. I initially trained as an archivist and then I was asked, why don't you go into records management? I was basically told, that would mean I would start off more at the beginning of the lifecycle of the record rather than dealing with the end and managing for the future. I've also come across the phrase 'do we apply paper records management methods and techniques to the electronic or the virtual world? And do they fit?' To a certain point, it's maybe just a comment on this, and it's picking up Edith's [Pringault-Adam] point – knowing about the technology, knowing about the tools that are out there. As records managers, are we in practice just managing the problem? Managing the emails that are just there, applying policies, applying the different parts to the problem. Or are we actually getting in there at the beginning and looking at what needs to be created? Getting to where we are supposed to be working and discovering

the systems architecture and deciding what needs to be created and then what needs to be captured as a record. So it's more a comment rather than a question.

### Steve Bailey

That's right.

### Heather Jack

Again, getting back to indeed this point about how much more do I need to know about as a records manager? And I remember an event we had up in Scotland where we were looking at the recruitment of records managers and the outrageous ranges of skills we were supposed to now have [laughter], despite the fact we were still getting paid rubbish money quite frankly [laughter]. I actually think what would make a fantastic mixed witness seminar would be to have a group of people who are from IT, a group of people who are from HR, a group of people who do business process analysis *and* the records managers. Because what frustrates the heck out of me is we're all working away at the same problem. Email's getting knocked from IT, to records mangers, to someone else and we're all trying to put our bit of expertise in (which we're good at) and then we do the bits we're not so good at, none of us come up with solutions. We've got to start talking to each other because if anything's come out of the last two days, this is all about people getting on with other people and achieving things. That's all I wanted to say.

### Steve Bailey

A good point

### Jonathan Downes

Can I respond to that?

### Steve Bailey

Please do.

### Jonathan Downes

A couple of things from experience... One is that the project I started two years ago was on behalf of the records management function and it was to put information management change across the council and to do best practice and to help with email management and file plans and disposal schedules. By the time we'd finished doing that and tried to hand  back to the department that sponsored it, it was so – almost beyond recognition that we're now struggling to change them to be able to support that on an ongoing basis, to do what they were asking us to do for the organisation. We've added electronic document and records management and scanning, and other technologies. So in one very small example that's gone on from managing paper files, to all of this other stuff., And the other is the interaction between ourselves as a project team and the IT function, as this didn't sit under the IT banner of the organisation. There has been a constant to-ing and fro-ing. It really hasn't been as joined up as it's needed to be and there's been different tensions between those parts of the organisation. We're resolving that now by something fairly fundamental, in the way that we're restructuring the teams. Previously we had separate information management and IT policies as well, and again, we've combined those. It is important that those two disciplines come together - the people that understand the technology, and people that understand what to do with it, what the users need.

### Susan Em (Royal Pharmaceutical Society of Great Britain)

I just wanted to pick up on what Heather [Jack] was saying about the kinds of people who would need to get together in order to try to coordinate a solution to dealing with email. Because quite a lot of the conversations that I tend to have with people are like Cassandra warning them that if they take these steps, awful things are going to happen to them [laughter], which obviously puts the records managers in the context of a very kind of negative interaction. You're seen as preventing, not as enabling. And in terms of staff, both records managers and IT very often seem to be poised with their hand up

like a Victorian parent, ready to slap people away from doing things [laughter]. And I think that there is another group that really needs to be involved. People who have learned their skills outside of the work area really need to be encouraged to bring them in. People like librarians, who are accustomed to searching, to tagging, to identifying, really need to be involved. And I think the records managers (though it is very daunting to see the new kinds of technology that you need to be familiar with) should try to be the first to spot what can be profitably done with it. So that when they say you really want to think about long term preservation, when they say what are the legal implications of somebody creating a piece of work at home that is then uploaded to ... ? When those kinds of questions come up, records managers are seen as somebody positive and as I say, enabling people rather than as people who are just there like Cassandra saying you're going to fall over a cliff, you're going to break your bones, it's going to be awful [laughter]. And have a much more positive role and it is very challenging for records managers to take it on, but I think it is an aspect that does have to be dealt with.

When I started work, I worked primarily as Zoë did as an archivist, and that aspect also has to be managed because archives are almost always more traditional in some ways than records management, but it's moving more as a continuum within a much wider information environment. And so that is a comment I just wanted to make.

### Steve Bailey

Thank you. Julie?

### Julie McLeod

Sorry can I just tag on to that? I think, Reynolds, you wanted to say something. But just continuing with what both of you have just said there, and following on from Edith [Pringault-Adam]. We cannot be masters of all trades. No one can. Well if we are, we're going to be at the top of the organisation or something. And none of us are sadly [laughter]. I mean some are higher than others, but you know, I'm fairly lowly. We can't be that. But why should we sort of put ourselves in a box as records

managers 'we don't know anything about technology, we'd better find out'. You know, the 13 year-old nephews or whatever probably know that. They're all there using Flickr. Why, because we're records managers, shouldn't we be doing that anyway, even if it's in our social lives? And learning from that and doing what we're talking about here, bringing some of those things in. I mean there's some fabulous threads coming through over the last day and a half about what we do and what we learn and use Facebook and Flickr and all the rest of it. And yes I confess, because I was one of those who stood up to Zoë's [Smyth] question, I don't have the Internet at home. That's a deliberate choice but maybe I will have to change my mind. But we shouldn't just say because we're records managers 'we're not going to do that' or 'we have to do that'. What's stopping us doing that and being there? The point is, I think, we've got to spot the problems, not go on and they say 'oh this is a problem', but here's a potential issue or challenge. We've got to look potentially for solutions, whether they're technical, whether they're sociological, whatever they are – human ones. But we've got to surely be ***facilitators***. If there's nothing else that our role is changing into, it's owners of processes or people who're looking after processes, facilitators to bring together the group of experts that we need. Because nobody, whether it's the IT person, the HR person – surely none of those groups has ***all*** of the answers. Sorry, it's a comment. I'm evangelising.

## Other

We talk about information and knowledge being a key corporate asset, but companies are not quite managing that.

## Martin Sanderson

It's a failure in the sense of we talk about information and knowledge being a key corporate asset, but we don't – they don't - companies are not quite managing it yet as that. And therefore we've got no-one at the top of that tree, who then creates a governance structure which brings all the various components and expertise together. Because there's no one clever enough to be all those things, you're right. So it's teamwork. And that's got to be allied to the business, it's got to be – people have got

to understand what expertise different people bring to that process. So it's very difficult. Because we're limited by where records managers intervene with the organisation. It's very difficult to intervene at a process level, to actually influence the strategic level unless you are enabled to do that by a governance structure.

### David Bowen

I just wanted to very much reinforce this point about being facilitators and bringing your expertise to a team. I worked recently on a project where the records management, the corporate communications, the manager of IT were in a room no further apart than these three tables. And the head of corporate training was simply in the next door room and the head of personnel was equally close. And a records manager can create that kind of environment and bring those teams together. We've also had a couple of people mention being archivists in the past. And we had an interesting discussion last night at the Baltic about how archives are now becoming very electronic. Archivists need to be involved in this but also we need to be influencing them because the traditional model of archiving is to apply the metadata at the very end of the lifetime of the objects. And that is no longer cost effective. We did some work in the Netherlands and the cost of applying metadata by the creator at the time of creation is measured in seconds or minutes. The cost of applying metadata as you move further in time or as you move further with different people, goes up by factors of 10 each time and if we're going to keep everything, we simply cannot afford that. [laughter] There won't be enough people alive to put the metadata on at the end of the lifetime! [laughter]. It's got to be put on at the beginning.

### Michael Moss

That' a very North American perspective. That's not what happens in the British Civil Service; it's always been the other way round. And that's true across the Commonwealth.

### David Bowen

I don't deny that that's what happens, but as I say we did quite a lot of quantitative studies with the government of the Netherlands and we proved that that's not cost effective.

### Michael Moss

No but it's always been the other way round in Britain. The metadata has always been applied at the beginning, and if you look at The National Archives catalogue, what you get is how that object was described at the very beginning of its conception. And your perspective is a very North American, Germanic perspective.

### David Bowen

Yes. OK

### Reynolds Cahoon

And that's a religion that North Americans need to get and get quickly!

### Michael Moss

Yes, absolutely! You should have a revolution! [laughter]

### Reynolds Cahoon

Because the truth of the matter is, that if we don't fund an architect of our information and its long term preservation and accessibility at the front end of a programme, it's very likely that there won't be funds sufficient to manage the information later. And most of the dilemma I think we find ourselves in today is because we've invested in technology without thinking about the long term implications and funding those implications as part of a life-cycle of the investment. So there isn't money to attend to

the problems at the end. And so part of this enterprise architecture notion really is to get in at the front end of the capital planning process when investments are made. Get into the business process design effort, so that records and information management are built into the design of those business processes. And then to be sure in the solutions development methodologies that we use to actually build applications, that we're following through our line of sight for those requirements developed in the capital planning and the process design, through to implementation, that we're actually – that one is getting to the end of the road - we're actually building the requirements that we've initiated, and that we've funded those things at the onset. I think if we don't do those things, our great great grand children are going to be looking back at us and saying what in the world were you guys thinking?

## Zoë Smyth

I'd just like to follow on from a couple of points that Michael [Moss] and Reynolds [Cahoon] have said. I don't know about the rest of the UK, but having previously worked in the Public Record Office in Belfast I would say that I would concur with Reynolds that the cataloguing from the archival point of view wasn't actually done by civil servants properly all the way through. Metadata wasn't collected**.…**but the archives have spent the last five years going through the catalogues from 80 years of the archives, trying to get it into an electronic cataloguing system, and the quality of the metadata was one of the biggest problems that they came across. They thought it would be the software, but it's the quality of the metadata. So anything we can do to capture the metadata, when we're keeping all the emails, upfront is the most important thing, I think, [laughter] records managers can do. On the issue of preservation that it's taken us into, one of the witnesses mentioned about open source software and access, and that type of thing as well. So as well as the metadata that's needed, the ongoing file formats, the access to the software, to the hardware, are all issues that records managers should be in there at the beginning. We've set up a working group in Northern Ireland to look at long term access, rather than preservation, because government is investing so much money in service-wide EDRM systems and HR systems and financial systems and the reform programme. We've spent so much money. How are we going to access all that information in the future?

And bring together all those types of issues – the metadata, the file formats, the software etc. And get it thought about while they're spending the money now and designing the systems and creating it; and it'll obviously go into the business processes that you use and the people etc.

### Julie McLeod

In terms of technology and solutions, because this [seminar] was about technology, but obviously the people issue and business processes have come up, one of the solutions is keep everything. Sorry Steve. But one of the solutions is keep everything – archives, email. And there are obviously those who agree and those who disagree. I just wondered yesterday and again today (I think it was John [McDonald] – you first raised the example of enterprise resource planning and things like SAP), we have huge HR systems – Oracle. We have huge SAP financial systems. Adrian [Cunningham] yesterday, and I think it might have been Ian [Wooler] again this morning, were talking about 75-80% of our business and business decisions seem to be happening within email systems. So, again Chatham House rule – not because of confidentiality but please don't go out and say this idiot of a woman [laughter] asked this question – but I was just musing on … if 80% of our business is done electronically, should we be at least thinking about (and then maybe discarding or saying yes there's some mileage here) thinking about managing the email as a ***system***, as a line-of-business system? And I know that means it's a silo and I know it means, David, it's not connected to finance, but I just wondered what anybody in the room – panellists or not – thought about that? As email is a, not a line-of-business, but a business system, and whether that's a stupid thing to think about or something to at least consider before we reject it.

### Adrian Cunningham

Yeah I think Julie's onto something there. One of the big problems with email applications is they've got lousy record keeping functionality, but there's no reason why it has to be like that. And so I actually think the paradigm of people creating their records in one application and then managing them and storing them as records in a different application, is really just a transitional phase. It's probably not sustainable.

The long-term solution is actually to have good recordkeeping functionality in the line-of-business applications that people are using, and if primarily they're using email applications, then that's the way it's got to go.

### Steve Bailey

It's a good point. We've got time for just one or two more questions.

### Ishbel Duncan

Just to answer Julie. Email is data, it's business critical. If it's business critical I would stamp security policies right on it. I wouldn't like it to be shared at all. That is the problem we've got. When we're talking about service architectures, people oriented architectures, information sharing. If that is business critical, nobody in their right mind in the IT unit would allow that to work without an IT governance security policy. It's just not going to happen.

### Steve Bailey

That need not mean you can't share it.

### Ishbel Duncan

As soon as you start sharing, you've got leakage. As soon as you've got any sort of network process, you've got attacks that can happen.

### Steve Bailey

But surely if you take away the point of sharing email [laughter], then you have no email. But anyway. [laughter]

### Ishbel Duncan

As my grandmother would say, you cannot keep what you cannot hold in your hand. If you start sending things around, it's out there; it's in the ether.

### David Bowen

Sorry, if you don't share, you also have no business. Two quick examples in the construction industry, building something of this sort [St James' Park] will take literally hundreds of companies, and they will all be sharing information. The plumbers, the electricians, the steelworkers, everybody needs to be sharing information. In the pharmaceutical industry as was said yesterday, you have outsourced functions, you have functions where for clinical research you're working with contractors, you're working with hospitals. And a single medicine is literally again developed by hundreds or thousands of individual people and other companies. And all this information needs to be shared. There need to be security models around the sharing, but there is sharing across national boundaries, there is sharing across company boundaries, there is sharing with competitors sometimes. The issue cannot be handled by preventing sharing. It has to be handled by managing.

### Ishbel Duncan

Yes, though sharing through edit control. But you've always got access problems

### David Bowen

Right

### Ishbel Duncan

But you've got access problems

### David Bowen

Isn't that the issue though? Isn't it controlled around the sharing that we are talking about?

### Jonathan Downes

I think for me small groups are the answer. A lot of the Internet things we're seeing like Facebook are around sub groups. I think it's about being very good and quick and simple, but sophisticated, in how we manage small groups and overlapping groups right across the organisation, and that we go into those to do our work for that particular topic and that's how we operate.

### John McDonald

At this stage I think of email systems as being utilities. They only indirectly support the work of an organization. This is because they are being used as communications tools and not as tools supporting directly and formally the conduct of the business of the organization. But I think this will change as email technologies evolve - and as they are augmented by other technologies - to support workflow and the work activities that to this point have been poorly defined or not defined at all. Hopefully, along the way we'll see them being configured to enhance the way in which records are captured and stored. Such a configuration would be mapped against workflow, something which I think in the future will receive a greater level of attention than is being paid to it now. It might begin with basic routing but over time I think organizations are going to pay greater attention to figuring out ways to morph email applications into workflow applications. So I think we have to think through how is this going to evolve? We may find that we're not looking at email systems - we're looking at the way that work is actually done and how to configure it. It is in the context that we should have the opportunity to figure out how records can be more properly captured, stored and retrieved. So I think its important that we look down the road to see (and perhaps model) what the next environment will be.

**Steve Bailey**

Well I think these discussions are obviously going to run and run over lunch. And I think that's testament to a very successful and interesting panel session which kicked this off. So can I ask you all to thank the four speakers for their excellent contribution.

# PANEL DISCUSSION:
# Moving forward - Futurewatch
## 1.30-3pm

**Chair: Professor Michael Moss, Glasgow University**

Panellist: John McDonald, Independent Consultant

Panellist: Professor Ray McAleese

Panellist: Professor Michael Moss on behalf of Dr Andrew Prescott, University of Wales, Lampeter

Panellist: Geoff Walker, Independent Researcher

The starting point for the debate:

Adam Perer, Ben Shneiderman & Douglas W Oard. (2006). Using rhythms of relationships to understand e-mail archives. *J. American Society for Information Science & Technology*, 57(14), p1936-1948.

C Hill et al. (2006). Beyond predictable workflows: enhancing productivity in artful business processes. *IBM Systems J.* 45(4), p663-682. http://www.research.ibm.com/journal/sj/454/hillaut.html

Donal Casey. (2007). Building a secure instant messaging environment. *Network Security*, 2007(1), p18-20.

Jesse Wilkins. (2007). RU ready for instant messaging. *The Information Management Journal*, May/June, p26-31.

Steve Cocheo. (2007). When lawyers want the needle in your haystack. Or the whole haystack. *ABA Banking Journal*, Jun, p44-48,63.

## WELCOME TO THE PANEL DISCUSSION

### Julie McLeod

Our final discussion looks to the future and I have to say that one of our speakers would appear not to have been able to make it. He at the last moment couldn't come yesterday, but I was expecting him today and guess what, I don't have a mobile 'phone with me and I don't have a Blackberry, you know that already. So I suspect when I get back on Monday because I'm not going in the office tomorrow and as you

know from Zoë's questions, I was one of the two or three who stood up and said 'I don't have Internet access at home', one of the emails in my however large inbox will be an apology from Andrew [Prescott] saying he got stuck on the way from Lampeter to here. It's only just in the last few seconds that I thought I have Andrew Prescott's statement and I've given it to Michael Moss, our chair, so he may or may not feel he's ready to read it to include at least Andrew's thoughts.

Anyway, on to our final discussion that looks to the future. It's going to consider, I hope, potential ways of moving forward and actions required, partnerships and collaboration as well as new challenges. We've already, I think, in the previous three seminars actually raised some of those, but I hope it will take it forward, and no doubt the chair and our three witnesses will draw on the discussion and the debate that we've had so far.

The starting point for our final group of witnesses was a series of quotes taken from what might seem an eclectic mix of articles in response to the question "what does the future hold?" One of them was a new technique for exploring an individual's email archive - temporal rhythms of relationships. [34] Unfortunately, we couldn't use that article because we didn't get copyright clearance from the journal publishers, which was a real shame. Those of you who do have legitimate access to it, it's well worth looking at. I thought it was fascinating. Then there was one on the democratisation of business processes through activity-centric computing.[35] Another comment: 90% of email users have, or will have, an instant messaging account by 2010, and 50% of employees are installing free instant messaging software themselves. What are the implications there? … And then ***spoliation*** - failure to present evidence that is held either intentionally, wilfully or negligently. Spoliation is a new word in my vocabulary. I don't know whether it is for you? No doubt the witnesses this afternoon, will bring their own ideas on what the future holds. These were only a starting point.

---

[34]Perer, A., Shneiderman, B. and Oard, D. 'Using rhythms of relationship to understand e-mail archives', Journal of the American Society for Information Science and Technology, 57(14), pp.1936-1948, 2006.

[35] Hill, C. et al. 'Beyond predictable workflows: enhancing productivity in artful business processes', *IBM Systems Journal*, 45(4), pp. 663-682, 2006.

So to chair the final session, I am delighted to welcome my colleague and good friend Professor Michael Moss from Glasgow University. If you were here last time, you will already know he was born in the same county that I was (and I think that's where the common ground ends sadly) – that's Yorkshire. He was educated at Bath and Oxford and he trained as an archivist at the Bodleian Library. But since 2001, he's been Research Professor in Archives Studies at Glasgow's Humanities, Advanced Technology and Information Institute which is even longer than our school, but it has a nicer acronym - HATII - with a double 'I' at the end.

Michael had the challenge of chairing our first seminar last time and getting the conference off to a good start. He did an excellent job, and now, with an eminent group of witnesses, I'm sure he'll do an equally excellent job of chairing this last seminar. Joining him are Ray McAleese, John McDonald, sadly not Andrew Prescott, and Geoff Walker; so over to you, gentlemen.

## CHAIR'S INTRODUCTION

### Michael Moss

Thank you very much, Julie, for those kind words. What the discussion this morning left me with was thoughts about process and about workflow. And one thing that I was sort of reflecting on, the comment I made earlier on, was about workflow and about a revolution that we had in Britain in the 15th century. And it's known as the Tudor Revolution in Government and it was led by an eccentric king called Henry IV who, no sorry, Henry VII, who was known for his Nora Batty socks and he introduced … it's true – he did wear Nora Batty stockings … and he introduced a system of recordkeeping in British government that began with his revolution and continued pretty much uninterrupted until the First World War. And it underpinned workflow and workflow practices because he was effectively a management guru. That's what he made his name as, the Tudor Revolution in Government is about government and governance and about the sorts of things we do.

We're going to hear from, as Julie said, four witnesses and I shall pretend to be Andrew Prescott. We shall start with John.

### John McDonald

Thanks very much, and good afternoon. I thought I would start by reading you an article that I received about two days before I came here. I thought it was really quite interesting especially if you are looking for incentives for addressing issues such as data loss. The article is from New Zealand, and it says: "The local media have reported that a laptop was stolen from the Croucher brewery company. The owners were desperate to retrieve the computer containing designs, contact details, financial information and other important documents. Apparently, co-owner, Paul Croucher said the company would provide 'a lifetime supply of twelve bottles of beer a month to anyone who would name the thief'". [laughter] Now that's an incentive!! Incidentally, it also went on to say, "the company has backup copies of the material stored on the laptop but these are not up-to-date." [36]

[36] BBC. 'NZ brewery offers beers for laptop'. BBC. [Online]. (18 October 2007). Available at: http://news.bbc.co.uk/2/hi/asia-pacific/7051496.stm.

This has absolutely nothing to do with what I'm going to be talking about, but I just thought I would share it with you because I thought it was rather novel.

First of all, I would like to echo Adrian's [Cunningham] comments yesterday and thank Julie for being invited to serve as a member of the advisory group on this very important project [the University of Northumbria AC+erm Project]. As Adrian highlighted in his own remarks, this is the most significant issue our field is having to deal with - the management of electronic records. And what is so special about this particular project is, as Adrian mentioned, the fact that it is dedicated to building bridges between theory and practice - something we don't see as being quite so evident in other related projects. Over the next three years it's going to be really exciting to see the products of this initiative emerge as I know they will be of benefit to all of us. So thank you Julie and also thank you for the invitation to be here as part of this seminar. It's a great format, multidisciplinary and, throughout, its been a great stimulant to discussion.

I'd like to begin by saying that, after all these nice things I said about Julie, she has been a little unfair. When I looked at the programme I was rather intrigued to see that all of the witnesses in the other panels only had one or two little articles to read – we've got no less than five [laughter]. Five big articles! On the other hand, I think we got the better part of the deal. These are terrific articles that I know were a challenge to bring together. But they focus very effectively on particular dimensions of the complex issues we're looking at this afternoon. I'd like to highlight one in particular, and that's the one called "Beyond Predictable workflows. Enhancing productivity in artful business processes".[37] You may not have had a chance to look at it but I would suggest that it's a real "must read".

The focus of that article is on something we talked about this morning - the rapid evolution or revolution taking place in the office environment largely as a result of the introduction of new technologies. It suggests that we should be thinking a little more

[37] Hill, C. et al. 'Beyond predictable workflows: enhancing productivity in artful business processes', *IBM Systems Journal*, 45(4), pp. 663-682, 2006.

rigorously about what the nature of that environment is really all about. By the way, they define 'artful processes' as "Processes at the individual or small team levels such that the process cannot really be separated from the specific people who perform it." Examples of such processes are those that connect people together to undertake a collaborative research project, to conduct small-scale projects, to consult with multiple audiences, to develop briefing notes for the Minister, to respond to correspondence, and to carry out the multitude of tasks that are commonly associated with an environment built on information sharing and the power of individuals and work groups (as distinct from the enterprise).It's an environment which is of course transforming itself quite rapidly.

