Identifying and Classifying E-Messages as Records

Research Conducted and Donated to the Profession by

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Introduction

Despite email's having existed for more than 35 years, and despite the explosion in email volumes and attendant storage requirements, most of the guidance available to organizations today takes the form either of email policies or vendor white papers. Email policies provide a good starting point for email management, but many of them are limited to acceptable usage, privacy, and the occasional nod to litigation holds. And vendor white papers are often suspect because they tend to reflect the vendor's strategies and approaches. Many of these white papers are written by, or in collaboration with, respected analyst firms but even these can raise more questions than they address because they are sponsored.

This white paper is the result of research conducted to understand the current state of affairs with regards to email management today. While some conclusions can be drawn, much work remains to be done in order to identify effective and defensible practices for managing electronic messages effectively. In particular, it is expected that this survey will need to be revised in light of the responses and comments provided and its audience broadened to include more end-user organizations.

Research Methodology

The research methodology consisted of several parts. The first part involved a review of the available literature relating to email management. This was done to determine the different approaches available for managing email more effectively as well as to inform the design of the survey. The review included resources from public and private sector organizations in the United States; selected public-sector resources from outside the United States available in English; research and analyst reports; vendor-sponsored white papers; relevant materials from publically available websites, blogs, and wikis; and published reference works. Representative resources are listed in Appendix B, References and Additional Resources.

In addition, vendor materials were reviewed to determine the email management solutions present in the marketplace in order to identify their architectures, capabilities, and deployment options. The vendors reviewed are listed in Appendix C, Email Management Vendors.

The next step in the research was to develop a survey. The initial survey was developed and piloted with a small pilot group of 20 users selected from the author's personal contacts and the U.S.-based RECMGMT-L mailing list. Each of the users agreed to review the survey for readability, coverage, clarity of response choices, and overall understanding of the responses requested. Based on the pilot group's responses, changes were made to the survey and it was encoded using SurveyMonkey[1] Professional, a web-based survey application. The pilot group then piloted the Surveymonkey survey to provide a baseline for the time required to complete the survey. The time for the survey averaged 10 minutes with a high of 20; this estimate was then added to the instructions for the instrument.

[1] http://www.surveymonkey.com/

The survey as distributed included 31 research questions and 5 demographic questions. The survey was broken into several sections, including individual email usage, organizational policies, metadata and attachments, personal email account access and usage, classification and discovery, and demographics. Most of the questions were multiple choice, with one answer allowed per question. Some questions allowed users to provide multiple responses; those are noted in the instrument and in the findings. Some questions also allowed for comments; those also are noted in the instrument and in the findings. The instrument is reproduced in its entirety in Appendix A, Survey Instrument.

The instrument was sent out to a number of potential respondents, including the RECMGMT-L listserv (U.S.), the ERECS-L listserv (U.S.), the RECORDS-MANAGEMENT-UK listserv (U.K.), the RMAA_List (Australia), and approximately 300 other users in the author's personal contacts. It is not clear how many potential respondents this represents as users may have been members of each list and with multiple accounts. By way of example, the author is a member of all four lists; taking into account all accounts signed up for the various lists, the author would represent 11 potential users.

Recipients were allowed to complete the survey at once or in multiple sessions; responses were stored on the user's computer until the survey was submitted. This also prevented users from casually submitting the survey more than once[2]. The survey was open for 60 days and reminders were sent to the respondent pool at 30 days and 15 days before the survey closed.

Once the survey was closed, the raw findings were downloaded from Surveymonkey including every response provided and a question-by-question summary of the responses. A total of 375 responses were received, of which 339 were considered completed by Surveymonkey. The question-by-question summary will be presented in the next section. The responses were analyzed and the resulting conclusions will be presented following the summarized questions.

[2] Users could have used multiple computers, or cleared the cookies in their browser, in order to submit multiple surveys. There is no evidence that any users chose to do this.

Survey Findings

The first three questions dealt with individual email usage.

Section 1: General

Q1: How many email messages do you receive per day?		
answer options	Response Percent	Response Count
Less than 10	3.23%	12
10-50	54.57%	203
51-100	28.76%	107
More than 100	13.44%	50
I don't use email	0.00%	0
answered question		372
skipped question		3

As expected, there were no respondents who didn't use email; as the survey was distributed almost exclusively through email this is not surprising. Other analysts have consistently reported that the average employee receives between 85 and 133 messages per day; the numbers here are somewhat lower than that.