I should mention that the article - and, by the way, the audience for it is the business systems analyst – doesn't say anything about records or even about email. It's making a plea for business systems analysts to be cautious as they begin to deal with this environment and begin to introduce what they think are effective application systems tools to help bring what they think will be benevolent order to that world. The authors suggest that perhaps the business systems analyst's tools that we have been used to may not be as appropriate as some might think in this particular world. So it's really targeted to that group - the business systems analyst.

On the other hand, I think it's also implicitly targeting ourselves in the records management field. In effect what it's saying is that just as with business systems analysts, we as record managers need to understand this environment much more clearly than we do now. We need to look at it in terms of the nature of the work activities that are being undertaken in this environment and how these are supporting the business of our organisations.

In arriving at an understanding of this environment, however, I think it would be useful first to understand where we've come from. How did we get to where we are now? What are the evolutionary trends that have shaped the environment we are experiencing today. I can relate to this quite personally because these trends had a very direct impact on myself as a public servant when I was in the Canadian federal government.

The first trend emerged from the early 1990s when we were all told to reinvent government, to deregulate, to empower our employees, to be able to let the manager manage, to focus on results - don't let bureaucratic red tape get in the way - don't worry about the processes involved in getting there. And don't worry so much about keeping records - its an administrative burden and, in any event, the new technologies will look after the keeping of records - automatically!!

The second trend was, of course, the introduction of the personal computer and, most importantly, the evolution of the personal computer to the networked personal computer, which even into the mid to late 90s (and still today) was viewed as a personal productivity tool rather than as a corporate tool supporting organizational business. There's been a lot of comment about that over the last few sessions. That the personal computer was intended to provide personal support but also ultimately to provide support to the organisation itself. What is clear, however, is that this kind of evolution is totally distinct from the evolution we saw in the so-called mainframe systems application systems environment. Applications systems being built today - such as benefit delivery, licensing, and taxation systems - tend to benefit from a structured approach to planning, design and implementation. Normally an accountability framework is in place to ensure that the integrity of the system is being respected and that the information generated in the system is managed effectively. The evolution of that environment is very different from the evolution that has taken place in the world of the personal computer. From supporting personal autonomy and enhancing personal productivity to emerging as a network supporting corporate goals, we have yet to see the benefits coming through in terms of the organisation it is supposed to be supporting. The evidence of this lies in the fact that after so many years we are still asking, "What are we supposed to do with all of our email?"

The third trend is the drive to reduce the costs of government operations. In the 1990s, in the government of Canada, we reduced the records management population by – in some cases, in some departments – by up to 75%. The argument was accepted that if you bring in the technology you don't need the classifiers, because the technology will look after it. There was a dramatic reduction in records management but equally, and I think really importantly, there was a dramatic reduction in the number of administrative assistants and secretaries who were in our organisations. As a public

servant working in the then National Archives of Canada, that's in the 80s and 90s, I came to depend upon our administrative assistant, not only to get information but also just to know how things got done. If I want to get such and such a memo up to a certain person to be approved, I needed to go through x,y, and z steps. They knew how to do it and they normally advised me on how to do it. They were the interface with the records management operation; I never saw a records manager. As a public servant, I knew that the administrative people looked after putting the file number on the document and making sure the relevant copies went off to the registry as they were supposed to. But we reduced all that, if not eliminated it in some cases. And we left the poor records management area - an area that had had no previous experience serving as the direct interface with the user (read: business) population - to be responsible for filling the gap.

The other important group we nearly completely eradicated was called the Operations and Methods group. These were specialists who designed and implemented workflow. They were the ones who came in said "well, if you want to process some correspondence, I'll put in place some workflow and business rules and enable you to make it happen in a logical and organized manner that makes sure you are able to get the job done quickly and effectively but in an enterprise, corporate context." They were the ones who could analyze the flow of information from point to point and then draw on administrative support as well as records management to bolt it all together to produce a workflow which, when done well, was efficient, effective and easy to use. Through the 80s and 90s we eradicated that whole set of personnel and also that whole set of expertise. Again, we've left the unskilled records management function to fill the gap.

All this to say that I know this session was supposed to be visionary but before we can envision I think we need to take a hard look at the current reality we're facing today and get a very clear understanding about the nature of that environment. First I think we need to understand that we are dealing with an environment that is quite distinct from the so-called mainframe systems environment with its highly structured, transaction-based business processes supported by dedicated application systems managed by technical specialists operating according to generally accepted standards for systems design and implementation. The environment we are having to deal with

is one in which the communication and exchange of information is not so formalized, where the role of the individual and the work group are paramount, and where formal rules of the road are absent in the interests of fostering creativity and innovation. Why is this so? Because the nature of the business activities - collaboration, knowledge exchange, and so on - require it. If we are to build electronic recordkeeping tools and solutions that are relevant for this environment then it is crucial that we acquire a deeper understanding of the nature of these business activities.

Secondly, I think we need to understand that our assumptions about the role of the records manager in this environment may have to be modified. Where does the records manager fit in all of this? Is it conceivable that the records manager could fill the void left by the reduction in administrative support and the eradication of the workflow specialists? If records are generated from transactions supporting a business process then would it not follow that someone - perhaps the specially trained records manager - should be available to map the inherent workflow from which the records in this environment are being produced? Could this be a new opportunity for enterprising records managers who are interested in evolving from the role of records storage facilitators to facilitators of the work process supporting organizational business - this in addition to being guarantors of the integrity of the records generated by these processes? Could they become not only the keepers of the story (i.e. how a briefing note was prepared, a policy developed, a project undertaken, etc.) but also facilitators in the story making?

If this scenario for the role of the records manager is feasible (and perhaps likely as no one else seems positioned to take on the task), then what competencies will records managers need and where will they get those competencies? Are education programs tuned to provide these competencies and, on a broader level, the required support to function effectively in the highly complex environment we have been exploring in this seminar?

If records managers are not positioned to take on this role of facilitating work process design in the environment we have been discussing , then with whom should they be partnering? Do they partner with renaissance business systems analysts who are capable of addressing the complexity of the environment and the issues associated

with designing and implementing workflow? Who else should they be partnering with - legal services and audit would be two but I expect there will be many others as well. Ultimately though the key will be to either assuming responsibility for addressing the work process issues of the new environment or to find others who can. Those are the kind of issues I think we should be raising. Because if we're setting a vision we need to be able to understand not only what the current environment is like today, but we also need to determine the kind of role we in the records business are going to play and in what direction we are going to take..

If we don't focus on achieving this level of understanding then I fear unless we act now, we will be leaving it to future info archaeologists to peel back and unearth what happened in this part of the century.

Thank you.

### Michael Moss

From that we need to have a hard look at current reality – perhaps John doesn't know, but some of the best commentary on what is happening in the workplace in this regard – certainly in the United Kingdom, in Europe – are being made by anthropologists. You only have to think of the work of Marilyn Strathern one of the most distinguished anthropologists in the world, who has done just what John suggested

Our next speaker is Ray McAleese, who is going to talk about VLEs

### Ray McAleese

To know that there's a future, we should be aware of our past. I'm not sure whether I am actually a problem, or a solution. Let me see if I can just say a little bit about that first of all.

I've lived inside email for many years. I've lived inside records management for many years as well, and it hasn't been until very recently when Julie very kindly and generously invited me to come out of retirement and come along and say something

today, that I had seriously considered records management. And I didn't, until I started to do that, consider what email has been to me. So what you'll get is an insight into in the next few minutes of what has happened to me over the last two or three weeks. That' is when I've had to move from the inside to the outside. I'm now observing records management more than I ever did before and I'm now observing email.

Allow me to tell you about the records management incident. This is a sad story. I retired and I had to clear out an office in Edinburgh after 38 years (not in the same office) - but after 38 years of continuous service in the university system. The Office was full of books and papers and acetates and all the sorts of things that we acquire. Even videotapes - whatever they were. Just as a matter of fact, I had something like - and it's a big office - 50 metres of shelves, double stacked; I had four filing cabinets each with 3 drawers; and I had 14 boxes of lecture notes and acetates and so on. I had never ever thrown out anything - ever. I had to sit down one Monday morning and decide what to do. Because I had to think of disposal and of archiving, the real problem was the social problem. How could I go back and tell my wife I was bringing home 50 metres of shelves etc etc. I had to face the fact that this was a records management problem. I was led to two ideas – one of memory, the memories that I encountered when I sat and I looked through these materials and decided which are disposed, which are archived, which are so on. And one of serendipity. I had recently had the experience of being able to answer a question by referring to an "old" book I happened to have at home. It was chance that I had brought a book home so that 10 days later someone I was able to share an idea with someone I could not have possibly known when I bought the book or choose to archive it at home,. So that's my experience of records management.

The title I've taken for my short statement is 'Email as an adjunct to thinking in Virtual Learning Environments.'

I've used email for a long time. I first had an email account in UCL on ARPANET back in 1981. I have undertaken a count, and I reckon I've sent or received just short of 100,000 emails. I am actually a very sad person. My current email dataset, which sits in my computer at home, has continuous emails back to 1997. I use a client called

Eudora, which I can extol later if you wish me to do so. Now allow me to make two statements. First of all I would like you just to look into your folder, and you'll find a handout that was circulated to you. Can I ask you to have in front of you the handout which I'd like to enter into with you and negotiate a few of the ideas about email and Virtual Learning Environments? [Fig. 4.1]

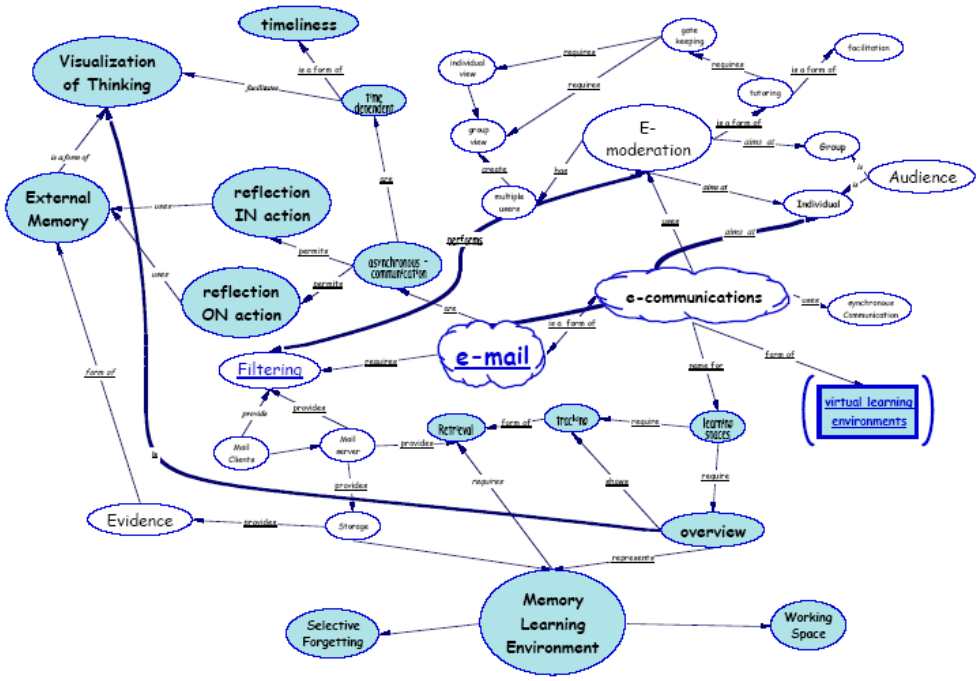



Figure 4.1

I'm going to offer a view in the way in which email provides metaphorical adjuncts to learning, in the way learning spaces provide an asset to records management. Now the figure that you have in front of you is my thinking aloud about the issues. And I think it's important to start with the following comments. The use of these Virtual Learning Environments in higher education, all forms of education, is now ubiquitous. Institutes of higher education provide e-learning opportunities as part of their advertising. They make assumptions that learning comes from discussion, that learning is the posting of emails or such matters and that somehow the reading and the writing of emails leads to learning. I just wonder whether that in fact is something that you would buy into?

So let's just look at this diagram, this concept map (Fig. 4.1). Can I ask you to address just three different areas? Just first of all, about three o'clock, Virtual Learning Environments. This is the generic term that we now call these things - many different things. An example is something like Blackboard, where students log in, there's chat, there's all sorts of various whiteboards and so on. But at the core of them is the exchange of email. Move up in the diagram, to about the northwest (about 11 o'clock). An essential ingredient of the posting of emails is the fact that these emails are asynchronous, and that's not a term I've heard mentioned in the last 24 hours. But the asynchronous nature of the email is essential for the learning process. First of all, it allows the learner to reflect in action and to reflect on action. Don't forget that as you write an email, you are thinking about what you're writing, what you're saying, what you're intending. You are creating. It is then sent and the same process unfolds at the other side when one or more students read or engage with these emails.

It forms, it seems to me, an external memory. A visual space or something outwith the individual to help them think. So there's an element of visualisation, in text, on the thinking. And lastly at the bottom bit, round about six o'clock, this suggests to me an idea called a memory learning environment. And one of the things I'd like to pick out of that, is the idea of selective forgetting. This was the serendipity or going back and engaging with ideas after you have posted them.

So can I ask you just to turn over to the next page of the handout? (Fig. 4.2).

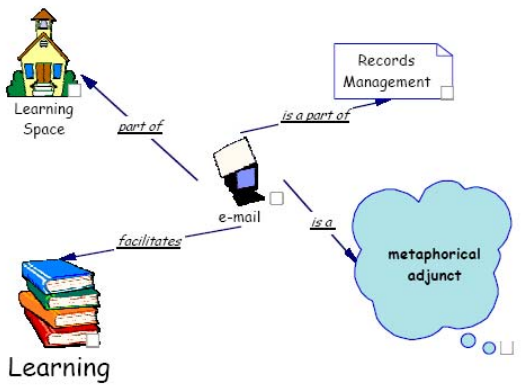



Figure 4.2

If we just look at learning to begin with. It's a metaphorical statement I'm making. There is a learning space – the Blackboard, whatever the thing happens to be. But learning is facilitated in this engagement. Now I have to say I do not believe that simply the writing or the reading of an email necessarily leads to learning; whatever learning might be. And we haven't unpacked that yet. But one thing's for certain, simply because I write something or read it, doesn't mean that I learn. Something else is going on there. So there's a – if it is important- metaphorical thing.

The Virtual Learning Environment – let's just jump on to two handouts now. This one here (Fig. 4.3). Just have a look at that one.

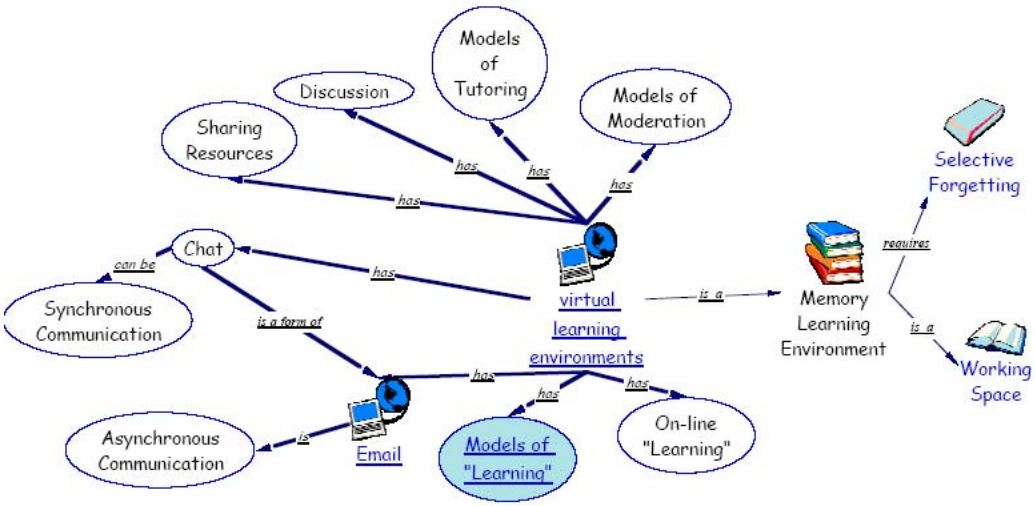



Figure 4.3

That's a very simple snapshot of what one of these environments consists of. Basically moderators, learners, posting, responding to, reflecting on emails. Strip away all that – and we have to turn the page, very quickly – until you get to a memory environment (Fig. 4.4).

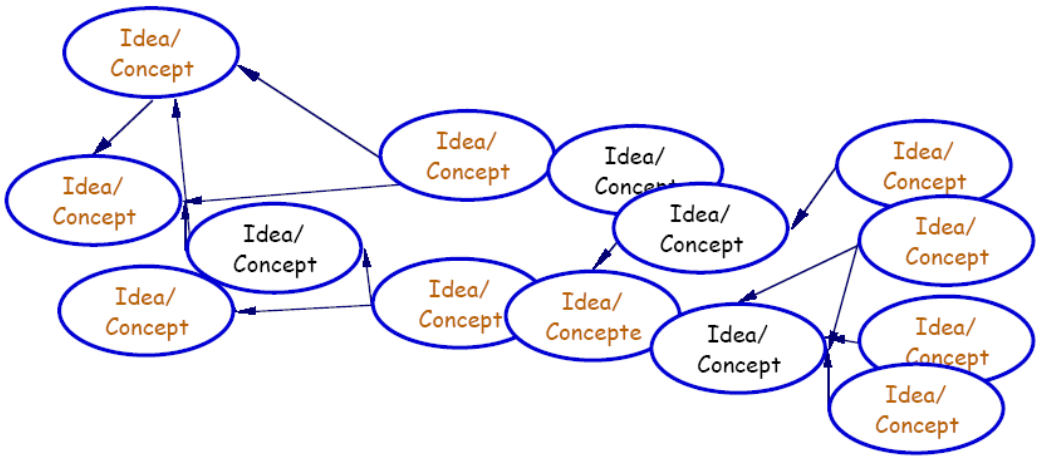



Figure 4.4

Now this is very much of a network associationist environment, which takes ideas and links them together. Not sure what a network is – there's a network there. It's a metaphorical statement of the associations between ideas. That is very much, very much what we've got when we get an email system which may comprise of maybe 1,000 or 1,500 messages over a period of eight to 10 weeks between a tutor and maybe 30 or 40 students. Something like 2,000 ideas – not single ideas but packaged ideas inside emails, that students are learning from.

Quickly jump over to the next one (Fig. 4.5): What is learning?

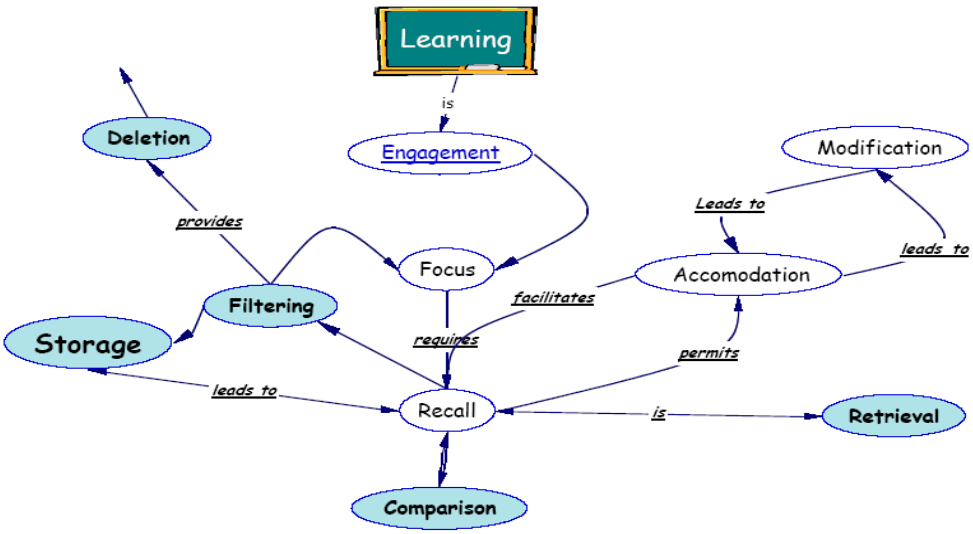



Figure: 4.5

Now you can do PhDs in learning and MScs and degrees, so therefore in about 10 seconds what I do to learning is not very much. But there are one or two ideas on learning. One thing, storage. About nine o'clock. You have to store ideas and things have to be stored somehow. Two, bottom right. You have to retrieve them. Sometimes the retrieval is the problem. It's not the storing, it's the retrieval. Three, you don't always get the right things back so you have to filter. And maybe this is coming on to selective forgetting or, lastly, deletions. So these are four ideas that come out of learning. Storage, retrieval, filtering and deletion.

I hope Michael is happy with this. Let me just end up with a final statement to see if we can get something out of this. Posted messages in a discussion forum provide an external memory for learners. The use of email in these environments – in these Virtual Learning Environments – can be enhanced when mail clients and mail servers can model what you might call a memory learning environment. It's now a place where ideas can be retrieved, sifted, used and so on. Although I have never ever thrown out anything, I have forgotten a lot! [laughter]. Right. But now and again it's nice to be ***reminded*** of what I knew in the past, to be able to retrieve selectively.

What I need is perhaps a fish-eye view. You know, a fish-eye view would be where you focus on something in the centre and it's absolutely quite sharp, but things in the periphery are more in the distance. Imagine a moving fish-eye lens over my memories of ideas, and I can move them around and see into the past where appropriate. If you throw everything out, you can never selectively retrieve again what may be of use to you at present or in the future. So to achieve this, we need I think – in a research community and a wider community – to give attention to selective retrieval of messages. But knowing what I know and knowing what I don't know makes that rather difficult at times, to forgetting (in other words not so much throwing away or erasing, but putting into the background) not having as sharp focus, but in distant focus, in the fish eye lens, things that are no longer relevant to me.

In order to model a true learning environment, email clients and servers need to be dynamically tailored for moderators and learners. This is within Virtual Learning Environments. And, Michael, while tempting to think that asynchronous communication is inferior to synchronous communication, the time-dependent nature of asynchronous email is probably one of the things that makes it such a powerful learning tool. There is time to reflect in action and on action. In doing all this the next generation, I think, of email clients and servers should address issues relating to time-dependent management of email records. If we use human memory as a metaphor for email, then – finally – records management, retrieval, representation and forgetting, need to be further specified and implemented. If we do this, a better understanding of time dependency and asynchronous communication is also essential.

Thank you.

### Michael Moss

Well, for the archivists amongst you we could have almost been listening to Hilary Jenkinson, because what Ray has said precisely echoes his speech to the Society of Archivists in 1955, when he did talk about the record, forgetting and memory.

### Michael Moss on behalf of Andrew Prescott

I'm now going to pretend to be Andrew Prescott. And I'm going to talk about – what he wants to talk about – really picking up from some of the things that Ray was talking about. Which is the pace of, as it were, history or our experiences in addressing the issues that we confront this afternoon.

[Andrew Prescott's statement] The spirit of the Witness Seminar format is that the witness statement should be informed by personal experience. This makes my place in a panel entitled "Futurewatch" perhaps inappropriate, since I am afraid that, as a historian, my default position in looking to the future is to reach back into the past. Moreover, as I get older I find that my view of the future is increasingly influenced by the experiences of my own career, which has been spent over nearly 30 years entirely in the public sector, first in a large national library, then as a researcher in a Russell

Group university and now finally as a librarian in a very small and conservative university in the remote countryside of West Wales. [Michael Moss – aside: He emailed me the other day to say that he was dragging that university into the 17th century]. [laughter]

The 1797 edition of the *Encyclopaedia Britannica* enthused about the potential of a recent invention to unite the capitals of Europe and imagined how "those disputes which at present take up months or years might then be accomplished in as many hours". *Britannica* was referring to the advent of the optical telegraph. The telegraph [Michael Moss aside: remember with mirrors and things?] – the telegraph was during the 19th century to be seen as revolutionary as the internet is today. Instructions which previously took a day or more to reach Portsmouth from the Admiralty in London could be sent immediately, transforming the organisation of the British navy. [Michael Moss aside: remember at one time Bristol had different timekeeping from London and so did Newcastle]. The standardisation of timekeeping across Britain was driven as much by the advent of the telegraph as by the spread of the railways; indeed, the telegraph provided the essential instrument by which timekeeping could be synchronised. Whatever else might be said of current technologies, it could not be claimed that they have transformed perceptions of time, although that may yet follow.

The telegraph is significant as it represents the point at which the speed of communication ceased to be dependent on animal movement (whether by man, horse or carrier pigeon). The issues we are discussing here, and which are raised in the papers we have been asked to discuss, are to a very large degree about this animal–information interface. How do we, as animal beings, cope with information moving more quickly and in larger quantities than we can naturally manage? It is possible that there is a natural limit, a sort of communications glass ceiling, beyond which humans cannot realistically go. Gladstone was reputed to have written by post to his wife two or three times a day – in other words, [Michael Moss aside: another sad man] he achieved the sort of frequency of communication that we nowadays might expect by email.

There has been a succession of new technologies since the advent of the telegraph which offer the promise of instant communication but which ultimately fail to achieve their promise because of the limitations of the human interface. For example, the telephone was, in the days before mobiles, a far from assured medium for instant contact. A conversation could be held when the call was achieved, but making that first contact was far from quick or certain. As a result, the telegram retained a legacy position as the preferred means of communication for particularly urgent and grave news. When fax machines first appeared in offices, a fax was treated as a great event and was assured of a prompt response. However, as faxes became more commonplace, the rate of response became not much quicker than a letter. We can see a similar process with email, which nowadays often achieves no greater speed of response than Gladstone's letters. It is by no means certain that instant messaging will avoid the same fate. If we receive 60 or 70 instant messages in a day, we will start to pick and choose the ones to which we respond immediately – the rest will take their chances in the same way as emails, faxes or written letters.

Does such a historical perspective offer any insight beyond encouraging a certain cynicism about the ability of new forms of technology to deliver quicker and more effective communication? I think that this perspective does suggest some themes which chime with those raised in the interesting papers we have been asked to read. The first and most important is that process is as important as technology. The ability to deal with varied methods of communication depends to a large degree on how they are integrated into the process. [Michael Moss aside: He could almost have been listening to our conversation this morning]. It also explains the toehold retained by certain types of technology. Thus, it is in some ways surprising that the fax remains a standard feature of office communication. The reason for this is that frequently the written, signed document is essential for certain administrative processes, and in providing such authentication the fax comes into its own.

Within this framework, integration is of equal importance. The telephone struggled for a long time to be integrated into office systems – I remember how in the British Museum when I first started work there, an office telephone was not a standard piece of equipment, and an unexpected telephone call was a noteworthy event which

involved being summoned to the other end of the building. [Michael Moss aside: I can remember exactly the same thing in the Bodleian Library – rushing up to Dr Hunt who was keeper of western manuscripts saying "there's a telephone call from America", which at the time cost a lot of money and to which Dr Hunt replied "It can wait." [laughter]]. The process of integrating the technology is as important as the effectiveness of the technology itself. The debate about instant messaging in the articles we have been asked to read reflects this – how can instant messaging be effectively integrated into wider systems without creating anxieties about system security, about inappropriate use of the facility by staff, and about effective recordkeeping across the system?

Within this framework, we might feel doubtful about whether the suite of approaches bundled under the name Web 2.0 has the capacity to transform business practice in quite the way that might first be imagined. One of the most interesting studies recently commissioned by the JISC concerns the use of social networking sites by students for educational purposes. It found that students frequently prefer to keep their MySpace and Facebook activity purely social – they do not like external hierarchies such as college administrators, lecturers and librarians to intrude. This suggests that, while the approaches associated with these sites might hold very interesting organisational possibilities, it may not be possible to pursue these possibilities within the existing frameworks. This raises the further question of whether, if particular sites are used for particular purposes (some for leisure, some for business, and so on), any effective integration of these technologies can be achieved.

My conclusion is that, regardless of the technical possibilities, it is the animal side of the equation which remains most important, whether in speed of receipt and response, in choice of particular platforms for particular purposes, and in the organisational structures that surround it. It is this human side of the interface that we will need to pay particular attention to in the future. [Michael Moss aside: not bad for a historian, I think].

Thank you

## Geoff Walker

I've created a little bit of messy data over the last couple of days, but I've metatagged it so obviously it's a record [laughter] of the event.

I've got a confession to make. I am a trained systems analyst who's studied social anthropology – there you are. I wanted to share with you an experience I've had over the last five or six years in terms of inner-city regeneration, and a government programme called community networks. I've been involved in inner-city regeneration for almost 30 years now, in various forms – as a systems analyst, as a social anthropologist and in various other ways. And the Blair government, when they came to power, (whenever it was – it seems like last century, it probably was) had a very good idea that they were going to join up government. And that is a very fashionable term – they were going to put things together like never before. And they said the one thing we're going to do is join up private, public and third-sector organisations to tap into the knowledge that we need to create better government processes.

So a bit of process re-engineering, business process re-engineering at a governmental level. But a very complicated and ambitious process from the point of view that it was bringing together three different sectors who had very different ways of doing things, not least their ways of managing their own records. A private sector who is very keen on keeping information to itself, not sharing information across cross-sector platforms, a public sector who is used to keeping its own records about how it did business with the local authorities, but was not necessarily very good at sharing information with the public. A third sector who is very insular and knew that it was doing a job that was very voluntaristic and very important to the other two sectors but also kept very detailed paper-based records systems rather than electronic systems.

So this was a very brave paradigm shift from silo-based project management to a very wider-based holistic systemic knowledge management system. So what they did, is they went and created 35 of these community networks nationally and brought together the private, public sector and the third sector. Very grand programme. It only really got policed by the Milliband brothers over the last few years, who I came to

regard as the Thomson twins, bit like in Hergé's *Tintin*, they appeared everywhere but nobody knew what they were doing there [laughter].

In the meantime, there was a lot of activity – clearly. The private sector went along – said "oh we've got nothing to share with these two sectors because we're doing things fine. So we won't share anything with these sectors." The public sector said "well, we've got a public sector responsibility to share information, therefore we'll set up a kind of duality of systems. We'll keep some records to ourselves for data protection. We'll share some with the partnership, and we'll keep the rest to ourselves in terms of what we want to share in the public domain." So you've got duplications, replications of information, replications of data across all the different sectors. What the government decided to do in its wisdom was, because it had the problem with joined-up government at Westminster level and across parties at local government level, was to roll out the traditional quick fixes if you like, in terms of internet-based applications – every community network had its own website, but all they did was replicate each other's information over the whole 35 websites. So you had 35 websites that had links to other websites which were already in the 35, and contained very much the same information. Email discussion lists were set up, but very soon people decided the email discussion list (you'll recognise this) didn't have an ethical code, didn't know what its ground rules were, so people migrated to another discussion list which they just set up themselves in social software (I'm doing a very good job of harming this mike); in social software.

So what happened in the actual world is first of all the surfers – the young surfers had already left the beach. They'd already migrated to text messaging and they just said "oh it's nothing to do with us, all this, we'll go and form our own little young people's community networks. Within each individual community networks they communicate with each other via text. We don't use any of the formal methods that have been created." So already you had a cluster which was excluded from all the other clusters of knowledge and the processes that they were trying to create. The third sector itself actually said to itself, "well look, what value does electronic communications add to face-to-face working. We've traditionally worked face to face in a lot of cross-sector partnerships in the past. These electronic systems are not giving us anything – because we don't trust these people that we're working with in

the first place across these sectors. [laughter]. We can't see the whites of their eye when we're talking to them. They deliberately send out false information in emails, so why should we work with them unless we can see the whites of their eyes?" And I think that's a perfectly valid point really.

It brings to mind two key texts that I'm familiar with. Around about this time was Brown and Duguid's *The Social Life of Information*, if people have come across that. Where Seely Brown and Paul Duguid argue that information (like everything else) had a social life. I'd like to go out and meet other information and multiply and get intrinsically drunk [laughter] in the knowledge itself, you know. Go down to the Baltic and have canapés and that sort of thing. The other thing was Scott Lash *A Critique of Information*. Scott Lash, a student of the sociologist Anthony Giddens, wrote this critique of information which proved to me quite conclusively – although it's very difficult to read because it reads like a prolonged email and not an academic text, although he's supposed to be an academic – he says in there, most of the information that we process on a day-to-day basis is not deep and meaningful, but superfluous and meaningless. Because we should be discarding most of it, because it's just totally worthless to us. And this whole idea of an information society and a global network knowledge economy is a complete and utter myth. And I thought, well, that's quite a strong point really. So I'd better start thinking about that.

So how do we overcome some of these things like social life – information as a social life? And the critical information along the "deep and meaningless" ideas of Scott Lash? And then I started to look at social networks. So I started to do social network analysis and used social network tools to see what things were holding these social networks together. And I found there was kind of two key headings that could be grouped under the ideas of social capital. The one is reciprocity. If you do somebody for somebody – something for somebody – they're going to do something back for you. But that was built on trust. Alright? So you trusted the person who sent you the email in the first place and then you would say that's a useful, that's a valuable piece of information to me. So we've got meta-networks there, not just social networks. We've got networks of networks where information has been changed and changing hands – informally, largely outside, beyond any information management or records management formal system of recording things. So there's a massive activity of

information knowledge-sharing that's growing up around us all the time that we just find it really, really very difficult to tap into.

In conclusion, I just think there are certain areas that we need to explore and I now consider myself more of a knowledge manager than an information manager. And I really think, we have to prove to ourselves, and to the people that we work with, if we're going to have a systemic holistic approach to sharing information, just what is the added value that we're bringing to it as professionals? We have to prove to people that we're adding value. I'm working as a consultant, now, so I have to prove on a very real level to people what added value I'm going to bring to the organisation. Because largely the organisations I work with don't have a great deal of money. So I have to prove a lot that way. There are patterns of knowledge-sharing out there, but we're not decoding the patterns. The patterns are there, people do use certain platforms in certain ways, like instant messaging, Internet based forums, social software and so on, but we're not digging in deeply enough, systemically enough into the patterns to try and see how the patterns match up. Or whether they kind of cross sectors.

Another couple of points is that this thing about relationship between people being new to email or electronic systems and people being veterans, clearly there's a division between veterans and newbies within systems, and how they use e-communications, needs to be explored. And there's also an area between "in" groups and "out" groups. Anybody that's read Irvine Janis's theory of groupthink will realise that he refers to people being inside the tent looking out, rather than outside the tent looking in. And it affects the decision-making process – which side of the divide that you're on. And clearly if you took a two-by-two matrix, and looked at veterans / newbies against "in" groups and "out" groups, you might get yourself a nice pattern for analysis there.

The final point I really wanted to make is, I think, something like "this is great". We've had a great couple of days. And it's great to come together with all you people and hear the witness statements in the way they've been presented, because I think the format's been excellent. But I don't think it's good enough to just end with a conference. It needs an ongoing process. It needs something that goes on in between

conferences. Yes, have the conference each year, yes bring on board other people, but it's an ongoing process which I think we'll all benefit from in the long run.

Thanks.

## OPEN DISCUSSION

### Michael Moss

We have about 35 minutes of discussion. I'm not going to ask the witnesses to comment on each other's papers. I'll ask that at the end for comment on the comments that you've made. And so can we have some discussion please? Your thoughts, there are lots of hooks to hang on? So who's first? Yes?

### Julie McLeod

To John and others, I read your statement obviously, John, before others heard it and at the bottom, when you were talking about "unless we place email and other electronic communications in the proper context, i.e. the work process and activity, we wouldn't get anywhere," I wrote 'how best do we tackle it? Do we join forces with business information or systems analysts to teach us more about those processes and those artful processes, which is a really interesting phrase? Do we work with them? Do we work with others?' Well, in fact you answered that during the statement because you said business systems analysts, we should work with. I wondered if there were others that we should work with. But that made me think I'm in a fortunate position, or we are in our research team in a fortunate position, because David Wainwright who was chair yesterday is an information systems person. And within our School we have that opportunity so we don't have to bash too many doors to get an open ear and to listen.

But we can do that in theory; so we can do the theoretical part of understanding artful processes. But we really need real data. We need to know and understand what's happening on the ground. So we need to work with other people out there. Well, I could probably think we could go around our School and other Schools and talk to people. But has anybody – John, other people – ideas of how we get some of you, some of your colleagues, on board to better understand those artful processes? I'm probably remembering a comment made at our expert panel meeting the other day when someone said "what's in it for me?" So how can we get people? Because in the short term, we probably don't have any solutions. We have better understanding, but it's a bit longer-term to see a benefit for them coming in and for us to understand

those artful processes. Sorry, I know it's not an easy question, but I wondered. It's not just to John, but to everyone – how we get people on board to better understand

### Michael Moss

Just let's peruse this theme.

### Other

I wouldn't say it's a continuation, it's just a bit like email. We've had problems with email for many years. The problems of linking up business and academia for many years has been around and we still don't seem to have that solution. And I'm not sure where it is going to come from myself. I've been doing university conferences and business conferences, and it always seems to come up as an issue in terms of how we really integrate the two for mutual benefit.

### Eleanor Russell (The National Archives)

My name's Eleanor Russell. I work at The National Archives. I find it very interesting, this whole discussion about records management and competencies. Partly because it's something that at The National Archives we are very interested in ourselves, and we've actually noticed that a lot of the comments that are coming out here are about "are the competencies right?" and are the organisations associated with training people getting it right. We're beginning to question whether the training is actually fulfilling the business need? And our feeling is, certainly talking to other government departments, that actually there is something that is not quite there. It's not quite right - in that there needs to be more of a linking with these associated professions, associated areas like the systems, like the IT areas and like the process side.

And I suspect that at some point, answering what Julie's saying, there will be a discussion that's held between representatives from the knowledge and information management function in government and the universities. I say at some point, because at the moment we're still scoping out very much perhaps what needs to be done.

Because as you said, it's a very big area. There are many different professions working in this space and at the moment they're all competing against one another. You've got records managers, you've got information professionals, librarians, archivists, knowledge managers – you know, the list goes on. And we're all trying to operate in the same space. But we're all kind of competing for that area. And in some ways IT has stolen the march, partly because they don't worry about that.

### Michael Moss

They have big budgets.

### Eleanor Russell (The National Archives)

Maybe, maybe because they don't try to compete with one another.

### Kate Knight (HBOS plc)

Kate Knight from HBOS plc – Halifax Bank of Scotland for those not familiar with the acronym. And ex-Standard Life. There are some fairly forward-thinking companies – particularly you mentioned Standard Life in this context, that have a central risk management framework through which they manage their business. And they have, for example, a unit where a chief information security officer will control – well guide, shall I say – functions such as records management, IT risk, information security, business continuity and so on. And there are virtual lines of reporting in from risk directors from all companies and they represent business processes, whether that be a business process of health and safety, or sort of pensions development or whatever. And they all work together as a team. I'm not saying that's perfect, but it's a very good model to study. And if you can knock on Standard Life's door and convince them to have a chat with you, I think you'll find it an interesting one to explore.

In HBOS, where I work just now, there's a good model being developed in the corporate banking division along the same lines. And it's new, but I think very

exciting and the two gentlemen either side of me are involved in that, would be happy to talk to anyone I think about that model as well.

### Michael Moss

Thank you. Steve?

### Steve Bailey

I was thinking back to what Julie said about motivation, What's in it for us? About collaboration and sharing ideas etc. I just thought – I picked up a book from work about Wikipedia and Wikinomics.[38] And what if you'd said five years ago why would anyone want to take the time and trouble to post something to Wikipedia? To update somebody else's entry? You know, what's in it for them? Well, there seems to be a new drive that allows or actually persuades individuals that it is worth taking the time and trouble, if they've got something to contribute. So I think what we've been lacking in a sense is the means– not the will because everyone wants to do it.

Yes, there's the time element, but there's also been the lack of vehicle in order to co-ordinate this. And I suspect now, that there are mechanisms out there whereby we can continue discussions, post a conference, post an event in some sort of semi-structured kind of way. And funnily enough, I was having a conversation with my boss earlier in the week about a similar idea about some sort of records management "big tent" as I described it, about trying to find a way of actually facilitating these sorts of developments, not just within records management, but bringing in people with other expertise and input, where it's required. Her comment was, "how do we prevent a records management big tent from becoming a three-ring circus?" And I'm afraid I don't have an answer to that yet. But you know, I think things are changing.

[38] Tapscott, D. & Williams A.D. *Wikinomics: How mass collaboration changes everything*, Portfolio, 2006.

### Susan Em (Royal Pharmaceutical Society of Great Britain)

Just to follow on both from what Steve said and from what Julie was asking, about how to get people to engage with the question on an ongoing basis, I think a remaining problem for many records managers and archivists is getting their organisation to see the value for them. I mean the organisation that I work for doesn't (I don't think) see the value of information as an asset. It doesn't realise the amount of metadata that is lost, which John was talking about in his presentation; the amount of metadata that is lost when we send emails. For example, it's difficult for them to see information as an asset and it is therefore difficult for them to see what is the point of engaging in the discussion of information, and the discussion of management of emails, in a more abstract way. Because I may come back to them and describe, for example, the very complex and very fascinating server set-up that Ray McAleese described, but what they're going to be expecting practical assistance. So it's a way of enabling records managers and archivists, other information professionals, to persuade the as yet unconvinced – or, indeed, the as yet indifferent – employers to see the value of this kind of discussion in the longer term, and as something that doesn't give them an immediate response and investment of time and expertise.

### Michael Moss

That's interesting because that links up with notions of what value – that you referred to – and how you value that in the balance sheet, because it's going to be an intangible and my colleague James Currall had the JISC-funded project just on that topic, on the information value called Espida which you'll find on the web.

Can we develop Kate's notion of risk, because I haven't heard much about risk. Has anybody got any observations about risk? Because how ***we*** teach this sort of stuff in our course is entirely in the framework of risk. I was at the FCO last week and that whole operation there is effectively a risk management operation.

### Ian Wooler

Just an example of an organisation that was trying to – at the top table – raise the profile of records management, information management, knowledge management – the importance. And one of the individuals of the organisation had the insight to use their risk register as the lever. And the individual took the risk register and looked at each and every risk on that register and then interpreted it through knowledge information records management lens and provided a response. And the response was that powerful that the top table then had to listen, because each and every single risk on the risk register was in fact a knowledge and an information management risk.

### Michael Moss

Just as one would expect. Any more comments?

### Martin Sanderson

One comment is that in the academic world, I mean (from comments, say) there was confirmation that, you know, you learn about the future by looking to the past. Whereas when you mix in the corporate world, they seem to have – they neglect looking to the past these days. They're just looking at the present to predict the future. And there seems to be two very different approaches between an academic world and a corporate world and I just wondered if there were any thoughts or comments from our academic representatives?

### Michael Moss

I thought Ray made some interesting points from that perspective. Adrian?

### Adrian Cunningham

This conversation has reminded me of a paper I heard Chris Hurley give at a conference a couple of years ago. And the title of his paper was "What if anything is a records manager?" And his answer was, to cut a long story short: essentially, records managers are providers of evidence solutions to organisations. The trick is to have a

situation where the organisations realise they need solutions in the first place; and secondly, when they have that realisation, to come to records managers and not to lawyers, for instance, to find those solutions. Or, perhaps, to come to records managers and lawyers together. But I think if you're looking at your organisation through a risk register system, one of your ways of managing risks is to manage the evidence that you need to protect your position. So I think there's something to be said for looking at our role in that way. And getting back to answering Julie's question "what's in it for them?" Well, if they feel that they need an evidence solution, hopefully they'll come our way.

### Kate Knight (HBOS plc)

Absolutely spot on Adrian, as ever. I have to dispute the fact of the earlier speaker (I think it was Martin) that the private sector doesn't look to the past. And that's exactly what we do in predicting our future risk; we do look at the past. We also predict forwards as well. But one more point, in our industry we have to support our position in an intelligent way. We don't have things labelled compliance records that leap out at us from paper or from electronic systems saying "look after me, I'm a compliance record." We work in an environment of what's called principles-based regulation. So we have to work out what record is going to support us in our position, and it's intelligent thinking all the time. And that may change all the time as well. It's not prescriptive at all. We really have to engage with the business processes and the outputs of those processes.

One more point quickly on what the records manager is. I don't believe there's a "one-size-fits-all" records manager. In our operations, we use different types of records manager at different levels. Some of them, like me for example, write policies in conjunction with other professionals and business users. And we also set strategy as well. We also work with our risk communities and external regulators and statutory bodies. There are other records managers who are very hands-on and involved in helping the business in what they do. So there isn't one records manager as such. They have a range of activities and a range of competencies.

### Julie McLeod

I would really like to see if two colleagues in the room would join in at this point and share their expertise, because I think it's really, really fascinating. Building on what you've just said there, Kate, about there isn't a "one size fits all" with a records manager; building on your point, John, about the O&M, the Operations and Methods and the workflow, and people going, the loss of good administrators who knew how to get things done, they knew about the business processes.

There are two colleagues here from Frankfurt and I think their organisation has done a really, really interesting thing in terms of building capacity and developing records management specialists. Beatrice and Bernice, you were doing other things in your organisation and you've actually come into a newly labelled post. I just wondered (within the realms of confidentiality) if you could just share with people in the room how your knowledge and expertise of the business – from different places that you and your colleagues have –has helped you in terms of your new role as records management specialists, if you wouldn't mind?

### Beatriz Garcia Garrido (European Central Bank)

Well, I think it has been very important. For us to give you a little bit of background; the European Central Bank decided to bring the organisation up to speed in records management. So they decided not to search outside for the knowledge, but to train somebody from the inside, to also give opportunities for a career path. So they picked some people in the organisation through a selection process. And we were trained; we are still – "on the making", I would say. But I think it has been very important because we are a group of six people coming from different backgrounds with different work experiences. We are bringing this experience together with a records management focus now. And I think we are applying to our current job. what we know from the organisation. It is useful to know what the users feel, what the problems they have because we have lived them, in fact we are still living them, I think. It's very important to know all that, to have been also on the other side and to know the organisation.

### Bernice Ibiricu (European Central Bank)

One thing I just wanted to add to what Beatriz has just said is that one of the things that I thought was quite valuable for our experience – actually two things, in fact. One was the fact that we were recruited internally, so we actually understood the business of the bank, and despite the fact that we don't completely understand it, we're still learning; that was actually a very valuable thing. And secondly, Julie has just been fantastic in helping us build on our knowledge in records management. So, it's been twofold.