Q2. How many of those emails are business-related?		
answer options	Response Percent	Response Count
0-25%	12.83%	48
26-50%	21.93%	82
51-75%	28.07%	105
76-100%	37.17%	139
answered question		374
skipped question		1

It was felt that the first differentiation to be made was between business- and non-business-related messages. For most users (65.2%), the majority of their messages are business-related. The distinction between messages that are merely business-related and those that are considered records that must be retained in a more controlled fashion is made later in the survey. This is in line with analyst findings that 60-70% of messages are business-related.

Q3. How many of those email messages need to be saved to document business activities?		
answer options	Response Percent	Response Count
0-25%	56.68%	212
26-50%	26.20%	98
51-75%	13.64%	51
76-100%	3.48%	13
Comments		27
answered question		374
skipped question		1

Here respondents are asked to make a further distinction between merely business-related messages and those required to document business activities. A significant majority responded that most of their business-related messages are not required to document business activities (and would presumably therefore not be required to be declared and managed as records).

The most common comment was that most of the business-related messages described in the response were actually transitory in nature and only needed to be saved until a particular event transpired, or were internal customer service messages. Examples provided included meeting announcements and agenda, requests for instructions on how to complete a particular task, and carbon copies (CC:s) of communications between staff.

Another common comment was that those messages were not directly related to the business of the organization but were instead more general and referential in nature. Examples provided included emails and digests from mailing lists and listservs, news summaries, and vendor and product announcements.

The next section asked users to consider email-related policies and procedures created by their organizations.

Section 2: Organizational policies

Q4. Does your organization use email to conduct business or official transactions?		
answer options	Response Percent	Response Count
Yes	95.75%	338
No	2.55%	9
Do not know	1.70%	6
answered question		353
skipped question		22

This is in line with most analysts' findings – almost every organization conducts business using email. This is also consistent with the author's experience in informally polling audiences at professional and trade association events.

In a certain sense this sets the baseline for the rest of the research; it is almost a truism in the records and information management discipline that records are to be managed according to their value to the organization, rather than their media, file format, or other physical or logical characteristics. In other words, *email* isn't a record, but a message could be a record if it is used to document a business decision or transaction or otherwise provides administrative, fiscal, legal, or historical value to the organization.

Q5. Does your organization set a limit on your mailbox size?

answer options	Response Percent	Response Count
Yes	66.19%	231
No	26.93%	94
Do not know	6.88%	24
answered question		349
skipped question		26

Q6. If so, what is that limit? (If there is more than one size allowed, indicate the size of your mailbox)

answer options	Response Percent	Response Count
Up to 50 MB	15.84%	51
51-100 MB	12.42%	40
101-250 MB	14.91%	48
Larger than 250 MB	9.63%	31
Do not know or not applicable	47.20%	152
Comments		31
answered question		322
skipped question		53

One of the most common organizational approaches to managing email is to set limits on the amount of email an individual user can store in the mailbox. In most messaging environments the user will receive an alert of some sort when the limit is approached, and will be unable to send or receive further messages once the limit is reached.

This can lead some users to attempt to circumvent the limits either by deleting messages on their own, thereby potentially deleting messages that should retained, or by moving the messages from the message store or inbox to another storage location such as a personal

archive file, their individual computer, a mobile device, or a personal email account. We will discuss this in additional detail in the conclusions.

In order to appreciate these size limits, consider that the analyst firm The Radicati Group has found that the average user receives almost 18 megabytes (MB) of email per day[3]. A mailbox size limit of 50 MB therefore equates to less than three days worth of email. Even the largest defined mailbox limit, 250 MB, represents less than fourteen days worth of email storage.

The results were relatively evenly distributed between the options provided. But some respondents provided very insightful comments. One noted, "I just get messages from time to time telling me I am over some limit and I usually find some big attachments to delete and then I'm OK again for awhile." Several respondents indicated that when the limit was reached, the user could save as much email as needed in .pst or another personal archive file format.

Q7. Does your organization set a time limit on messages, e.g. all messages older than 30 days are automatically deleted?

answer options	Response Percent	Response Count
Yes	23.14%	81
No	74.57%	261
Do not know	2.29%	8
answered question		350
skipped question		25

Q8. If so, what is that time limit?

answer options	Response Percent	Response Count
30 days or shorter	4.60%	12
31-60 days	7.66%	20
61-120 days	12.64%	33
121 days or longer	4.60%	12
Do not know or not applicable	70.50%	184
Comments		26
answered question		261
skipped question		114

Another common approach is to set a time limit on the inbox, such that messages that are older than a certain date are automatically deleted; some solutions will automatically archive rather than delete, but the principle is the same. Respondents indicated that this is less common than the mailbox size limit approach.