### Julie McLeod

It was really just sharing that. We've heard these comments inside out and outside in, from different perspectives. I just thought you were an example of being on the inside, and still on the inside, but with a different view – that was really important.

### Russell Joyce

I don't know if it's worth adding, but I've just joined a company who were insistent on the new archivist having industry specific experience. And yet I was employed having none at all. And that is because they thought I had the necessary skills to bring to the business. But what was interesting to me is that I've actually been employed in working under regulatory compliance. That's where I sit, but I do have dotted lines to legal and to risk management. And that's essentially where I do most of my work. So it is very much a risk-driven business and compliance is absolutely essential to everything that I do. So I just wanted to add that comment, which reinforces what other people have said.

### Michael Moss

Can we develop, in the short while that we've got left, the educational angle? Because I think certainly for the educators here  it would be interesting, to hear a bit more about that. Because there is what Terry Cook calls the creative tension between the knowledge base and the skill set. And that's a sort of moving paradigm that we grapple with. And it's certainly what we do. We have moved very much more towards

the knowledge base than the skill set. But that's a debate that's going to continue.. Does anybody have any views – certainly from the practitioners' end, I would like to hear more about what you expect. Because we can't teach everything. Heather?

### Heather Jack

As I was thinking about my question, you then ended your question and it kind of changed on its head, but I'll continue the way I was going. You will remember, Michael, I came along to talk to you …

### Michael Moss

... it was a comedy act!

### Heather Jack

Yes, I was Heather Jack / Billy Connolly, and in fact Michael actually said to me at the end (and I took this as a compliment) "Heather you're the first records manager that's made me laugh." [laughter]. Throughout my career, I've always been very, very keen to try and involve both children at school and also students at university, in whatever work experience I could get them to get their hands on. And I did that partly because I did my history degree at Glasgow, straight out of school, and didn't get nearly as much out of it as I ought to have done, and then I went off to Renfrew District Libraries and was a trainee librarian for a bit; and then I went to Sheffield University, and all of a sudden, I had a hugely effective learning experience. And I was getting that real balance between the theory and the practice.

And I think it's interesting because you've got so many people now who are the practitioners and then they go off and do the courses. And I don't know if I'm coming up with any answers here whatsoever, but there are things happening (you know, this vocational thing plus having the theoretical background) and also the contributions that each sector, if you like, between the academic side and the practitioners side, that they can bring to each other. And I guess this is one of the kind of platforms that

we're doing it in. I think it's really exciting, I think we should get things from it. But I've not got any answer, so ...

### Michael Moss

Comments?

### Rachel Hardiman (Northumbria University)

Since I've got control of the mike, I'm going to hog it now! [laughter]. Rachel Hardiman from the University of Northumbria. It's just the – talking in terms of education and skills, and also what a lot of people here have said, and alluded to, and also you do come across a lot in reading and speaking to people – this idea, you know, the "young people" coming up and so on, the people now familiar with all the social networks and the software. That in some way the implication is often made that these people are actually very conversant and completely on top of information as such. But is it really true that they are? I mean, more than, say 10 years ago, the teenagers who knew how to press all the buttons on the video machine were on top of cultural and media studies?

They know how to do things, but that's not the same as understanding and knowing information, information management, information culture, in a broader context. And sometimes it kind of worries me, that we're looking at this and thinking "oh my god, I've never logged onto Flickr, therefore somehow I know less than a 15-year-old who can." And there's a bit of a danger, sometimes, I feel in us thinking (not ***us*** necessarily, but some people) – as it were, almost being ready to jettison a much, sort of, broader, a much more deeply developed body of knowledge that's (you know) occurred over years, generations, because we're a bit fazed, a bit afraid of this "new thing" that's suddenly appeared. I just thought I'd throw that into the mix.

### Reynolds Cahoon

For me that topic, it's not so much an "or" thing, as an "and" thing. It seems to me that some young people know a lot things that maybe we don't know yet, and we

know an awful lot of things that they have yet to learn. And I think it's a question of how do we collaborate together and gain that kind of mutual knowledge. The second point I wanted to make is that at the US National Archives, records managers are being trained in the disciplines of systems design, process analysis and information design. The whole records management certification programme being sponsored by the US National Archives, is focused on broadening the scope and the capabilities of the records management profession. And so you might want to speak with the folks at the National Archives, Larry Baum leads it– and I can connect you with him – he is the individual who is probably best suited to talk about the programme. The programme does create a much broader range of capability in records managers which I think will be useful.

### Steve Bailey

I'm just going to go back to the previous point about whether we're over-fazed by the fact that people know, kids know Flickr or whatever, is that any different to when they knew how to turn the video on? Unfortunately I think it is. I mean, I think when you look at who invented Google, you know, they were not a couple of records managers, you know; they were a couple of high-school dropouts, you know, who knew a bit about IT, and I think …

### Michael Moss

And a lot about mathematics.

### Steve Bailey

And a lot about mathematics – absolutely. You know, I think we are fast coming into a situation where well, we *don't* drive the agenda. There are IT people – do drive the agenda, they will continue to drive the agenda; and to an extent, we're kind of clinging by our fingernails to a theory and a practice that was developed 50 years ago for a world that is entirely different to today's world. Some of the concerns which are key, and always have been, will continue to be. But the way in which we go about actually exercising them and tackling them needs to change fundamentally or I

suspect that records management will no longer be fit for purpose in another five years. Or records managers won't be. I think the management of information – the management of a record will obviously continue, but I just get concerned when we're sort of clinging on to some of these tenets that really don't fit any more. And I think we're sort of on a bit of a hiding to nothing if we're not careful. What a cheery note to end on!

### Michael Moss

I'm not very sure about that, because that seems a very techno-deterministic view of the world. And if you think about the invention of moveable type: moveable type was invented in Tibet, nothing happened. Moveable type, when it was invented by Gutenberg – something happened, and that was partly due to the social environment in which that technical development situated itself. And I think we can learn a lot from cultural and material studies; cultural studies, they've *been* down this route and discussed a lot of…Sorry Catherine, I've interrupted.

### Catherine Hare

No, no, actually I want to pick up the point about education. And as a former educator who then went back to practice, and then someone who's had a little bit of time to be out of both (as I moved into retirement) and then having had the experience of the witness conference here. And also knowing that in this room there are a number of people who have completed their professional education while continuing to work, and having been very interested by the various witness statements, I think the potential – and perhaps this is something for the future, and I don't quite know how we do it – but the potential for a more, a closer cross-fertilisation between practitioners and the educators. So, I was talking to Sue [Childs] about this at lunchtime; we were talking about what happens in the medical field, where people drop out of practice into a research project and then come back into practice. Is that – and that moves medical research forward quickly, and I get the sense that we all have this recognition that things need to happen and things need to get going and it's looking for ways of doing that, and it is all about – you know, we've talked about partnering between different

stakeholders in information management: I think we need to partner more between the two sides of, you know, education (professional education) and the practitioner. And look for ways of closer exchange, collaborative working. and I know Julie's project involves academics, as well as practitioners, and multidisciplinary. I really do think we need to try and work more closely together, and I don't know whether it's people dropping out of work – coming and doing some research – or working with the education programmes, the research programmes, whatever … just throw that in.

### Martin Sanderson

There's plenty of desire to do that. To do the...

### Catherine Hare

... the mechanics

### Martin Sanderson

Well it's money. Being able to afford to get out of work and earn the money in the research environment. Well we have disparity.

### Steve Bailey

I'll give you my wallet now!

### Martin Sanderson

All donations welcome!

### Michael Moss

But unlike other sectors we've done nothing. We haven't exploited things like collaborative awards. Which we should. But we've not done that and of that we're guilty.

### Jonathan Downes

Maybe this is a bit obvious but it does seem like we've got an awful lot of people that are identifying a problem and there's organisations and companies out there that want to sell solutions and make their living on doing that. And an observation about the role of the National Archives and the EDRM systems is that through the setting up of the standard (I mean you can have a debate as to how suitable or appropriate that standard was) but have being creating a standard and making that standard essential for governments that were buying that solution, they've forced the hand of the industry to a certain extent and did research in achieving that. And I know that the programme they're moving on to now is looking at how they can work within industry to help set the principles in place to do it. So perhaps being able to somehow yield (or bring to bear) the power of the software developing organisations can be managed but we need to help present them with a specification to be able to articulate those issues to the software industry, who I'm sure would be delighted to receive the spec, of what we need!

### Michael Moss

I'm going to ask the witnesses to comment or add to the discussions.

### John McDonald

I'd like to touch on two things. First is the issue of risk that was raised earlier, I was really impressed by the discussion last year at the first Witness Seminar when an entire topic was dedicated to risk. What was great about the discussion surrounding the topic was the way in which the discussion moved from seeing risk as making sure that we're complying with laws, policies - minimizing the risk of liability - to seeing risk as being a lever for carrying out change in an organisation. Every organisation changes and has to take risks to accomplish the required changes. This is where records come in. As Adrian was saying the effective management of records results in the establishment of an evidence base that enables legislative compliance and, at the same time, a rich information resource that allows an organization to carry out the changes required to move forward. And I think that's a really key concept of what records management is all about– that we're not just keeping records to

document (of course we're doing that), we're also doing it to keep valuable information sources that can be exploited for a variety of purposes beyond those for which they were originally created.

Which gets to the second point I'd like to make and then I'll close. I agree that multiple disciplines need to be involved but in saying this I think we also need to ensure that we give primacy to business people. In my experience it's been the business people who have been waking up to the records issue. I recall one senior official in particular saying, "I'm setting up a brand new research agenda – of national significance. I need to know what it means to document what I'm doing, and I also need to know how I can get information that's coming from diverse sources gathered together so that the inter-jurisdictional steering committee I'm responsible for can make effective decisions." Senior officials are asking those kind of questions which makes me think that it would be great if a case study could be developed to illustrate how multiple disciplines could be brought together to work with a concerned business manager to address key business-driven records issues and approaches reflecting legislative and policy compliance considerations on the one hand and information exploitation considerations on the other. Such case studies could help us understand how we can work with other disciplines more effectively and, ultimately, how we can work more effectively with our business clients and stakeholders. This is easier said than done, because business managers are saying "I don't want to become a pilot laboratory landscape here"; on the other hand, the principle of bringing the business side in, I think, is a really important one. Finally , I think records management should stay on this side of the screen, facilitating the means by which business people can express the requirements which can then be passed to – hopefully, informed – IT people who can actively respond to those requirements. In other words give priority to the business end rather than paying exclusive attention to building partnership with the IT side.

### Ray McAleese

Two brief points. To know that there is a future, we should be aware of the past. We were wondering whether you actually got a look at the present or the past to see the future. Let's be clear. There's a difference between prediction and projection. What

should happen is different from what will happen. Look at the recent Office for National Statistics population projections as an example. To look at the future is to say what should happen, not just what will happen; I don't think that's a legitimate way to do it. What should happen requires value judgements; those value judgements are in our hands. We can change the future, only if there are alternatives offered to us. Secondly, of all the many, many classifications of knowledge – I'm thinking of knowledge and information and training issues here – one that's often trotted out is the procedural–declarative–metacognitive distinction: the procedural, to know how; the declarative, to know that; the metacognitive, to know what, or to know that you know something. Now in my short experience of university education going back to the 1960s, we have no doubt that students who come into higher education know that: they have lots of pieces of paper to say that they know that. To know how (the procedural) is something that very few of them seem to have. They know that something, but they don't know how to do it. The one that they're least aware of is the metacognitive one. Learners are often not aware of what they know and what they don't know. Their ignorance is so profound that they are unable to ask the first question, in that sense. So it's the metacognitive level. And the fourth one of this classification, finally, I think there's another knowledge question is to know why. Why are we doing things? It's reason-giving. It's not just evidential, it's reason, explicative reason-giving.

## Geoff Walker

My point, I think, follows on quite nicely from that. I wanted to bring forward the point of social networks again that I touched on in my witness statement. But it's been mentioned several times throughout the two days. And I was struck by the comment about competencies overlapping and people occupying the same intellectual space. Because my understanding of having worked in a large organisation and working in a cross-sector partnerships is that people are very good at seeking out like-minded people when they're looking for information and knowledge, because it can be shared quickly. And there's substantial bodies of work now about knowledge-sharing within organisations, and social network analysis that's been applied as to who knows what within the organisation, over and above the architecture: either the systems architecture, the information architecture or the knowledge architecture of the

organisation. I would quote in particular the work of Rob Cross and Andrew Parker, who've done a lot of work into this in the United States.

The other point is in cross-sector partnerships, and a lot of work's been done by Bob Gulati in the United States again, on this: he calls them alliance constellations.[39] Basically what happens is that when organisations come together, they come together in hierarchical ways but also in horizontal ways, and they create formations of alliances of like-minded people. And we need to tap into that. So on the first instance, within an organisation, in terms of information and knowledge sharing, we need to be in tune with who knows what outside the hierarchy of the organisation even though we're trying to flatten the hierarchy of the organisation, ultimately I would have thought, all of us. On the other hand, it's tipping into people who are like-minded, across partnerships and across cross-sector partnerships. And again, suggesting that there is a body of academic work that allows us to investigate that a little bit further

### Michael Moss

Thank you very much. Well that just leaves me to conclude this afternoon's session which I hope you've all enjoyed. I've found it very illuminating. I could perhaps have one last comment, that everything I've heard today was predicted by the social constructionist Jacques Derrida in his book *Archive Fever*, because if you read it – and not many people get right through it – but in the middle of it, you'll find a passage about email. This is written in the 70s/80s? Email had just arrived, and he predicted exactly the sorts of scenarios we've discussed today in a few short paragraphs. It's a good illustration of how a very theoretical approach, we end up with real practical problems.

May I thank the panellists very much for their contributions? And the absent Andrew Prescott who we noted well. Thank you.

---

[39] Gulati, R. 'Social structure and alliance formation patterns: a longitudinal analysis *Administrative Science Quarterly*, 40, pp. 619-652, 1995.

Gulati, R. 'Alliances and networks', *Strategic Management Journa*l, 19, pp. 293-317, 1998.

Gulati, R. 'Where do interorganizational networks come from', *American Journal of* Sociology, 104(5), pp.1439-1493, 1999.

## CLOSING REMARKS

### Julie McLeod

This is the last time I'll get up with some words. "Wow" is the single word I'd like to start with. Whenever we go to any event, we should always come away reflecting on it, analysing it, and I think most importantly ***acting on*** what we've learned and heard. But particularly an event like this. We had a *rapporteur* last time and I can't emulate the wonderful David Ryan. He did a brilliant job of wrapping up. I can't do that right now, but I can give you some immediate impressions that I'm coming away with from what we've heard today and yesterday.

First of all, the title of this event is a technical title in a way - email, e-communications. It suggested technology, but I think what's come out in every single panel is that it's about ***people*** (animals, I think, in Andrew's words) and ***business processes***. Which is really, really interesting and it sort of reassures me that we've chosen the right order of facets to investigate in our AC+erm research project that a number of people have mentioned.[40] We've had lots of different views from our witnesses, and actually presented in different ways, which I think has made it all the more stimulating and interesting, over the last day and a half.

We had an aim "to identify topics and opportunities for research and development and to move forward." There's a whole ***list*** of things that I've thought about, but just some of the things that strike home…

- lots of things to do with people and organisational issues - behaviours, strategic, holistic, systemic views; alliances, culture.
- about communication – not just about email, but about communication and using email as one mechanism for communication. I love the "licence to email" – it's not quite as good as the 007 licence to kill [laughter] but sometimes we might think it's killing us with all the stress around. But I like that "licence to email" idea. the information systems view.

[40] AC+erm: Accelerating positive change in e-records management. A research project funded by the AHRC. Blog at http://www.acerm.blogspot.com Project website: http://www.northumbria.ac.uk/acerm

- there is, and it's the last time I will mention this, the "keep everything" option as a solution. And there's two camps in here about "keep everything, delete everything" – perhaps? But seriously, the issues around costs and benefits, storage, process and or retrieval, whether we're talking about that in the e-discovery context or not. The impact on behaviour. And if the "keep everything" approach, so that we know that everything is there ***and*** the smoking gun is there, maybe if that's a self regulating approach that makes us just stop and think about what we're emailing, well then, maybe that's not a bad thing.

- We've heard a lot about who should be involved within and outwith the records management field and it's really interesting. I tried ***hard***, with other people's help, to bring a number of people together. I don't think everybody in this room would say they're a records manager. And there are some people, colleagues, who've come in and gone out who certainly aren't anywhere near that domain. But I pick up on Heather's [Jack] point about trying to bring different disciplines together. That's what we've actually been trying to do. We've had some success but we could get more disparate disciplines together.

- And then research into getting our message across, at a young level, broadly; whether we think we need to be worrying about people knowing more about Flickr or not (just as an example). Bringing together what we know from experience and our ability to analyse situations versus our knowledge on the latest technology.

David Bowen's gone now, but his idea about using plagiarism software to de-duplicate never occurred to me and yet former colleagues in our School were on, are on, the Plagiarism Advisory Service. The 3D mapping software, there's lots of things there so I think if we read through, if we reflect, there's ***loads*** of things here for the research agenda.

But Heather and someone else (I've forgotten who it is – I'm really sorry) said – the $64 question is "how do we take this forward?" - the action. We do have some

technology in place and Steve, I think it was you actually, you talked about Wikipedia and what was in it that makes people contribute. Well, maybe we need a "Witness Wiki", I don't know. But I'll bet it's difficult to create in the university environment. But we ***do*** have a project blog for our accelerating electronic records management project and, this is not something I'm trying to plug (really) [laughter] but, seriously, it's not on my list of things I had to say. We could quite easily, project team couldn't we, think about putting one or two posts up there so that people here could join in and keep some discussion going? If there are other ideas about how we keep that discussion going, beyond the ones that we've had, then that would be great. I would say, email me about those, but you know what, I'm not [laughter]. A phone call would be ***really*** nice, or a post, or a comment to a post on the blog would be really nice. Because then it would be in one shared location, going back to what Jon Downes was saying earlier.

And that forgets another area, or doesn't include another area which is all about this cognitive psychology, and that struck me as an area for research

So, I think someone whispered to me sitting on the table just now, when we were talking about keeping things going and action, have we created a beast, an unstoppable truck that's going on the train? I'm thinking "how many more years until I retire?" [laughter]. I can't get off this train yet.

Anyway, it's time to wrap up and I hope you'll be able to take forward some of those ideas within your organisations, and joking apart, if we can get some collaboration going, that would be fantastic.

I ***do***, however, want to formally wrap up with some "thank yous", because I think it would be remiss if I didn't. A few people who I would ***really*** like to say thank you to because they helped to make today and yesterday happen. In particular, Sarah Howells who's not here – my admin colleague back at base -, and the e-records research team, Sue Childs, Rachel Hardiman and, behind the scenes here, Naomi Hay-Gibson, have all in their own ways helped support today before it happened and whilst it's been happening. And we have got a record of the event, so thanks a million

to them. And to our sponsors. Iron Mountain have been mentioned and Emerald, because again, it wouldn't have come to fruition without their sponsorship.

My ***second*** thank you, main thank you, goes to everyone who accepted the invitation – whether it was to be a witness or to be a chair. Without those contributions, the debate wouldn't have started. And without the ***quality*** of those contributions, the discussion wouldn't have continued, and it wouldn't have been nearly so stimulating; and I don't think that hallowed turf [looking at St James' Park] has ***really*** had a negative effect on what's gone on in here. A particular thanks to all of those who've come such long distances.

But my final thanks go to everybody else in the room – the delegates. The fact that you wanted to attend says something about the people, the topics, the format. And the fact that you engaged in the discussion and the debate suggests, I hope, the experience has been worthwhile.

So it just remains for me to say, safe journey home and thank you for being here.

### Michael Moss

As it were the last chairman of the proceedings, can I on all our behalf thank Julie very much for organising this occasion. She's paid tribute to all her colleagues, she also can't pay tribute to herself; and some of you may have noticed that something happened to Julie this year. She stopped being a doctor and she's become a professor [laughter] which, I think, is a most important recognition of both ***her*** contribution to records management and also to the standing of records management within the academic community, So Julie, thank you very much and congratulations.

# APPENDIX A: WITNESS BIOGRAPHIES

## Steve Bailey, JISC infoNet.

Steve currently acts as senior advisor on records management issues for JISC infoNet, an advisory service for managers within the HE and FE sectors. He is responsible for preparing and disseminating a range of guidance material and tools to help support the development of records management within the sector and is a well known speaker and writer on records management issues. Prior to moving to JISC infoNet in February 2007 Steve spent five years leading JISC's own internal records & information management activities and its successful programme of innovative records management and information governance development projects. Since obtaining his Masters with Distinction in Archives and Records Management from UCL in 1997, Steve has worked as Assistant Records Manager for the global pharmaceutical company Pfizer and Team Leader (Archives and Records Management) for the University of Gloucestershire. Steve's blog on the future of records management can be found at http://rmfuturewatch.blogspot.com/

*N.B. Steve Bailey attended the conference with the full support of JISC infoNet. However all comments expressed are Steve's personal views and as such should not be taken as a reflection of the formal statements of JISC infoNet.*

## Dr David V Bowen, Audata Ltd.

After school in Andover, Massachusetts, David studied analytical chemistry at Cambridge and London. During the 1970s and 1980s he was increasingly involved with the computers which collected, analysed and distributed analytical data. This led him to build Pfizer's Central Electronic Archive and their physical data archive in the early 1990s. David is Managing Director of Audata Ltd and since 1998 has worked in information management, performing strategic studies and projects, configuring and implementing document and records management systems, working in digital preservation, and managing projects in these areas for government, local authorities and private industry.

### L Reynolds Cahoon.

Reynolds is Director, Advanced Programs, at Lockheed Martin IS&GS. He has served as Senior advisor on electronic records to the Archivist of the U.S., was Assistant Archivist and CIO for the U.S. National Archives and Records Administration (NARA) for 10 years, Managing director- Family History Department of the Church of Jesus Christ of Latter-Day Saints and Financial controller of Inland Steel Company. His appointments include being a member of the International Commission for the Accreditation of Professional Genealogists, the Federal CIO Council Executive Committee and the Board of the Civil War Trust. He is also a member of the International Council on Archives' Automation Committee.

### Adrian Cunningham, National Archives of Australia.

Adrian is Director of Strategic Relations for the National Archives of Australia (NAA) where he oversees the Archives' collaborations with government, industry, professional and international partners, particularly on matters associated with digital recordkeeping and other modern recordkeeping initiatives. Before joining the NAA in 1998, he worked at the Office for Government Information Technology and for many years as a private records archivist/librarian at the National Library of Australia, the Pacific Manuscripts Bureau and the State Library of New South Wales. Past President of the Australian Society of Archivists (ASA) (1992-2000 and 2002-2004), he was also Secretary of the International Council on Archives (ICA) Committee on Descriptive Standards. In 2004, he received the ASA's prestigious Mander Jones award for work published in the Archives and Indigenous Peoples theme issue of the International Council on Archives journal, Comma. He is Convenor of the ASA Descriptive Standards Committee, Chair of the AGLS Metadata Working Group and a member of the Standards Australia Committee IT/21, Records Management.

### Jonathan Downes, Prokata Ltd.

Jonathan is founder of Prokata Ltd which helps enterprises meet the challenges and reap the benefits of Content Management. He led the Content Management and Knowledge Management programmes for MG Rover, characterised by tactical delivery in a strategic context. Projects attracted media and industry attention with

strong business cases and pioneering solutions. He has shared his insights and experiences with audiences in the UK and US. Consistent with his maxim of Innovation and Empowerment, Jonathan is also working closely with leading developers to bring 'In-page replacement' or 'Content Injection' web technology (AJAX), as showcased by Google, into common usage through open source projects like DWR (Direct Web Remoting).

### Dr Ishbel Duncan, University of St Andrews.

Ishbel is a lecturer in Computer Science at the University of St Andrews. Her research interests and published articles include the areas of software testing, privacy and security engineering, electronic voting, intelligent agents, the learning of programming and network security topics. She currently teaches computer security and has supervised several postgraduate students in related fields.

### Steve George, Iron Mountain Europe.

Steve is a records and information management consultant with Iron Mountain Europe working with the public and private sectors. Prior to this, he spent 8 years within the legal environment undertaking numerous project management roles specialising in records management and the promotion of best practice systems. Steve has extensive knowledge of data cleansing and reconstruction, and was part of a working group to develop records management infrastructure and to create and launch an intranet database for the rapid retrieval of deeds and original documentation. His recent commissions include the co-authoring of a good practice guide for land quality records management records for nuclear-licensed and defence sites which has been published under the Safegrounds Learning Network.
(http://www.safegrounds.com/guidance_record_keeping.htm )

### David Gibson, Crutes.

David joined Crutes law firm in 2006. He qualified in 1997 and has experience of acting for national and multi national firms. A graduate of both Newcastle and Northumbria University, David spent the first seven years of his career in London before returning to the North East in 2002 where he worked for another leading

regional law firm. He deals with contentious and non-contentious employment matters including TUPE and share transfers and advising clients on the implementation of work-life balance projects. David has a particular interest in the provisions of the Disability Discrimination Act 1995 and the new age discrimination regulations. He regularly provides training for employers in conjunction with other business service providers, speaks at external events on a broad range of employment issues and contributes regular articles for the regional press and trade publications.

### Catherine Hare, formerly United Nations, New York.

Catherine is by training a records and information specialist with over 30 years' experience of working in information management in the UK and abroad. For 13 years she was Senior Lecturer in Information and Records Management at Northumbria University in the UK and published extensively on managing records in the electronic environment. She has undertaken consultancy and training contracts and helped to develop a Lifelong Learning Award for information and archives staff in the BBC and a Masters in Records Management by distance learning. She was joint editor of the Records Management Journal from 1994 to 2004 and Chair of the Records Management Society of Great Britain from 1998 to 2000. After a short period as Manager of the UK Office of the Community of Science, an American-based company that provides research funding and expertise services for universities and other organisations across the world, she was Chief of the Records Information Systems Unit at the United Nations in New York from May 2005 to December 2006.

### Heather Jack, HJBS Ltd.

With a Masters in Librarianship and Information Management from Sheffield University, Heather has worked in the information arena for 20 years in both public and private sector organizations. She set up her consultancy in 2003 and helps clients improve working practice in all aspects of records, information and knowledge management, ensuring that these not only support the organisation's strategic goals and follow best practice but are realistic to achieve. Effective staff communication, inclusion and support is a fundamental strand to her service delivery. Heather has been Chair of the Records Management Society, Scotland Group since its inception in 2005.

### Prof. Ray McAleese.

Professor McAleese worked in education, technology and information studies at the University of Aberdeen and Heriot-Watt University. He has interests in learning and thinking. His research interests in electronic communications include early work on shared knowledge bases over networked computers and hypertext. His computing experience spans some forty years. He retired in 2002.

### John McDonald, Independent Consultant.

John specializes in information management. During a career of over 25 years with the National Archives of Canada he held a number of positions that were responsible for facilitating the management of records across the Government. A particular focus was the management of electronic records. In 2000, he led an initiative jointly sponsored by the Treasury Board Secretariat and National Archives that that led to the report, "Information Management in the Government of Canada – A Situation Analysis". He has authored or contributed to government-wide guides and standards on the management of government information and has published numerous articles in leading information management journals. He is a Past-President and Fellow of the Society of Canadian Office Automation Professionals, Past Chair of the Committee on Electronic Records of the International Council on Archives and founder and Past Chair of the Canadian Federal Government's Information Management Forum.

### Prof. Julie McLeod, Northumbria University.

Julie is Professor in Records Management in the School of Computing, Engineering & Information Sciences and also Programme Leader of the MSc Records Management (distance learning) course, the first of its kind in the UK. She has conducted funded research projects into the management of research records, the impact of ISO 15489 in the UK and the evaluation of records management toolkits. She is currently a member of the committee responsible for the development of ISO 15489 and of the Arts & Humanities Research Council Panel 6 which supports research and vocational education in records management, archives and librarianship.

Prior to joining Northumbria University Julie had a long career in industry in records and information management.

### Prof. Michael Moss, Glasgow University.

Michael Moss was born in Yorkshire and educated at Bath and Oxford. He trained as an archivist at the Bodleian Library and was archivist at the University of Glasgow from 1974 until 2001. Since then he has been research professor in archive studies in the Humanities Advanced Technology and Information Institute (HATII). He has published widely on many subjects.

### Dr Andrew Prescott, University of Wales, Lampeter.

Andrew is Manager, Library Services at the University. From 1979-2000 he was a curator in the Department of Manuscripts of the British Library and was the British Library contact for the pioneering Electronic Beowulf project. From 2000-2007, he was Professor Associate in the Humanities Research Institute at the University of Sheffield, where he was founding director of the Centre for Research into Freemasonry, the first such centre to be established in a British university. He has recently taken up an appointment as Manager of Library Services and Director of the University Research Centre at the University of Wales Lampeter.

### Martin Sanderson, TFPL Ltd.

Martin is a Senior Consultant for TFPL Ltd with considerable experience of records management and managing information services in the health services and in the pharmaceutical industry, providing internal and external information services. Since November 2001, he has advised government, private and charity organisations on records management strategies and policies as well as designed and implemented records management programmes and frameworks. He has completed a number of strategic records management projects within a knowledge management framework, develops and delivers training courses and also publishes in the records management press. He has an MSc (Distinction) in Records Management and has been Vice Chair of the Records Management Society.

## Zoë A Smyth, Northern Ireland Office.

Zoë is Senior Records and Information Manager at the Northern Ireland Office (NIO) managing the Belfast Records Team, who have primary responsibility for EDRM, LIMs, and Intranet Content Management. Zoë is a history graduate from Queen's University in Belfast who qualified as a professional Archivist in 1998 from University College Dublin. Following qualification she worked at the Public Record Office of Northern Ireland (PRONI), then the Commission of Communications Regulation in Dublin. She returned to PRONI in 2003 to work in the Records Management Unit, where she advised public sector bodies on records management best practice, regularly gave presentations and workshops and contributed to the Northern Ireland Civil Service's (EDRMS) Records NI project. Zoë was regional Secretary for the Society of Archivists Ireland (1999-2002) and more recently as a Councillor and Hon. Membership Secretary for the Society. Awarded a Winston Churchill Travelling Fellowship to study the management and use of electronic records in North America, with placements at NARA, the Library of Congress, and the National Archives of Canada, Zoë participates on ISO's international records management committee, in particular on metadata. She has spoken at numerous conferences.

## Dr David Wainwright, Northumbria University.

David is a Reader in Information Systems and also Head of Collaborative Research within the School of Computing, Engineering and Information Sciences. His research is in the area of organizational modelling for information systems adoption, planning and implementation. This involves the application of social, organizational and innovative theoretical approaches to understand the complex cultural, power and political issues associated with ICT use in both the private and public sectors. Current projects involve the NHS primary and secondary care sectors, the public sector exploring new theories and value models associated with electronic business and the strategic potential of business process modelling and management across both large and small organizations. The latter is particularly focused on developing organizational analytic modelling (advanced thin client and web enabled

technologies) and methods and examining the transformational impact of ICTs on working practices, job design and work organisation. David is an elected Board Member of the UK Academy for Information Systems and a Member of British Computer Society.

### Geoff Walker, Independent Researcher.

Geoff has been specialising in the study of knowledge sharing in organisations for almost ten years. During this period, he has spent time as a Part-Time Lecturer at Northumbria University and an Associate Lecturer at the Open University in 'Knowledge Management'. He has published several papers on the nature of knowledge sharing and given presentations on this subject to a number of conferences in Scandinavia, Eastern Europe and South Africa. Geoff's current research interest is in how communities of practice, social networks and collaborative technologies add value to face-to-face networking in small and medium enterprises.

### Prof. Teresa Waring, Northumbria University.

Teresa is a Professor in the Newcastle Business School. She has worked at Newcastle University within the Business School where she was Director of Quality and Teaching and Learning. Prior to joining Northumbria University she was Associate Dean in the School of Business, Law and Psychology and Head of the Business School at the University of Sunderland. Teresa researches in the implementation of integrated systems, the innovative use of research methods and more recently Internet abuse.

### Ian Wooler, Associate with TFPL.

Before joining TFPL as an Associate, Ian was Chief Knowledge Officer and member of the Executive Team of 186k, a telecom start-up business, and was responsible to the CEO for instilling the organisation's knowledge management discipline whereby 186k employees routinely create, capture and lever collective knowledge. Prior to joining 186k, Ian was the Knowledge Development Manager at BG plc where he was responsible for the International Information Centre and the development and implementation of knowledge management across the Group. Ian has also held a

number of senior management roles in Business Improvement and Marketing in BG plc and British Gas. Ian is a Member of the Chartered Institute of Marketing, an Associate Member of the Institute of Management Consultancy, and is a qualified Myers- Briggs (MBTI) practitioner.

# APPENDIX B: WRITTEN WITNESS STATEMENTS

This Appendix contains the statements submitted by each witness prior to the conference. Witnesses were asked to read the relevant article for their seminar and prepare a brief (1-2 page) position on the topic. These were sent to the seminar Chair so that he/she could read them in advance and determine an appropriate provisional order for witnesses to speak and be aware of issues to pursue. The statements were not required to be formal or presented as carefully referenced papers. They were meant to capture the individual's views and form the basis of their 8-10 minute contribution at the conference.

Some witnesses followed their statements very closely on the day; others excluded some points and/or included extra points, or picked up points made during the event.

The original statements are included here in ***alphabetical order*** to complete the record.

## Dr David V Bowen: Witness Statement

(Seminar 3: The technology perspective: Technology – problem or panacea?)

Of course it is both, but more often a problem, because technology is pursued at the expense of business needs and real benefits to processes and staff. To properly manage email requires:

1. Top level management attention and commitment - too often they think they can solve the problem by buying technology. They can't.
2. Technical and business process guidance from IT and Information Management and Governance - too often they are seduced by technology – they should know better.
3. Commitment by every member of staff, and understanding and compliance with the policies and procedures. Often they are frightened or seduced by technology.

Then, emails should be managed along with other records and information objects according to the process or matter to which they refer, and according to the appropriate retention and security management.

Technology is a problem when it offers "total email archiving" and separates email from other objects.

4. 1. Technology helps when it allows:
   a. Automated or required gathering of good metadata (drop-down lists, required fields, …)
   b. Automated or assisted deposit of emails into an EDRMS
   c. Single subject emails
   d. Information sharing outside of wide email distribution lists.

We might hope for technology to provide:

1. Better de-duplication: surely we can detect and reduce the number of duplicate objects stored in our systems?
2. Better email strand tracking: an email conversation quickly becomes a complex web of replies, forwarded emails, crossed messages, etc. This could be expressed and managed better with 3D mapping tools.

And we should use workflows to manage processes, which avoids using complex email distribution patterns for process management.

Finally, we must have systems that gather the metadata at the start of the process, from the message creator; this is many times more efficient that adding metadata later.

## L. Reynolds Cahoon: Witness Statement

(Seminar 3: The technology perspective: Technology – problem or panacea?)

The Short Answer:

Unfortunately it is often more problem than panacea.

The Longer Answer

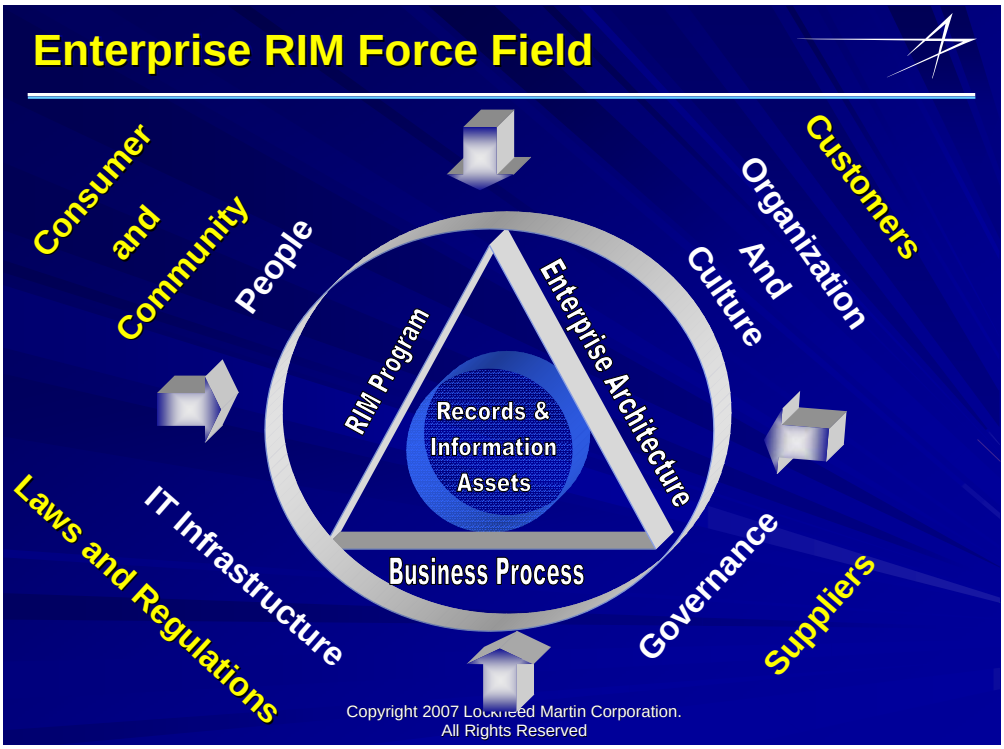
Let's look at e-messaging. Over the past fifteen years, messaging systems have quickly evolved to become central to the conduct of business, often with little planning and almost without us realizing it. It offers the potential for significant benefit to the enterprise and at the same time poses considerable risks.

- The possibility: a rich sustainable source of exploitable records, information, and knowledge that forms the foundation for collaborative business process improvement, more productive knowledge workers and measurable improvements to business results
- The peril: a non-linear, increasingly costly resource sink, highly complex, decentralized, policy challenged, disintegrated information islands, resistant to change, and increasingly risky

The source of the peril is generally not technology itself. Problems arise because technical strategies and specific solutions are often attempted without adequate consideration for the other elements of the larger system in which the solution will operate. We call the larger system the Records and Information Management Eco-System (see illustration).

We define the eco-system as the interaction of the organization's Records, Information and Knowledge (RIK) capabilities with its strategic vision, business processes, and the Enterprise Architecture.

- These central elements of the eco-system in turn, influence and are influenced by the organization's people, culture, governance, policy and IT infrastructure.
- External factors such as laws, regulations, customer and supplier requirements and the needs of oversight bodies also exert influence and shape the nature of our organization's policies and business processes.




Our Approach – Take an Enterprise / Holistic Perspective

From my perspective, how an enterprise's strategic technology choices (of which e-messaging management is only one example) support its key goals and business objectives is far more important than the specific technology chosen. Rather than diving directly into evaluating technology options, we recommend the following approach: When choosing e-messaging technology, seek to optimize the entire enterprise, not the e-messaging sub-system**.**

- Clearly define the real e-messaging problem; what must be achieved, preserved and avoided?
- Understand the problem in the context of the organization's ecosystem
- Use the eco-system analysis to design a solution that dissolves the real e-messaging problem while balancing the requirements of the entire eco-system

Taken in context, understanding this set of relationships enables selection of technology strategy and specific solution choices that satisfy the full range of requirements and work to optimize the entire eco-system, not just the e-messaging part of it.

This is important insight because it leads to solutions that consider the entire enterprise requirements not just the often isolated, solution specific, needs of part of the organization. Particularly the IT part.

- For example:

One of the organization's requirements might be to exploit the knowledge in its messaging system to improve performance of key business processes and increase customer responsiveness

Another might come from the legal department to support compliance with new e-discovery civil procedures

A new business strategy might need to use messages from customers to evaluate trends in product quality

Redesigned business processes might want to use the messaging system to alert customers to order status or employees of new training requirements

Users may require the solution require only two clicks and look like the interface they are used to

The existing budget may make outsourcing look attractive to the IT budget staff

The Intellectual Property team may have deep seated distrust of storage they do not control

- These requirements and others like them, from all parts of the eco-system, would work together to create a holistic e-messaging solution that optimizes the entire enterprise taken as a whole.

Frequently this isn't what happens. Rather than a holistic approach, solutions focus on the immediate needs of a major stakeholder. In the case of e-messaging, that stakeholder is often the IT staff wanting to stay within their storage budget and who see a technical fix as a simple solution. While this is a laudable short term goal, it can have a longer-term effect of eliminating the possibility of meeting broader, strategic objectives.

- The point is this: If every part of the organization is seeking to optimize itself, the entire organization is being sub-optimized.

Some Practical Steps You Can Take Immediately

How can we develop technology solutions that meet current and future user and organizational needs? Some simple things we can do:

- See the enterprise as a system and craft technology solutions that support the enterprise eco-system
- Use an architecture and business process-centric approach to RIK Management. Start with business goals and strategy for information and knowledge
- Spend more time with the people who are feeling the pain of dysfunctional e-message management capabilities

- Chose initiatives and technologies that are consistent with enterprise architecture. Resist temptation to seek a wavier.
- Insist on Open Standard platforms with exposed services written to industry standard interfaces to enable integration into enterprise architectures and infrastructures
- Employ Service Oriented Architectures
- Insist on open standard, technology agnostic data formats in addition to vendor supplied proprietary formats
- Get clear on your enterprise data model and metadata requirements. Employ standard metadata schemas.
- Participate in vendor user groups and advocate features, functions and standards that meet user requirements and that will relieve pain points

In Conclusion – A Way Forward

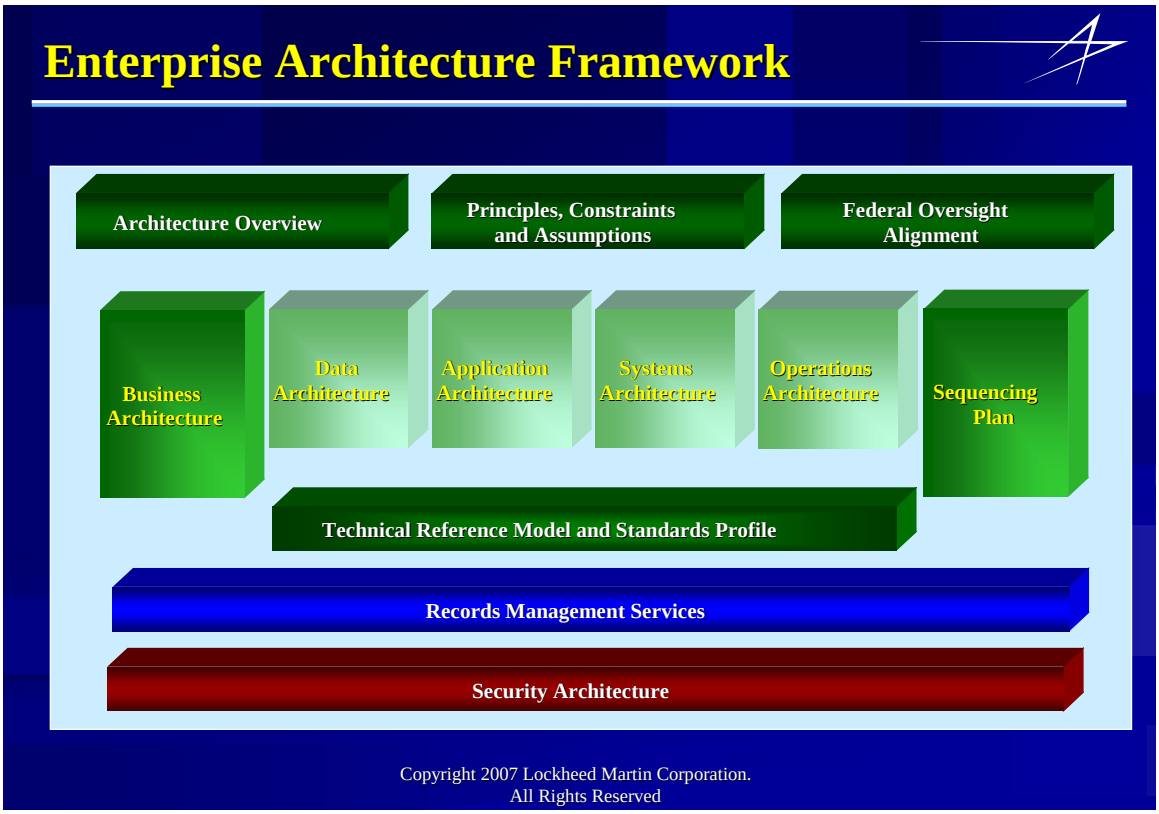
Change the game through sustainable information engineering

According to David Stephens, 60% of an organization's business critical information assets are stored in its electronic messaging systems. This is a rich source of both evidence of business transactions and information containers often with valuable content that could be exploited by the enterprise.

We well recognize that the way we do business has fundamentally changed. However, the way we manage the records that document the transactions of that business has not kept pace. Systems are funded, designed, developed and implemented often without thought for how the records created by those systems will be managed and preserved over time.

To end this practice requires records-aware business process and more culturally embedded changes to:

- The capital investment and portfolio planning processes,
- The way we design and redesign our business processes,
- Enterprise Architectures and the methods we use to manage and control systems development and acquisition.


Enterprise Architecture Framework
Architecture Overview
Principles, Constraints and Assumptions
Federal Oversight Alignment
Business Architecture
Data Architecture
Application Architecture
Systems Architecture
Operations Architecture
Sequencing Plan
Technical Reference Model and Standards Profile
Records Management Services
Security Architecture
Copyright 2007 Lockheed Martin Corporation.
All Rights Reserved

## Adrian Cunningham: Witness Statement

(Seminar 1: The business perspective: Doing business electronically – what are the records management implications & challenges?)

Email has utterly transformed the way business is conducted. In my organisation, and I strongly suspect in most organisations, email is the principal means by which communications occur, the principal means by which information is transmitted and, very often, the principal means by which decisions are made. In the eight years since the National Archives of Australia installed an electronic records management system in 1999, over 80% of the records captured into that system have been emails.

If email is the principal means by which business is conducted, then it stands to reason that email records provide the principal source of evidence and corporate knowledge of business decisions and activities. As such, achieving adequate control over business critical emails as key organisational assets should be the top recordkeeping priority for most organisations. Unfortunately, the recordkeeping issues associated with email are all too rarely given the priority they deserve, and when they do, the response of the organisation is too often totally inappropriate and unsustainable. Why is this so?

Why is email recordkeeping so often given a low priority?