[3] http://www.radicati.com

Both mailbox size and age limitations are often implemented to remove messages from the email message store in order to improve its performance rather than to provide any structured retention or disposition framework. This approach is noted repeatedly in vendor literature and in trade articles that address email management-related topics.

Most respondents indicated that the limits were 61-120 days, followed by 31-60 days. Numerous respondents commented that they read this response as relating to storage specifically within the inbox and that their organization provided a tiered approach to storage and time limits. Some respondents' organizations distinguished between messages stored in the inbox and those stored in personal folders, for example 30 days storage in the inbox and 180 days storage in personal folders; some organizations had no limit on messages stored in personal folders because in many email architectures those are stored on the client machine.

Others drew the line based on storage mechanisms, with messages archived to lower-cost, slower-access storage for some period of time. Examples provided included one year, eighteen months, and five years of storage on these lower tiers of storage.

And several respondents indicate that they do not currently use mailbox time limitations but had done so in the past until they were advised by counsel that their approach was problematic. We will address this further in the conclusions.

Q9. Does your organization allow users to archive their own email (using any techniques including drag & drop, save to .PST/.NSF file, print, etc.)?

answer options	Response Percent	Response Count
Yes	87.03%	302
No	10.37%	36
Do not know	2.59%	9
answered question		347
skipped question		28

The overwhelming majority of organizations allow users to archive their own messages. This may not be so much a conscious decision to allow this behavior as it is a lack of a decision on the part of the organization. Preventing users from dragging messages from the inbox, printing them, or even saving them requires positive action on the part of the organization.

Q10. Does your organization have a policy that addresses retention of individual messages?		
answer options	Response Percent	Response Count
Yes, as part of records management policy	48.13%	167
Yes, as separate policy (e.g. "email policy")	14.99%	52
No	33.14%	115
Do not know or not applicable	3.75%	13
Comments		46
answered question		347
skipped question		28

Fully 60% had some type of policy in place addressing retention of messages, with the bulk of these being addressed as part of a records management policy. Given the makeup of the audience this is not particularly surprising. What is more interesting is that one third of respondents indicated they do not address message retention; given the high-profile civil cases that turn on effective email management or the lack thereof, this response would seem to provide cause for concern.

The comments expressed a common theme, that email is a format type rather than a content type, and should be managed according to the value of the content of the message. Another comment repeated by multiple respondents was that there is a policy in place but that compliance with the policy was not being enforced effectively, or in some cases, at all. As one respondent noted, "It is incorporated into our revised Records Management Policy, but most users are still ignoring it."

Q11. Have you been trained on your organization's policy regarding retention of messages?		
answer options	Response Percent	Response Count
Yes	50.43%	174
No	32.46%	112
Do not know or not applicable	17.10%	59
answered question		345
skipped question		30

Half of respondents indicated they had been trained on the organization's policy regarding message retention, but almost a third had not. This is of significant concern, as many employees have problems following policies without training on how to interpret and apply them to their day-to-day activities.

Q12. Does the organization declare those email messages that relate to the organization's business as records?		
answer options	Response Percent	Response Count
Yes	74.21%	259
No	17.19%	60
Do not know or not applicable	8.60%	30
answered question		349
skipped question		26

Q13. If so, where are those records stored? (Select all that apply)		
answer options	Response Percent	Response Count
Email messaging application (e.g. Exchange)	34.23%	115
Email archival application or service (e.g. EMC emailXtender)	11.01%	37
Electronic document management system	19.64%	66
Electronic records management system	20.24%	68
Individual archive file (e.g. .PST, .NSF)	30.36%	102
As individual messages on a shared drive	30.36%	102
As individual messages on the user's PC	24.40%	82
Printed	49.40%	166
Other	5.95%	20
Do not know or not applicable	13.99%	47
Comments		40
answered question		336
skipped question		39

Almost 75% of users declare business-related messages as records. This again is probably more indicative of the audience for the survey than for industry as a whole.

For the follow-up question users could select as many answers as were applicable, so the results are a bit more challenging to interpret. It is interesting to note that more than a third of organizations use the email server to store records, as the email servers do not generally provide classification (beyond the most basic), retention, disposition, or any other records management functionality. Similar concerns exist with regards to individual messages stored on a shared drive or on the user's PC. Many respondents noted that their organizations allowed any or all of the above; a typical respondent noted, "We're working on standardizing this process, which is all over the map now." Another noted, "No organizationally mandated solution to this, and no dedicated capture and retention tools."