Despite the fact that email is so central to the conduct of business it is still very frequently seen as an informal, ephemeral and thus low-value source of business information and evidence. This view is exacerbated by the fact that a lot of email is indeed ephemeral and low value. Its ease of use is the reason for its popularity. As such, users naturally resist any moves by organisations to regulate or control email in ways that might hamper its ease of use. Too often organisations live in a state of denial about their unmanaged email anarchy. Email applications give individual users unparalleled personal power over their business communications and information (mis)-management – power that they will strongly resist handing back to their organisation. The sheer speed and volume of email communication has speeded up the world and good recordkeeping has, as a result, been squeezed out of the equation.

Why do organisational responses to email recordkeeping usually fail?

Usually by the time an organisation realises it has a problem with its email recordkeeping the human beings within the organisation have lost the habits and skills of good recordkeeping. Instead of working with its staff to re-inculcate these habits and skills supported by clever and user friendly technology, too often the response to the problem is framed in solely technological 'blunt instrument' terms. More times than I care to remember I have seen organisations respond to the problem by either:

- Instituting technological rules that delete all emails after a certain time, regardless of their value;
- Buying storage technology (because storage is thought to be cheap) that stores all emails received and sent (regardless of their value) in huge, unmanaged data stores, where staff have practically no chance of finding anything that they might need to consult; or
- By relying on a (usually ignored) policy of printing emails to paper and filing them on a paper file.

All of these responses are bound to fail. The print to paper approach fails because of the disjunction between the business process and the recordkeeping process. However, the most common approach nowadays is to store everything in a huge storage system. This approach is no doubt fuelled by legal 'compliance' fears rather than by any rational desire to identify and properly manage retention of and access to vital information assets. It illustrates how the technologists have effectively seized control of information management from information management professionals. The message is 'don't worry about the hard work of identifying and managing the email you really need, because this storage silver bullet technology absolves us of our need to think'. Any solution that discourages us from thinking about managing our information assets is only postponing the problem, which will continue to grow and come back to haunt us worse then ever - probably much sooner than anyone expects.

First and foremost good recordkeeping systems are social and cultural systems. Good technology that makes it easy for people to do the right thing is important, but good recordkeeping cultures will keep good records even with bad technology – whereas bad recordkeeping cultures will not keep good records, regardless of how good the technology is.

Recently the issue of recordkeeping has moved centre stage in my Government. The most important committee of senior bureaucrats, the Management Advisory Committee, has recently issued a report on Recordkeeping in the Australian Public Service. A lot of the report agonises over the question of what deserves to be a record and what does not – the issue of sorting the wheat from the chaff that has been so highlighted by the explosive growth in the use of email. When launching the report in Canberra on 31 August the head of the Australian Public Service, Dr Peter Shergold, concluded that most email traffic deals with matters of fleeting interest and importance and that "We shouldn't be cluttering our record systems with such material. **As in all aspects of our work, judgment is needed**".

It is not too much to expect public officials and other people in positions of responsibility to be able to exercise this judgment properly and to capture proper records of important business decisions and activities that have been facilitated by email. Provided of course that their organisation gives them some basic tools, support, encouragement and training to help them do this. In such cases if people in positions of responsibility do not ensure that proper records of their important email interactions are captured, they deserve to be condemned and punished just as they would for any other failure to perform the duties that are expected of them.

## Jonathan Downes

(Seminar 3: The technology perspective: Technology – problem or panacea?)

Is technology the problem behind the email crisis or a panacea for resolving it? Perhaps we could also ask if manufacturing is the problem or panacea to road traffic congestion. It is true to say that without manufacturing there would be no cars to clutter the roads, fewer roads to be cluttered, fewer places to travel to and from and far fewer reasons for wanting to move around in the first place. So, without manufacturing, there would be no congestion problem. Without technology there would be no electronic communications, no networks for them to travel along no computers to send or receive them and fewer reasons for sending them in the first place.

So as much as manufacturing is the cause of road traffic congestion, so technology is the cause of the email problem. But as with progress, there are growing pains, overcrowding, road congestion and polluted atmosphere. Rapid growth and change always seem to take some casualties. The email issue is just one of those casualties of progress, one of the growing pains of the technological revolution a new disease in need of a cure. So does technology also hold that cure?

I guess it is always wise to diagnose the patient before administering the cure. But when the symptoms are severe, we don't always have the luxury of the time to get to the root cause. And perhaps that is where we are at the moment with email management. Solutions like those that deal with email at a storage level are essential to help us through the current crisis, but only serve to prolong the agony. We apply smarter storage techniques and larger storage options. These may appear to serve the needs of the business and the regulators, but is this information actually managed or merely contained?

Is a full text index and a date stamp (forgive the over simplification for illustration) sufficient to harness this valuable asset? After all records & information management

is as much to do with how you throw something away as it is to do with how you keep it.

So there are solutions to deal with the symptoms, but what about the root cause? Here are a few suggestions as to the current and needed direction of travel to get a better grip on email management.

Diversification & Enhancement

We need fewer transactions being sent through email and those that are sent need to be managed better from an RIM viewpoint. Email diversification is well underway with tools like discussion forums, RSS feeds, workflow and shared working environments, but more are needed. I think more sophisticated but simple to use collaboration spaces hold the key.

Your place or mine?

Instead of having to send files and notes to each other it would be so much better if we just sent the 'permissions' and gave people access to documents in situ. The popularity of sites such as Flickr and Facebook facilitate this at a certain level, but sites like Pownce and perhaps apps like Groove have the potential of taking this a stage further. You can't achieve this in a physical world, but in a virtual world, you can have as many little meeting places in the corner of the pub as you have relationships with people. You can add and remove people from your little groups at will. This way documents retain their usage context.

Business or pleasure

There is a difference between the way people use technology at home and at work. And a massive difference between the responsibilities this brings. Individuals can be very flight of foot with their technology at home. In business there is an overhead in working together and this currently reduces the flexibility available to business to implement new software quickly - user training is a massive issue. Perhaps the best of both worlds is to invest in open source software, but instead of banking the license

savings, building a development team who can work as part of the wider developer network to solve your problems and contribute to others.

Keeping the Cat amongst the pigeons!

Email reminded me a bit of carrier pigeons. We attach some info and then whoosh, the mail completely leaves its original context and arrives in some distant land with a minimal amount of information. We need to encourage users to send mail from within a context and email clients to retain, transfer and use this information so that the cat (categorisation information) can be kept amongst the pigeons!

The mega munching multiple metadata mashing machine

We need more metadata but for that to happen we need more ways of capturing it and more ways of processing it. There are solutions out there such as the Dabs product selection interface. You search for a product and are presented with a number of lists to narrow down your selection. As you select from the list, the options on the other categories reduce. Just one example that allows something like a document to be navigated to, through multiple parallel access paths. These paths are not just important for searching, but for records management as well.

I shall only tag this once

One of the great things about the internet is that someone can tag a piece of info once and everyone benefits from it. We should find ways of achieving this with the information in our organisations. Are these tags of a quality acceptable to records managers? Perhaps yes if the alternative is no tagging at all.

Email is the tip of the e-berg

Email is a bit of an anomaly. I quite often phone someone and find them unavailable. I can leave a message, but more often I email them. Why would my email be more or less of a record than a voice mail I would have left? Why would an electronic conversation be more or less of a record than a discussion between two or more people. The technology we have to record audio & video, to transfer and hold it and to

convert it into other formats is increasing. This is going to present us with an increasing challenge in handling what might become a 'record of everything'.

Future Proofing

Information legislation can be applied retrospectively. So we need to be thinking about solutions that provide us the flexibility to apply new rules in new ways to existing information. Again I think oodles of lovely metadata would help.

The death knell for email?

Will we be rid of emails in years to come? Did the paperless office eliminate paper? Has wireless computing eliminated wires? New technology and innovation should help us replace some of our current uses for email and better manage the ones we are left with, but e-communications as whole will continue to grow and so the challenges, particularly of records management will spread to these new forms. When is an RSS feed a record? If a document gets posted in a collaboration area that I had permission to, does that make me liable for not acting on its content.

In perpetuity

And what of preservation for historical and educational benefit? Archivists have a massive opportunity given the number of people and organisations who are recording their lives and activities as a matter of course. The challenge is now not what is missing, but what to leave out.

**Ishbel Duncan**

(Seminar 3: The technology perspective: Technology – problem or panacea?)

***"Houston, we have a problem."***

Data Flooding:

In 10 years individual storage on public emailing systems has gone from a few MB of storage to unlimited storage. The email traffic in 2007 is expected to be around 5 exabytes ($10^{18}$), allegedly the equivalent of all published written words. 161 exabytes of data was created, captured or replicated in 2006. We are suffering an "exaflood" of useful and useless data transmission.

Email usage:

20 years ago we saved only a few emails, 10 years ago we managed our own systems, sent short emails and administrators deleted emails over 30 days old. Today, we can keep all our sent and received emails. So, Alice may have a complete email record of her work and her private life, including perhaps her financial and social life stored on one or more email systems. She may delete some email on her PC or PDA but her service provider, or even her employer, may still retain her emails, perhaps legally obliged to do so. Legal compliance, such as under the Sarbanes-Oxley Act in the US, is estimated to have cost American companies between $1.6M and $4.4M in 2005 alone.

Personae, Profiling & Sales:

How many personae does Alice have online, each receiving and sending email? Everyone has several personae from our work identity, commercial accounts, social accounts etc.. Each has a data trail and a history, stored by the provider. Amazon knows what Alice likes to buy and recommends goods via email, Ebay will tell her when her watched items are close to termination. Any profile of Alice's accounts will demonstrate her penchant for old black & white movies, novels and antique jewellery.

Her spending patterns, including through online supermarkets, would also indicate her social group, educational background and spending power or perhaps debt. Profiling is big business when the value of sales over the internet is £103B in 2005 and rising. UK internet usage is at 63% of households with the proportion of enterprises receiving orders over the internet standing at 30%. Knowing your customer is mandatory. Mass marketing can be made to appear private given knowledge of an online persona's habits. Profiling is performed by Gmail and Google's Orkut cookie. Email marketing statistics show that marketing emails between Tuesday and Thursday are more likely to result in the email being opened by a recipient. Email is often business critical both intra and extra company at the sales interface.

Email abuse:

Abuse is rife, with one US study showing that 2/3 of companies discipline employees for email abuse and 27% of companies have dismissed staff. In the UK 43% of larger companies have recorded incidents involving staff web or email misuse.

Data Falsification:

Falsification of data is commonplace when websites request information for social reasons – online chat rooms, dating agencies etc.. However, a real forensic problem is detecting and tracing online activity by known or suspected predators. How many personae will a voyeur or predator have when grooming or conning a potential victim. How can it be determined that the person Alice is talking to in a chat room is really a nice young graduate who also likes to watch old movies, is new to the area and wants to go to the Arts Cinema? Is it a strange world when young people meet and date online rather than go out and meet socially? How many people sit at home pretending to be that bit taller, smarter, and prettier when online. How much easier it is to sit behind the electronic curtain than venture outside to be faced with the reality of life, love and rejection. As shy as Alice is, she finds it so much easier to relate to Bob when she doesn't have to actually meet him. Some dating agencies have recently stated that users are more likely to be honest when clients converse over longer periods of time, i.e. dishonesty gives way to honesty once trust is established.

Data Storage:

Alice may archive or compress her email to save space on her laptop; storage capacity requirements for email are increasing by 50% per annum. Restoration and readability of archived files have already cost companies £Millions. Morgan Stanley were fined £5.2M when they failed to hand over email evidence in 2006. Old or allegedly lost file (or system) restoration has higher associated costs, the perennial legacy problem. Archived or not, Alice's email data can be data mined, with or without other employees email to detect misuse.

Information Leakage:

Naturally, data can be lost through attack or accident and given the ease of saving emails, as opposed to file saving or paper printouts, there is a higher probability that critical (business) data would be stored only within email systems. Risk assessment would indicate that email should only be the carrier of minimal data, or the pointer to it via a secure URL, but that back-ups and secondary storage should be used for critical data. Using email only to pass information is high risk from a security attack, or simple knowledge leakage. Access to email systems is simply based on password entry and it is estimated that 50% of users use simple passwords rather than complex ones. Some 35% use variations on their own name. Further, 2/3 of users use only one password for multiple purposes, thus increasing the risk of attack to any of their online systems.

Viruses & Spam:

Simple knowledge may be transmitted through an email without much thought on behalf of the sender. Alice may ask Bob for some information regarding who to contact re sales. Bob answers the name and email of that person. Alice now owns some corporate information that may be used to set up some phishing attacks. Viruses are commonly sent through emails (79%) and companies have to eliminate viruses from outgoing mail to prevent offending clients. Viruses are reckoned to have cost businesses $60B worldwide in 2006. Spam is obviously another problem, 90% being transmitted by email but the use of filters has allegedly reduced the impact on recipients. The Radicati group estimate that 70% of email will be spam in 2007 and projected associated losses is estimated at $75B for the US this year. 79% of large

businesses scan for viruses in outgoing email, 36% for inappropriate content and 15% scan for confidential information. Surprisingly one in six companies do not scan at all.

Worst Case Scenario:

Alice's habits are known by her supermarket (loyalty cards) and her online trading (Ebay, Amazon, Marks&Spencer etc). Many corporations know her age group, education level, social group and spending power. Her emails can be searched and mined to determine if she has accidentally or otherwise leaked corporate information. Her email and storage controls are likely to be considered the weakest link for external attack either by denial of service, viruses, phishing attacks or password penetration. Her level of cryptographic protection on her stored files is not likely to be strong or enforced correctly and current cryptographic standards are susceptible. Alice's life is no longer private. Security and privacy can not be assured or assumed. Her employers may also know that her lunchtime is spent trawling websites and her secondary personae are known and recorded by her employer. Even trawling sites at home or in an internet café will be stored via online providers. As Alice spends more time online she becomes socially inexpert, frightened of being herself rather than her online persona.

87% of UK teenagers use the internet regularly at home, with 55% visiting chat rooms. Although 95% use mobile phones, the increase in use of the internet for communication indicates a more sedentary life style than previous generations enjoyed.

What hope is there for the social and private life of the next generation? Is there a panacea?

As Alice's wise Granny used to tell her: "You cannot keep what you cannot hold in your hand".

If Alice wants to remain a private person she should never send emails or log onto the Web.

## Steve George: Witness Statement

(Seminar 1: The business perspective: Doing business electronically – what are the records management implications & challenges?)

### Raising the Bar

Information created by or held within new technologies such as email is no more or less in need of management than information held in traditional paper format. It's just that the rules of engagement have changed slightly and having spent a number of years telling people that the practice of "declaring" something a record was essentially unhelpful as it suggests that other information is somehow less worthy, I now find myself asking clients to consider which of their emails provides evidence of business transactions to highlight the fact that some of it is ephemeral, without substance and more easily cast aside.

To illustrate the fact that this is not rocket science, I typically say that the email requesting that you meet your colleague in the pub is an example of something that can be comfortably deleted – unless of course its evidence of you being somewhere you shouldn't have been, in which case you would need to make sure that it's deleted, purged and overwritten, for it not to return to haunt you at a later date.

And, if you do that in the normal course of business, in line with an approved retention schedule, the chances are that you will be deemed to have acted in good faith, perhaps not in attending the pub in the first place, but certainly in having thought about the way in which your are managing your information compliance responsibilities.

And what of that term – compliance? Well it's certainly raised the bar somewhat because it has given records management an image makeover. Not that it ever lacked worthiness; just that the longer it has festered in the administrative domain, the more readily has the excuse to ignore it been available, because it didn't seem important, strategic or sexy. Now "they" can't get enough of it because compliance is tied up with ethics, which they know is important. Poor ethics equals poor reputation, equals fines ($850million worth in the case of Morgan Stanley), equals someone at the top

not doing their job as opposed to the little people at the bottom. Granted they haven't a clue what to do about compliance but they know they should be doing it. And as the heads are removed from the sand, ever so slowly the little people at the bottom are rising to the top to guide the beleaguered boardroom through the maze of records management.

Interestingly enough, in recent engagements throughout both public and private sectors, a number of company wide information audits have revealed that to a man, staff across a variety of departmental groupings have agreed that emails may constitute formal business records. But when set against the lack of robust infrastructure or procedures from which to manage this awareness it is perhaps not surprising that email is treated more casually than something that is physical, that you are not only able to see but which you accept needs to be filed somewhere because it takes up real as opposed to virtual space.

The solution to cluttered in-boxes is either to send out automatically generated warning notices - which are likely to encourage nothing but rapid and random deletion or the squirreling away of emails in pst files located in local hard drives, subject to the idiosyncrasies of the user across their own myriad tree structures entitled Fred's Folder or Miscellaneous. Or the purchase of more storage space for server based emails which are then backed up to tape. The point being that none of these solutions offer the centralised control or retrievability that is crucial to facilitate compliance and discovery obligations. They are merely convenient and by default a lazy option.

So how can we make it both convenient and compliant? Records management as I mentioned previously isn't rocket science its just most organisations don't have the benefit of introducing policies on to a blank piece of paper. We are all faced with legacy situations, righting the wrongs of the past. This is why we shouldn't panic but draw a line in the sand and move forward with robust policies and procedures up front to ensure we do not repeat the mistakes of the past. As the Dukart article stresses, "the ad hoc strategy" really doesn't work.

The small percentage of official e-mail records that are buried in an ever-increasing volume of casual e-mails causes major issues and risks for corporate IT, legal and records management. Corporate records management departments have to contend with the fact that e-mail is under the control of the individual, not the organisation. Records managers are struggling with how to extend the corporation's retention policies to e-mail and how to get employees to retain important e-mail records and delete the transitory information. As the Dukart article asserts – clear business rules are key (ideally applied within email archiving software) to the understanding and tagging of what should and shouldn't be kept. The situation has to be addressed at some point however uncomfortable or onerous it may seem when you peak under the bonnet.

With increased demand for mobile email devices such as blackberries, some 20,000 a day according to retail figures, I would argue that email is in some ways managing us. However, the challenge is to the perception of the need to manage email in the first place as fundamentally individuals believe that emails belong to them and so must recognise if nothing else that all records, irrespective of format, are corporate assets. An enterprise wide policy allied to technologies or methods which add a degree of automation to email management through centrally controlled repositories or at the very least simplified e-mail classification schemes which associate employees by their functional department will make it much easier for employees to classify e-mail records.

For the record, I would prefer that end users did not have control over what is and what isn't kept but am realistic enough to accept that a robust change management process will be required to persuade everyone of the value in relinquishing control. In order to sell the virtues of transparency in email management and to demonstrate that such a concept is not an invasion of privacy, firm-wide communication and collaboration is needed. Allied to Wilkins "right blend of technology and policy" this suggests to me that what is needed is an active steering committee, comprised of senior management across all departments to proactively address the changing business climate and the ever-increasing regulatory controls for records and information management. But unlike Wilkins, I do not believe that his contentions

can possibly sit outside the domain of records management. They are intrinsically linked.

So to conclude, in the absence of policy, operating in functional silos is inevitable but by acting consistently you will not only demonstrate that you are acting in good faith but provide a reduction in complexity of business process, reduction of non-compliance and litigation risk and a reduction of storage and access costs. And yes ultimately compliance, however complex or costly it may seem, is a good thing because it facilitates building solid foundations of controls and processes that support sound business decisions and management.

## David Gibson: Witness Statement

(Seminar 2: The people perspective: People and email – the problem and the solution?)

**COMMUNICATIONS LET US DOWN?**

"The Email Gossip Trap"

- Harassment and discrimination issues-how banter can overstep the mark
- Bringing the Company into disrepute-the danger of forwarding "humorous emails"
- The stressed employee-bombardment –how and when to stop it?
- Defamation issues.

Downloading of material in general and access to the net.

- Impact on office discipline.
- Impact on profits.
- Consistency - How come the MD gets away with it?
- Confidential information - How to retain it.

Privacy Issues

- Data Protection Act-do employees still have any privacy
- Regulation of Investigatory Powers Act-a paper tiger?.

A sensible way forward?

- The Three Degrees singing in harmony.

  The importance of communications policy, grievance procedures and discipline policies working together.

## Catherine Hare: Witness Statement

(Seminar 2: The people perspective: People and email – the problem and the solution?)

### People and email

The two articles present and summarise succinctly the nature of email, its evolution and its current situation as an organisational and personal tool. As with any tool it is only as useful or useless, beneficial or dangerous as the skill and knowledge of the user allow. It may not be as dangerous as a chainsaw being wielded by a drunken person in a crowded shopping mall but it is a powerful tool and can damage your

- productivity
- health
- pocket
- firm's reputation

which means that users need to understand what it is for and how to use it.

I am not sure how many of you share my experience but, while I have been taught how to use email software, I have never been taught how to do email or be an emailer. In fact if we consider email as simply an electronic postal system it may not be possible to be an emailer but as the article by Stebbins confirms email is used for multiple purposes for which it was never intended, for example, for 'archiving' and workflow.

Email is now becoming old hat and 'for old people' as the new technologies of instant messaging and sms take over in the world today where the instant and 24/7 communication is the goal. But interestingly it is also being adopted as the preferred medium for formal communications. This is of particular interest to records managers as it implies that email messages are the outputs of formal transactions and therefore are or should be records.

However do the email creator and receiver know this and what about the systems administrators or IT staff? So we need common understanding and rules about what

email is and how it should be used in the specific context. But what should the common understanding cover and who should set the rules. Should it be senior managers, legal advisors, IT staff or all three and others besides?

I'm particularly interested in the IT staff and noted the almost throw away comment in the article by Stebbins that 'even IT staff, use only a small fraction of the bells and whistles that come from Microsoft Outlook'. The IT staff are in the strongest position to impose their view/understanding of email because they are the ones who manage the system and keep the tool in working order but what are their objectives?

Recently I worked for a large international non-governmental organisation which relied heavily on its email system both to communicate with its distributed employees and to transact business. The IT section was very powerful both at HQ and in the field and regarded the email system primarily as an electronic postal system. The aim was to get the message from creator to receiver as quickly and securely as possible and to keep the channels open and as clear and free running as possible. This meant that all sent emails disappeared from an individual's inbox after one month and all received messages after three months. There was the possibility of archiving within Lotus Notes on one's own PC and we in the Archives and Records Management Section had an electronic records management system.

For me as a records manager having a shorter time for the retention of sent messages over received messages was the wrong way round, especially given the best practice approach that it is the creator who should manage the email message as record. However in talking to IT colleagues it was difficult to change their mindset. I did however realise that their focus is on information, in the form of documents, – they found real difficulty understanding how a record differs from a document – as individual items and bits and bytes and not groups of interrelated evidence of business transactions.

Things were however changing with the enterprise content management project which coincided with an organisational reform programme giving primacy to accountability

and transparency and new policies on records management and information sensitivity, classification and handling. The focus shifted from email as a rapid transport system covering only the most recent communications to the creation of function-based taxonomies to capture and maintain both documents and records including email messages. The first step was a seminar for IT staff on business classification schemes and taxonomies followed by working meetings between IT and records management staff on procedures for developing and implementing business classification schemes.

This is one example of establishing and extending the common understanding about email and its use. Each email exchange must be a conscious act with explicit implications. This can only be achieved by defining the role of email – business tool or personal communication system – and developing and monitoring compliance with clearly stated rules.

## Heather Jack: Witness Statement

(Seminar 1: The business perspective: Doing business electronically – what are the records management implications & challenges?)

**Email Session Overview: Managing emails as records: from problems to solutions**

Summary

The challenges we face, in terms of managing email as records are really no different from those related to the managing of all electronic records held by an organisation. I believe we already know what has to be done, as outlined in the two articles selected as a starting point for this session. We know the problems; we know what needs to be done. The key is to get the buy in from all levels of the organisation:

- from senior management to provide adequate resources
- from IT and HR managers to work with us to develop and implement appropriate policies, procedures and staff guidance supported by IT systems and tools
- from all staff, so they embrace rather than avoid the necessary changes they will have to make

There is lack of clarity in terms of its actual role

A victim of its own success, it filled a vacuum for communication and information sharing for many, has become their prime personal information storage system

We still have strict procedures for logging, actioning and filing incoming paper mail, but haven't recognised the need to apply the same principles to our email

This move from paper to electronic mail and its management is a key reason why people now regard the information they handle as personal rather than corporate

Need for process analysis and email in context

Analysis of where email currently fits into our processes and activities now, and evaluate this against where this is appropriate, where there are better alternatives, and where we can improve current practice:

e.g. Does it support transactions?

- Which transactions?
- What other options are there?

- Use of a group email rather than individual
- Use of this group email as part of transactional web service
- Use of incoming email to kick off workflow

Organisations have been reactive rather than proactive with email:

Policy and guidelines introduced when problems have become huge, and rarely properly implemented or reviewed

Guidance and policy "stick" rather than "carrot" led

**We don't see it within its broader context**

Specific guidance and policy for email, while practical in focus, re-emphasises its isolation from general information asset management

**Lack of resource and joined up working**

Email management in practice is seen as the domain of IT in terms of both funding and control

Practical control of e-mail has been technology rather than business led:

Well intentioned but escalated the RM problems:

- Auto archiving and email archive solutions take no account of business needs of search and retrieval, retention and disposal
- Restrictions on mail box sizes force users to make retention and deletion decisions based on short term value to them (and possibly their immediate team) and to squirrel away emails they don't want to get rid of, making them even less accessible – now to ourselves as well as others, as well as putting the organisation at risk
- Not enough awareness training – users believe that space is the problem, not sharing of info, role of email as records ..

**Shared projects for Records Managers and IT**

Working together, Records Managers and IT staff can ensure technology tools can be exploited to support effective email management.

e.g.

Rule-based indexing and archiving

Auto-classification based on content

Use of Standard Outlook forms and templates with retention rules built in for emails that are clearly part of a business transaction

Retention needs to be built in at creation, where possible. The well-trained user, armed with clear policy, practical guidance and a simple retention schedule should be able to think, on creation of an email, whether it is likely to be of short term or longer term value and a mechanism set up within the email creation process to create the email with retention period set within it – very basic levels – that can be flagged up when period is reached

Senior management need to be bought in, not only to the importance of best practice but also the effort required to achieve the necessary changes in working practice and culture. Without teams of practitioners employed within each of an organisation's functional areas, who can practically implement RM policy and support users, Records Managers will be restricted to issuing guidance which will either be applied inconsistently or simply ignored.

Training has been focussed on the "hows" of email and not the "whys"

Training based on how to do things, not how to use it to support the work of the organisation and the individual; as with other desktop applications, either self taught or taught in application rather than business context

Training needs to be on the information we use, what we use it for and the benefits to the individual and the organisation that will justify the effort to change

Simple things:

- Understanding the implications of current behaviour

  The risks of inadvertent disclosure of sensitive info

  Wasted time and effort

- Practical rules

  Single topic for each email

  Naming conventions for email titles – consistent with general naming convention

  Handling email in inbox only once

Sending links rather than files internally

- Practical "how tos"

Correct format and process for saving emails as records in appropriate record keeping system

How and when to manage a chain of emails to ensure it is a complete record

Mechanisms to support good practice not properly in place

Prior to training people you must ensure that all is in place to enable them to comply with the policy and

- Ensure all who need to access a shared directory can, otherwise people will stop sending links, if the recipient can't access it
- Ensure that the folder structure is workable, understandable and that staff are familiar with it and understand its logic
- Approved, workable retention policy implemented

Also monitor users behaviour after training to ensure they are actually applying it to the workplace, give them a chance to provide feedback, raise issues. Only in this way will people start to change their working habits

**"One size fits all" approach**

Single retention periods for all email i.e. retention based on format, not content and context

Guidance is too generic and vague

Solution for RM has to balance the control requirements of RM with the ease of use with users

- threat is that could easily get buy out from users who have been used to the freedom and personal habits in using it
- need to overcome this sense that we know we need to do something but we do nothing because we don't know where to start

**Email could become an ally rather than a challenge for RM**

People hate the thought of the effort of filling in index fields

BUT

They happily fill in up to 3 or 4 fields of info for an email

People keep all emails "just in case" – that "just in case" is about evidence of what they have done i.e. they recognise and value the "record" element of their emails

They rely on it but aware of the problems with it and want our help
this means it could be a "quick win" so long as we support them rather than obstruct them in carrying out their job

**Blue print for success**

Awareness, buy-in, commitment and ownership from all

Analysis of its role

Clear agreement of what it should and should not be used for

Clear policies, procedures and retention, consistent and part of overarching IM policy supported by training, support, performance monitoring – continuous improvement cycle – and don't forget to test these to ensure they actually work in the real world!

Regular policy review to ensure policies are updated to take account of changes in e-mail systems, business processes etc..

Practical support for staff to improve their practice – don't just issue guidance, train people, have short one-to-ones to ensure they have applied what they have learnt and have made the necessary changes to their working practices

Better use and exploitation of available system functionality to take as much of the RM effort out of the hands of users

## Professor Ray McAleese: Witness Statement

(Panel Discussion: Moving forward - Futurewatch)

### Electronic Mail as an Adjunct to Thinking in Virtual Learning Environments

I want to offer a view on the way {e-mail} provides a metaphorical adjunct to learning and the way {learning spaces} may provide help to records management.. The Figure over (Figure 1), is a snap-shot of my external thinking about e-mail.[41] The use of {Virtual Learning Environments (VLEs)} in higher education is ubiquitous. Institutions of higher education that provide "E-learning" opportunities use a VLE that centres on discussion forums. These forums require the learners to post messages; that is, to submit "e-mail" messages. These messages are the substance of discussions which many claim lead to personal understanding.

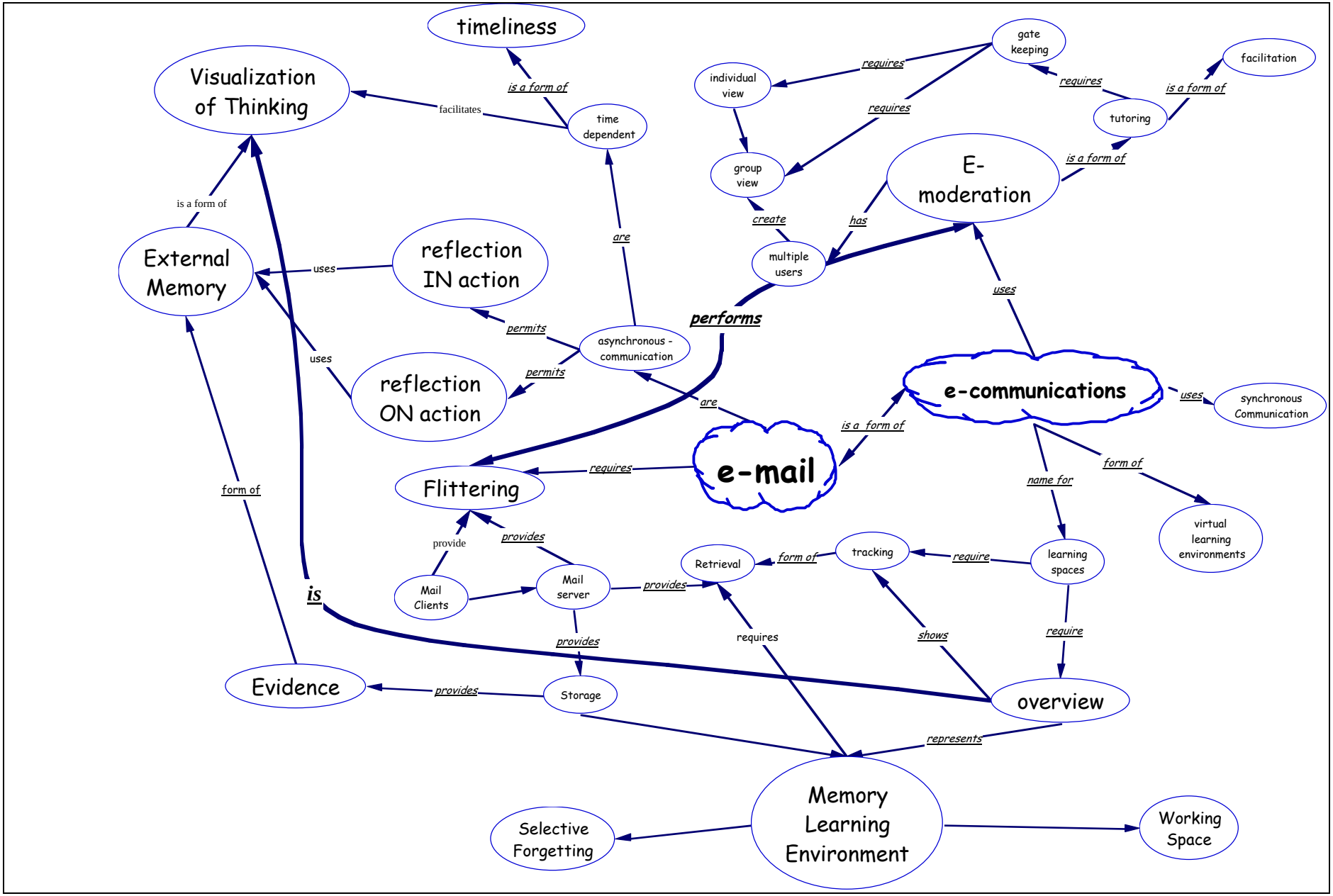
The VLEs operate {asynchronously}. In the construction of messages, learners{Reflect IN Action} and {Reflect ON action}. Their thinking is mediated and attenuated by the input system – typing messages into {Mail Clients} using a keyboard. {Moderators} provide a guiding role in this discussion to facilitate discussion and to promote learning. In so doing, they {Filter} messages. Posted messages in a discussion forum provides an {External Memory} for the learners.

The use of e-mail in VLEs can be enhanced with {Mail Clients} and {Mail Servers} that can be tailored to model a {Memory Learning Environment}. To achieve this, attention needs to be given to the selective {Retrieval} of messages and to the selective {Forgetting} of messages. In order to model a true learning environment, e-mail clients and servers need to be dynamically tailored for e-moderators and individual learners.

While it is tempting to think that asynchronous communication is an inferior form to synchronous communication, the {Time Dependent} nature of e-mail provides unique opportunities for VLEs to provide an accurate model of thinking and learning. In so doing, the next generation of e-mail clients and servers should address issues relating the time-dependent management e-mail records.

[41] The "concept map" uses nodes to represent {Concepts}; these {Concepts} are linked by *relationships*. The importance of the {Concept} or the *relationship* is indicated in this figure by the size of the font. Where appropriate, {Concepts} are indicated the text.

Using human memory as a metaphor for e-mail records management, retrieval, representation and forgetting need to be implemented. To do this, a better understanding of the time-dependency of asynchronous communication is essential


timeliness
Visualization of Thinking
is a form of
facilitates
time dependent
gate keeping
requires
individual view
requires
requires
facilitation
is a form of
tutoring
requires
group view
E-moderation
is a form of
is a form of
External Memory
uses
reflection IN action
are
create
has
multiple users
uses
permits
asynchronous - communication
performs
uses
reflection ON action
permits
e-communications
uses
synchronous Communication
are
is a form of
e-mail
form of
Flittering
requires
name for
form of
virtual learning environments
provide
provides
Retrieval
form of
tracking
require
learning spaces
is
Mail Clients
Mail server
provides
provides
requires
shows
require
Evidence
provides
Storage
overview
represents
Memory Learning Environment
Selective Forgetting
Working Space

## John McDonald: Witness Statement

(Panel Discussion: Moving forward - Futurewatch)

When I saw the program a couple of months ago my first reaction was - 'Hmmmm, there seems to be something a little unfair about this. How come those in this panel have 5 articles to read while everyone else got away with one or perhaps two articles to review?!!' Kidding aside I think we got the better end of the deal. These are great articles each of which explores a distinct aspect of the email issue.

One article is of particular interest. In their article on 'enhancing productivity in artful business processes', Hill, Yates, Jones and Kogan argue that the sophisticated business systems analysis tools and techniques commonly employed for large scale applications may not be appropriate in supporting the design and overall management of small scale so-called specialized work activities where electronic communications are more informal and less well defined (e.g. policy development, research, small scale projects, etc.). They suggest that if we are to understand how improvements can be made to an environment dominated by email and instant messaging and by what they call the artful process (i.e. "processes at the individual or small-team level such that the process cannot easily be separated from the specific people who perform it"), then the nature and characteristics of the work activity environment must first be understood.

If we in the records business subscribe to the principle that records are generated from processes and work activities then it seems to me that the article is also suggesting, very indirectly, that our efforts to deal with email messages and other forms of electronic communications must first begin with a clear understanding of the environment within which these objects are being generated. If we want to set future direction, especially for those in the records profession, then I think this is an important prerequisite. It is through this understanding that we can better frame some rather important questions about the future - which I will come to at the conclusion of my statement.

The current environment - and here I am speaking of an environment dominated by email and those 'artful processes' described in the article - has been shaped very much by three events all of which converged in roughly the late 80s and early 90s and which are continuing to have an impact today. (And here I am drawing on what we experienced in the Canadian federal government - an experience that may or may not have been shared in other jurisdictions).

First was the emphasis on reinventing government which focused on reducing and eliminating bureaucratic procedures to enable employees to be more creative and productive - to find new and better ways of getting the job done. Capturing and maintaining records was perceived to be one of those administrative and bureaucratic functions that had no real place in the new world order of empowered employees.

Second was the evolution of the personal computer from a personal productivity tool to a tool intended to support improved organizational performance through networking and enhanced electronic communications. This evolution, which emerged from a world dominated by the autonomous individual is totally unlike the evolution of the so-called application systems environment (e.g. personnel, finance, taxation, etc.) which has always been subject to enterprise approaches to rules development, systems design, accountability, etc.

Third, the drive to reduce the costs of government operations in the 90s resulted in substantial reductions in the government's records management workforce (in some government departments up to 75%). The argument was made that sophisticated new information technologies would replace the need for records classifiers. More importantly, however, and at the same time, there was a substantial reduction in administrative staff - the brain trust of any given organization - the individuals who knew how things got done including when and why certain documents went to the records office. Those that were left were hard pressed to continue focusing on what was being perceived by many as an administrative burden - records management. And most important of all - and this is a very important point - the Government eliminated completely the entire occupational category of workflow specialists - a group called 'operations and methods'. The argument was accepted that workflow

specialists would not be required in an empowered work environment where the technology, supported by IT specialists and business systems analysts (who, incidentally, knew very little about the modern office or supporting small scale activities) would fill any required gaps.

Three phenomena - empowered employees (and the associated deregulation of the office), networked personal computers (and the growing centrality of email as the tool of choice for communications), and the reduction/elimination of specialists who could otherwise bring order out of chaos - have contributed to the seemingly chaotic or 'wild frontier' environment we are now facing.

Now what does this have to do with the future and what we do about email? I think the article (i.e. the focus on the work activity) and the fact that records management has not traditionally been involved in work activity design should cause us to wonder about the role of the records manager in dealing with emails and other forms of electronic communications. In my experience in the Canadian federal government where there has been a huge investment in electronic records and document management systems (EDRMS) I think records managers are being asked to take on roles far greater than what they should be expected to take on - roles previously assumed by administrative staff and especially workflow specialists. Records managers have great expertise in capturing and storing records and facilitating records retrieval but, in my experience, they have little understanding about workflow (nor were they ever expected to have such expertise). Moreover they traditionally have had relatively little direct experience with users because the interface used to be through the administrative assistant. As far as I can see their emphasis has been more on records as objects that need to be managed than on the processes that generate the objects and give the objects their context. It is little wonder that EDRMS applications fail. Asking users who have never been exposed to file classification schemes or records management operations to participate in records capture activities that are perceived to be entirely distinct from the business activities they are carrying out (i.e. the artful processes) has been a recipe for disaster.

So where should we go from here? Before we set off into the future I think we need to step back and ask ourselves if we know enough about how modern organizations function. How do people communicate with one another, especially in unstructured work activity environments (i.e. as distinct from the highly structured business applications environments associated with functions such as finance, taxation, benefit delivery, licensing, etc.)? How has the shape of business activities (i.e. those artful processes) in these environments changed as a result of advances in electronic communications? Where and how can requirements to maintain a documentary trail be incorporated? (Is it possible?).What should be the role of the records manager? Should they fill the gap left vacant by workflow specialists? Should they be occupying the open field and become specialists not only in mapping work activities (in order to place records creation and capture in context) but also enhancing them to improve organizational performance?!! If so, what competencies need to be added and what tools and techniques need to be developed? What do they need to learn and how should our education programs adjust to meet the need? If they need not be involved then with whom should they be partnering to fill the gap? And where will the required renaissance workflow expertise come from? If not from the business systems analysts (as explained in the article), then from where? And what about the administrative assistant? Have we spent enough time understanding their evolving role and how they can help us from a records and recordkeeping perspective?

These and other related questions suggest that before we set out a future vision for managing email we should be clear about the nature of the environment we are experiencing today (i.e. a vision in itself) and, based on that understanding, the role records professionals should (or should not) be playing. Perhaps it's time we spent less energy agonizing over the status of email as records and what we're supposed to do with them and more on unravelling the mysterious (but also fascinating) world of the artful process and what we can do about the recordkeeping issues being faced in that world. Unless we place email and other electronic communications in their proper context - i.e. the work process and activity - I fear that records creating organizations will continue to foster environments that will require forensic info anthropologists to unearth and understand in the future.

## Dr Andrew Prescott :Witness Statement

(Panel Discussion: Moving forward - Futurewatch)

The spirit of the Witness seminar format is that the witness statement should be informed by personal experience. This makes my place in a panel entitled 'Futurewatch' perhaps inappropriate, since I am afraid that, as a historian, my default position in looking to the future is to reach back into the past. Moreover, as I get older I find that my view of the future is increasingly influenced by the experiences of my own career, which has been spent over nearly thirty years entirely in the public sector, first in a large national library, then as a researcher in a Russell group university and now finally as a librarian in a very small and conservative university in the remote countryside of West Wales.

The 1797 edition of the *Encyclopaedia Britannica* enthused about the potential of a recent invention to unite the capitals of Europe and imagined how 'those disputes which at present take up months or years might then be accomplished in as many hours'. *Britannica* was referring to the advent of the optical telegraph. The telegraph was during the nineteenth century to be seen as revolutionary as the internet is today. Instructions which previously took a day or more to reach Portsmouth from the Admiralty in Whitehall could be sent immediately, transforming the organisation of the British navy. The standardisation of timekeeping across Britain was driven as much by the advent of the telegraph as by the spread of the railways; indeed, the telegraph provided the essential instrument by which timekeeping could be synchronised. Whatever else might be said of current technologies, it could not be claimed that they have transformed perceptions of time, although that may yet follow.

The telegraph is significant as it represents the point at which the speed of communication ceased to be dependent on animal movement (whether man, horse or carrier pigeon). The issues we are discussing here, and which are raised in the papers we have been asked to discuss, are to a very large degree about this animal-information interface. How do we, as animal beings, cope with information moving more quickly and in larger quantities than we can naturally manage? It is possible that there is a natural limit, a sort of communications glass ceiling, beyond which humans

cannot realistically go. Gladstone was reputed to have written by post to his wife two or three times a day – in other words, he achieved the sort of frequency of communication that we nowadays might expect by e-mail.

There has been a succession of new technologies since the advent of the telegraph which offer the promise of instant communication but which ultimately fail to achieve their promise because of the limitations of the human interface. For example, the telephone was, in the days before mobiles, a far from assured medium for instant contact. A conversation could be held when the call was achieved, but making that first contact was far from quick or certain. As a result, the telegram retained a legacy position as the preferred means of communication for particularly urgent and grave news. When fax machines first appeared in offices, a fax was treated as a great event and was assured of a prompt response. However, as faxes became more commonplace, the rate of response became not much quicker than a letter. We can see a similar process with e-mail, which nowadays often achieves no greater speed of response than Gladstone's letters. It is by no means certain that instant messaging will avoid the same fate. If we receive sixty or seventy instant messages in a day, we will start to pick and choose the ones to which we respond immediately – the rest will take their chances in the same way as e-mails, faxes or written letters.

Does such a historical perspective offer any insight beyond encouraging a certain cynicism about the ability of new forms of technology to deliver quicker and more effective communication? I think that this perspective does suggest some themes which chime with those raised in the interesting papers we have been asked to read. The first and most important is that process is as important as technology. The ability to deal with varied methods of communication depends to a large degree on how they are integrated into the process. It also explains the toehold retained by certain types of technology. Thus, it is in some ways surprising that the fax remains a standard feature of office communication. The reason for this is that frequently the written, signed document is essential for certain administrative processes, and in providing such authentication the fax comes into its own.

Within this framework, integration is of equal importance. The telephone struggled for a long time to be integrated into office systems – I remember how in the British Museum when I first started work there, an office telephone was not a standard piece of equipment, and an unexpected telephone call was a noteworthy event which involved being summoned to the other end of the building. The process of integrating the technology is as important as the effectiveness of the technology itself. The debate about instant messaging in the articles we have been asked to read reflects this – how can instant messaging be effectively integrated into wider systems without creating anxieties about system security, about inappropriate use of the facility by staff, and about effective record-keeping across the system?

Within this framework, we might feel doubtful about whether the suite of approaches bundled under the name Web 2.0 has the capacity to transform business practice in quite the way that might first be imagined. One of the most interesting studies recently commissioned by the JISC concerns the use of social networking sites by students for educational purposes. It found that students frequently prefer to keep their MySpace and Facebook activity purely social – they do not like external hierarchies such as college administrators, lecturers and librarians to intrude. This suggests that, while the approaches associated with these sites might hold very interesting organisational possibilities, it may not be possible to pursue threes possibilities within the existing frameworks. This raises the further question of whether, if particular sites are used for particular purposes (some for leisure, some for business, and so on), any effective integration of these technologies ca be achieved.

My conclusion is that, regardless of the technical possibilities, it is the animal side of the equation which remains most important, whether in speed of receipt and response, in choice of particular platforms for particular purposes, and in the organisational structures that surround it. It is this human side of the interface that we will need to pay particular attention to in the future.

## Martin Sanderson: Witness Statement

(Seminar 1: The business perspective: Doing business electronically – what are the records management implications & challenges?)

E-Business is considered in its broadest sense, that is where e-communications are used to do business between an organisation and its customers and suppliers. My proposition is based on how e-communications have acted as both the enabler and the consequence of a significant change in the nature of organisations and how it is these changes that have implications and create major challenges to records management.

Traditional organisations are characterised by the industrial model of the Victorian era, essentially self contained entities with a strong emphasis on structure and control, bringing together the means of production and creating a market for the products and services created.

This model is contrasted against today's network organisations, enabled through e-communications, where:

- Business processes and supply chains [and resulting information flows] pay increasingly little respect to organisational boundaries.
- Knowledge/innovation based organisations are dependent on the integration of knowledge into their business processes and products.
- Customers rule and organisations are having to listen and respond to customers in a more strategic way.
- Access to services and information are location and time independent
- Workforces are more fluid and more independent of their parent organisation

The records management model like the traditional organisation is essentially based on structure and controls so how will records management operate in the changing organisation and new e-environment? The following three questions may help to explore some of the challenges and opportunities that face records management.

3. Who owns and controls the knowledge lifecycle and its related records?
4. How do we separate records from information in the e environment and how do we identify and capture what is important?

5. How does the changing relationship between employees and their employer affect records management?

Who owns and controls the knowledge lifecycle and related its records?

Given that business processes cross organisational boundaries, with each organisation having their own technologies, information policies and processes then how do we ensure the total story is captured and properly evidenced? I Does it still make sense to try and collect records into a single repository with a single owner (e.g. EDRM model), is it even possible in the new business environment? Perhaps in the future records managers should be free agents contracted to records manage a business process rather than belong to one of the participating organisation!

Records managers use legal and regulatory compliance requirements as their driver to win over senior management to their cause. Compliance, however, is a matter of risk and organisations have increasingly began to assess risk of non-compliance against risk of not doing business and remember it is getting easier for e-businesses to operate from less regulated countries. Perhaps the future records manager will be restricted to the management of well defined compliance records only where the need and value of structure and control can be justified.

Today the e-world also brings with it the emergence of 'super records' for example, peoples individual health record or education record, which although may be used and managed by a number of organisations over a period of time they are essentially owned by the individual. In the future what is to stop us having individual 'customer record' and others, stored and controlled by the individual rather than any particular organisation.

How do we separate records from information in the e environment and how do we identify and capture what is important?

The interactive relationship between organisations and their customers facilitated by e-communications is a dynamic and unstructured environment but essential to the

success of businesses. Is there a role here that records managers need to take on to help define and manage customer information and route into the business processes, potentially adding real value to the business?

The growing application of Web 2.0 technologies and collaborative software demands some serious rethink as to 'what is a record' as opposed to 'what is information' If records managers try to define too much information as records then we have to ask whether systems and records management tools can realistically manage and control this emerging e-environment? I think not. One consideration for example is to ask where the structured fileplan fit into this dynamic e-business environment? It seems likely that the balance from structured filing classification is going to lose ground to the metadata/search model which is better suited to cross organisational, cross technology information management environment. Also in moving away from the paper paradigm where records were predominantly documents the new e environment and XML provides for a more granulated view of information objectives. Do we have the standards tools to manage such objects as records?

How does the changing relationship between employees and their employer affect records management?

Knowledge workers make up an increasing proportion of today's employees, their value to the organisation being the current skills and knowledge that they can bring to the business. From an information perspective such workers are seemingly more interested in managing their personal information environment and sharing information with external agents than managing information for their corporate owner. Academia is a good example where academic staff have greater need to align themselves and share information with external agents such as funding bodies, research establishments, external research and academic communities than they do for the University corporate. A clear difference between what is information and what is a record is a difficult one and rarely recognised. Another breakdown in commitment to the corporate organisation is the increase in staff movement within and between organisations as well as the growth of home and multi locational working. Keeping staff aware of organisational dependent policies and processes becomes ever more

complex and difficult to implant both the motivation and awareness irrespective of the commitment to training and marketing.

Perhaps in the future we will be seeing alongside the 'personal trainer' the 'personal information manager!' helping them to manage their personal information environments. Given this breakdown in traditional organisational relationships then how will future organisations interact with individual knowledge workers to for example extract critical information for the business, to protect intellectual property and to avoid risk? Perhaps workers information and records management responsibilities will become more a matter of a contractual arrangement between the organisation and the employee rather than overall corporate policy approach.

In conclusion we can be sure that e-communications and e-business is here to stay. We can be sure that as an instrument and driver to organisational change that this is going to have a major affect on records management practice as we know it today. A convergence of the information professions, a new information management paradigm may be forthcoming. No one knows the answers but we as records managers need to accept the need for change, and develop our roles and our own practices if we want to play any part in defining the future e-information environment.

## Geoff Walker: Witness Statement

(Panel Discussion: Moving forward - Futurewatch)

### BUILDING A KNOWLEDGE SHARING NETWORK

1. INTRODUCTION

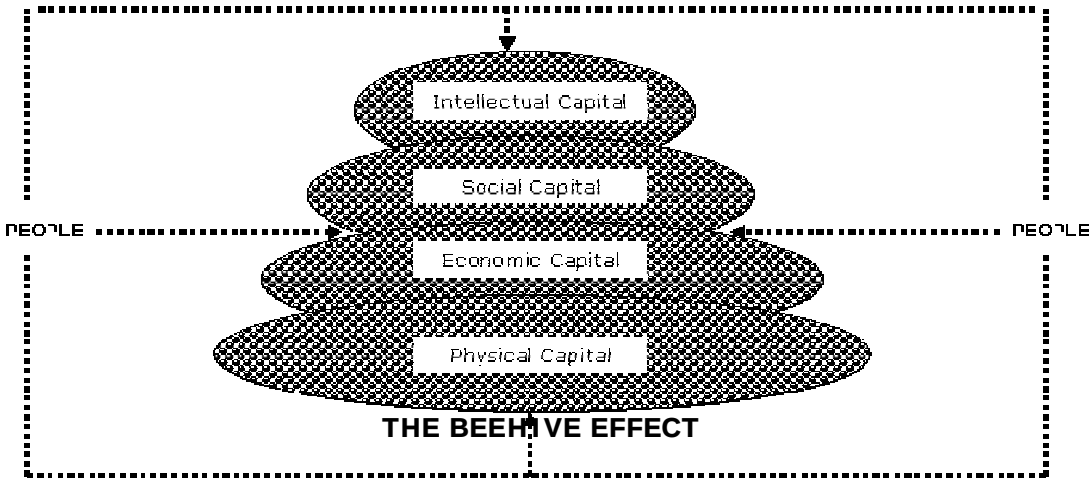
Many people will be familiar with the phrase *'knowledge is power'* but few will know that it forms part of a much longer quotation by Francis Bacon:

> *Knowledge is power. But mere knowledge is not power; it is only possibility. Action is power; and its highest manifestation is when it is directed by knowledge.*

In post-industrial societies, knowledge is embedded in both human and digital networks and actively released through the conscious realisation of the power of the knowledge to lead to positive action and outcome. Effective knowledge-sharing networks, as a result, are the key to realising individual, group and organisational potential.

2. THE BEEHIVE EFFECT

A knowledge-sharing network can be viewed as a form of human beehive where individuals, acting simultaneously as architect and builder, are engaged in the dynamic creation of honeycombed layers of intellectual, social, economic and physical capital with each layer of the beehive ecologically dependent on the other for survival. Each layer contains multiple networks; therefore the beehive becomes a network of networks: a meta-network.




Knowledge permeates the entire structure of the beehive and communities are constantly being formed, shaped and disbanded as the need to create shared practices waxes and wanes within it.

## 3. THE COMPONENTS OF A KNOWLEDGE SHARING NETWORK

There are potentially eight components of an online knowledge-sharing network:

6. Knowledge Repository
7. Knowledge Portal
8. Online Project Space
9. Online Community Space
10. Discussion Groups
11. Online Meeting Space
12. E-learning Space
13. Expertise Exchange

From the outset, creators of knowledge-sharing networks should not seek a total technological solution to knowledge-sharing as this has demonstrably failed in the past. Technology should be viewed as appropriate to how it adds value to face-to-face networking; as a result, developers may need to mix-and-match solutions.

### Knowledge Repository

This is the mainstay of traditional knowledge-management systems. Making communities a centrepiece of a knowledge strategy moves the primary focus from

information management to social structures, but it does not make these traditional information-oriented concerns obsolete. Communities do produce and share documents and other knowledge artefacts, which can be put in electronic form, and which they need to manage effectively.

Knowledge Portal

A knowledge portal is based on the assumption that knowledge workers participate in multiple groups, projects, and communities, and have to manage this multi-membership. They make a complex store of information and knowledge accessible through sophisticated search engines.

On-line Project Space

This is an online space for a project team to conduct its work. It focuses on project management, task scheduling, and managing collections of project-related documents.

On-line Community Space

An on-line community space stands halfway between specific interest groups, often referred to as SIGs (Special Interest Groups), and more sophisticated knowledge worker desktop systems. They support more or less tightly connected communities across organisations and their boundaries, including customers, suppliers, partners, and employees. These systems usually have somewhat more complete community capabilities than other systems, but like them, they focus on communities such as customer or supplier groups, which can remain rather loose. They place the emphasis on interaction and often lack sophisticated repositories for documents. They do not necessarily attempt to create a sense of closeness and often handle very large groups.

Discussion Groups

Products in this category aim to support conversations among ad hoc communities, communities of interest, faith communities or often just simple discussion groups. These groups are sometimes very large, with multiple topics. The focus of these systems is almost exclusively on conversational interactions, usually through

asynchronous discussion boards, though in most cases this is augmented with chat capabilities, presence awareness, and instant messaging.

On-line Meeting Space

These systems provide for synchronous interactions at a distance, for both small interactive groups and large audiences. They often use a combination of media, including audio and video, to provide an experience of co-presence. Some use physical analogies, such as, auditoria, conference centres or buildings to create the feeling of co-presence.

E-learning Space

E-Learning is defined by the Open and Distance Learning Quality Council in the UK as:

> *the effective learning process created by combining digitally delivered content with learning support and services.*

E-learning systems provide space for explicit educational activities, some of which can be helpful to communities of practice. This is especially true when communities have a well-established body of knowledge and take on the responsibility of training newcomers.

Expertise Exchange

These systems focus on providing more sophisticated access to expertise. They often collect answers in banks of question and answer pairs to be accessed before turning to an expert. When they do have to turn to an expert, they attempt to use criteria such as general ranking, history of answers to questions in an area, or analyses of relationships to determine who is most likely to provide an answer. There is usually a way for the recipient of information to give feedback to the provider.

## 1. SEEKING AN INTEGRATED SOLUTION

At this point, we must ask ourselves the question:

*Is there a single application that meets all the needs of a knowledge-sharing network?*

The simple answer is probably no. However, developers of knowledge-sharing networks should not be perturbed by this as we acknowledged earlier in the paper that there is no technological 'quick-fix' to effective knowledge-sharing in networks. Knowledge-sharing in networks is a combination of appropriate face-to-face networking and using collaborative technologies to add value to face-to-face interaction.

Recent developments in knowledge-sharing software, however, do demonstrate that the key components of a knowledge-sharing network are attempting to converge in a single solution. Solutions combine most, if not all, of the knowledge-sharing components outlined above. It is interesting to note that a number of these attempts at integrated solutions have been purchased by Microsoft in the last few years. Many view this accumulation by Microsoft as the beginning of an attempt to integrate knowledge-sharing into the Microsoft Operating System.

## Teresa Waring: Witness Statement

(Seminar 2: The people perspective: People and email – the problem and the solution?)

### Internet Abuse – it is not just about email

Introduction

Email has been a facility available to many organisations and businesses for well over fifteen years and if one traces the history of email it can be seen to emerge in the 1960s through the scientific use of mainframe computers. However it was when the Internet actually took a step change that certain issues began to arise. This short paper challenges the two articles in as much as they are too narrow in their outlook and appear to be covering ground that has already been explored by the Human Resource Management literature and the Information Systems Management literature. I will argue that ICT research in this area has moved on to such an extent that email is only a small part of what organisations should be concerned about and the real issues lie in developing policy that addresses crime at work, organisational misbehaviour and litigation.

The Bigger Picture

For many organisations it is becoming increasingly clear that the Internet is now a critical component of their business and is shaping behaviour of many employees. Both in the public and private sector, organisations that operate at the forefront of the Knowledge Economy greatly benefit from the enhanced communications and extensive research capabilities brought by Web technologies (Cohen, 2001: 70). From an employer perspective using the Internet can also generate undesirable outcomes – loss of intellectual property (documents sent via email outside the organisation), sexual and racial harassment (e.g. through email, SMS, Facebook) productivity loss due to excessive use of the Web (too much time surfing the net, writing blogs, playing on-line games, gambling) and crime (Anandarajan and Simmers, 2001).

Computers and associated communications technology are ubiquitous in businesses in both the public and private sector. Authors have hailed access to the Internet "*as a great opportunity for business development and enhancement of employees' productivity*" (Scheuermann and Langford, 1997:847). This medium has made global, regional, national and institutional communication not just cheaper, but also faster and

much more efficient. Companies can access the most up to date information at the click of a mouse, making it easier to be on the cutting edge in their particular industry and remain competitive. It is also a valuable way to communicate with employees, particularly in large multi-plant companies with many employees. Many organisations have also developed intranets that allow employees to communicate with management and each other quickly and easily. The Internet has not only boosted productivity in the organisation, but has also created a sense of empowerment among workers and it is probably this very sense of empowerment that has contributed to what has now become to be seen as a dangerous and indeed costly trend in the non work-related use of the Internet. (Sharma and Gupta, 2003).

With the advent of the Internet organisational misbehaviour has taken on a more insidious aspect and a new term has been coined -'Internet Abuse' (Griffiths, 2003; Muhl, 2003). In some countries personal use of the Internet by employees may be excessive and new terms such as '*cyberloafing*' and '*cyberslacking*' have arisen (Lim at al, 2002:69; Davis, 2001).

Siau et al. (2002:76) classify potential employee Internet abuse into eleven specific categories:

| Internet Abuse | Description |
|---|---|
| General email abuse | Including spamming, harassment, chain letters, solicitations, spoofing, propagation of viruses/worms and defamatory statements |
| Unauthorised use and access | Sharing of passwords and access into networks without permission |
| Copyright infringement or plagiarism | Using illegal or pirated software that cost organisations millions of dollars because of copyright infringements. Copying of web sites and copyrighted logos. |
| Newsgroup postings | Posting of messages on various non-work related topics from sex to lawn care advice. |
| Transmission of | Using the Internet to transmit or display trade secrets. |

| | |
|---|---|
| confidential data | |
| Pornography | Accessing sexually explicit sites from the work place as well as the display, distribution and surfing of these offensive sites |
| Hacking | Hacking of web sites, ranging from denial of service attacks to accessing organisational databases |
| Non-work related download/upload | Propagation of software that ties up office bandwidth. Programmes such as Napster that allow the transmission of movies, music and graphical material. |
| Leisure use of the Internet | Loafing around the Internet, including shopping, send e-cards and personal email, gambling online, chatting, game playing, auctioning, stock trading and doing other personal activities. |
| Use of external ISPs | Using an external ISP to connect to the Internet to avoid detection |
| Moonlighting | Using office resources such as networks and computers to organise and conduct personal business |

**Table 1: Categories of Internet Abuse (Source: Siau et al, 2002:76)**

The types of Internet abuse outlined in Table 1 are indicative of the behaviour an organisation may wish to monitor and eliminate (Siau, 2002). Organisations are generally concerned about lost productivity of staff, misuse of resources and illegal activities in the workplace that might lead to loss of organisational reputation and litigation from plaintiffs who may have suffered due to management ineffectiveness in controlling employee behaviour. In terms of time spent making personal use of the Internet, Lim et al (2002:66) quote a survey by SurfWatch which suggests that this may be costing the USA up to $1 billion per annum and this suggests that there may be a loss of employee productivity of as much as 30-40% in some organisations.

One of the most difficult aspects of investigating Internet abuse at work is in determining how much misbehaviour or crime is taking place and its effect on the reputation of organisations. As more Internet related laws are introduced globally

organisations are finding themselves increasingly vicariously liable for the activities of their employees. From the perspective of their reputation it is in their own interests, where possible, to deal with dysfunctional behaviour internally and not to go public and involve the law. Unfortunately some cases are so high profile that media coverage is inevitable. In the US the Chevron Corporation was caught up in a major court case involving sexual harassment in the workplace mediated through email. They were forced to make an out of court settlement of $2.2 million to four plaintiffs (Hartman, 1998:16). More recently a world wide criminal investigation into child pornography, known as 'Operation Ore' in the UK press (e.g. Sunday Times, January 26th, 2003) has highlighted a database with credit card details of 250000 individuals accessing this type of material on the Web, 7272 of whom were UK residents.

It is access to pornography in all its forms that employers appear to be most concerned with preventing through workplace computers (Panko and Beh, 2002). Research by NFO and Elron found 62% of US organisations surveyed had caught employees accessing sexually explicit web sites on company computers (Boehle, 2000). A survey carried out by Vault.com found that 4% of respondents admitted to downloading pornography from the Internet in the workplace (Cohen, 2001). Lim et al (2002) surveyed 188 adults in Singapore and found that 9% browsed 'adult' sites at work a few times a month, 3% reported that they did so a few times a week and 2% stated they did so a few times a day. Similar work by Siau et al. (2002) and Young (2001) have produced comparable results. Stanton and Weiss (2002:435) suggest that the loss of organisational reputation and hence loss of business is now at the forefront of management's mind and state:

> *"It is possible that this individual focus on sex is a reflection of corporate emphasis on the subject. Companies may put more emphasis on prohibiting these sites over other because of potential damage to the company's reputation should the pattern of web site visits become public"*

Clearly concern over access to pornography in the workplace is a major issue for organisations whose staff need to use the Internet. However, no matter how distasteful and high profile this abuse is organisations must also be aware that other misuse and crime may be going unnoticed or unreported.

Many organisations have Internet Usage Policies (IUPs) and I would contend that these policies should be the framework through which employee behaviours are developed and monitored.

## Ian Wooler: Witness Statement

(Seminar 2: The people perspective: People and email – the problem and the solution?)

I have prepared my statement based on a bullet point story line that includes:

- Email, what is it?
- The organisational motivations for managing it
- The business threats and opportunities it presents
- Email as a very selfish tool
- The view that organisations fail to exploit it as an information and knowledge asset.

The story line can be adjusted as the overall session unfolds to take account of what has already been said, i.e. to re-enforce or challenge points, and to add or omit others. If possible I would like to engage with the audience by posing a couple of questions and asking for a show of hands/stand to feet to indicate the views from the floor.

This note ends with an e communications anecdote (for amusement and/or use at the Seminar) from a recent train journey.

Email, what is it?

- A channel of communication, an electronic filing cabinet, a work/planning tool, a social networking tool, an information and knowledge asset, a regulatory/legislative ticking time bomb, the major cause of stress in an organisation, an addiction, the heart-beat of an organisation, a way of life?
- It has developed and continues to develop and it is increasingly difficult to answer questions that include:

  What is it in the context of my organisation?

  How does it fit/sit/support/conflict with other communication and information tools, techniques and channels provided by the organisation?

  What is its business purpose?

  What measures and metrics should be applied?

  What value does it add?

  What is the business case for email?

Organisational motivations for managing it

- Away from motivations include: risk management (reputation, FOI, miss-use), cost/storage control, security of back-up
- Toward motivations include: capture and harness information and knowledge, connectivity, effectives/efficiency, competitive advantage
- People appear to need no encouragement whatsoever to using email – compare and contrast this with trying to get people to use intranets, collaborative fora, EDRM, and lessons learnt databases
- However, use does not imply control and value, for example:

  Show of hands/stand up if you do not use email

  Show of hands/stand up if you would like to receive more email

  Show of hands/stand up if you feel that you are in control of email

  Does it manage you or do you manage it?

  How does it help you do your job?

Business threats and opportunities

- The threats are well documented and discussed at this seminar through a records management lens. Organisations have, and are putting in place policies, processes and technologies to reduce these threats or ensure they are manageable within a risk management framework
- The business opportunities presented by Email are less well understood (examples include social network analysis, peaks/troughs of workflow, knowledge transfer, information domain mapping) and accordingly less exploited by organisations.

A selfish tool

- Organisations have and do put guidelines, training and best practice in place, but adherence to these, other than the contractual/sackable/big brother aspects, is often not embedded in day to day Email use, with the possible exception of restricting server/file space or banning the use of email on Fridays
- On the whole people can send when they like, read when they like, delete when they like, impose on others when they like, use whatever format and metadata

they like, use whatever shorthand/language they like, file how they like, select the audience they like – all at the press of a button

- What power! And you don't have to pass a user exam before being able to unleash (inflict) this power on your organisation. Compare and contrast this with access to and use of a company car, charge card or mobile phone
- The people and organisation perspective is that Email is 'free' and is an essential part of the office/desk furniture, in the same way that pens, paper and phone are. When did you last hear of an organisation which had to make a business case for Email?

Email as an organisational asset

- Where is the information and knowledge in organisation and how much of it is locked up in Email?
- Organisations need to spend thinking and innovative time answering, within the context of their organisation, Email what is it?
- If you do not know what it is, then how can you manage it?
- Not fully answering the question results in 'point solutions', Email Guidelines, Training (often more about the technology and which button to press, than the use of Email as a business tool), Email as a record
- A more holistic/strategic approach might include synchronising Email in community spaces, making it a part of appraisal and reward processes, providing people with Email user health checks, providing starters with Email tests that they have to pass before being given an account, charging people for using it
- What is required is the strategic/holistic management of Email as an asset. People and email are both the problem and solution – but nothing will change unless both are asset managed strategically and with a result/for what purpose mindset.

Are we losing the ability to communicate?

I've been reflecting on the use and abuse of e communications in organisations and keeping a look-out for stories and examples that evidence the ways in which e communications shape our every-day lives, every-day. One such story materialised whilst on a recent train journey. As the train left the station, the lady sitting next to me

was busy tapping into her Blackberry and continued to do so until we reached the next station. As passengers joined the train my fellow traveller suddenly became aware that a friend of hers had joined the carriage and was sitting opposite. This sudden realisation resulted in the following 'conversation':

- My fellow traveller, very loudly, "where have you been?"
- Her friend, "at work"
- My fellow traveller, even louder, "no, where have you been for the last two weeks?"
- Her friend, "I've been at home and work – just the normal stuff"
- My fellow traveller, now at full tilt, "so why did you not respond to my text message?"
- Her friend, "but I did"
- My fellow traveller, almost screaming, "but I did not receive it!"

What then followed was a bizarre game of 'technology investigation and blaming'. The 'investigation' included checking their respective outboxes, archives, addresses and numbers, and the 'blaming' a pop at their hand-held devices and service providers. The game ended, after 20 minutes or so, in victory for the friend who was able to prove the time, date and content of the message sent. My fellow traveller, now somewhat quieter, acknowledged that she might have deleted the reply in error. To my relief and that of others sitting within ear shot, my fellow traveller and her friend decided to dispense with their hand-held devices for the time being and re-engage in eye to eye contact. At this point our train pulled into the next station and my fellow traveller enquired of her friend "how are you?" "Fine", came the reply, "but I have to get off here so can't talk now. We must keep in touch. I'll send you a text". And with that, she left, and my fellow traveller returned to her Blackberry.

If you have any questions, comments or feedback to this witness statement then please contact Ian Wooler at Email: Ian.Wooler@TFPL.Com

# INDEX