Fully half of organizations print messages that are records. According to the literature this is a very common approach, particularly for messages that must be retained for extended periods or that have permanent retention. That said, printing and filing messages presents a number of problems from a recordkeeping standpoint. First, the sheer volume of information to be printed can be challenging, particularly considering that many messages are quite lengthy, including previous messages in the thread, signature blocks, and email disclaimers. It can also be difficult to verify the authenticity of a printed message which may not include metadata. Attachments present unique difficulties as they can be almost any size and format, including many that do not lend themselves to printing such as complex spreadsheets with formulas, audio and video, and databases.

A number of respondents indicated that their organizations are also at least investigating the possibility of using Microsoft Office Sharepoint Server to store messages (as well as other content). And in at least one organization, messages are printed, then scanned and stored electronically.

Q14. If so, in what format are they stored? (Select all that apply)

answer options	Response Percent	Response Count
Native format (e.g. .msg, .eml)	66.77%	223
Plain text (e.g. .txt)	20.36%	68
TIFF	7.19%	24
PDF	19.46%	65
Word processing format (e.g. Microsoft Word .doc)	21.56%	72
Printed	42.51%	142
Other	4.49%	15
Do not know or not applicable	17.96%	60
Comments		12
answered question		334
skipped question		41

Two thirds of respondents reported they store messages in the native format offered by the messaging application. A significant number of organizations fundamentally change the nature of the electronic messages by converting them to TIFF, PDF, or a word processing format. This is not as common an approach as in years past, but there are a number of sources particularly in the legal field that recommend this approach. Several respondents commented that their organizations did not require any particular format; one noted, “Whatever format works for them.”

And as with the previous question, a significant number of organizations print messages. As one respondent noted, “Basically in whatever format they arrived in. ‘Print and file’ is the RM policy requirement but almost no one follows it. Most users believe e-mail volume is just too great for that

option"; another indicated that "messages of an extremely critical long term value may be printed (less than 3%)".

Q15. Does your organization archive email?		
answer options	Response Percent	Response Count
Yes	66.67%	232
No	23.28%	81
Do not know	10.06%	35
answered question		348
skipped question		27

Q16. If so, what approach(es) does the organization use? (Select all that apply)		
answer options	Response Percent	Response Count
Backup tapes	45.86%	144
Email archival application or appliance	21.34%	67
Hosted/outsourced	2.55%	8
Personal archives, i.e. .PST or .NSF files	28.66%	90
Print and file	27.07%	85
Other	4.14%	13
Do not know or not applicable	26.43%	83
Comments		28
answered question		314
skipped question		61

Users were allowed to provide multiple responses to this question. Taking these two questions together resulted in some interesting responses based on what respondents considered "archiving". Almost half of respondents referred to backup tapes as an archive, which is quite common in the literature but also quite problematic. Backups are generally snapshots of a particular system at a particular time. Those snapshots do not consist of a number of individual email messages, or even generally of inboxes, but rather some or all of the entire message store. In order to access messages from backup, the backup must generally be restored from the backup media to the server and then searched until the desired messages are found.

Many respondents indicated they archived messages in personal archive files; an equal number indicated they archived messages by printing them. Both of these approaches tend to remove the message from organizational control.

The next section focused on email metadata and attachments. Several questions were also included that addressed instant messaging usage.

Section 3: Email metadata and attachments, and instant messaging

Q17. Do you capture metadata for each message stored?

answer options	Response Percent	Response Count
Yes	59.41%	202
No	22.06%	75
Do not know or not applicable	18.53%	63
answered question		340
skipped question		35

Q18. If so, what metadata do you capture? (Select all that apply)

answer options	Response Percent	Response Count
Sender (e.g. From:)	65.45%	197
Recipient (e.g. To:)	63.79%	192
CC:	52.82%	159
BCC:	39.20%	118
Subject line	64.78%	195
Attachment names	50.17%	151
Date sent/received	64.45%	194
Time sent/received	57.81%	174
Other	11.63%	35
Do not know or not applicable	33.55%	101
Comments		25
answered question		301
skipped question		74

Almost 60% indicated that they captured some metadata; all of the most common metadata values were captured by at least 50% of recipients, the only exception being BCC: (which can be difficult to capture outside the message store itself). Many respondents further indicated that they are archiving the individual messages in native format which allowed them to capture all of the message metadata at the same time.

Q19. If so, where is that metadata stored? (Select all that apply)		
answer options	Response Percent	Response Count
In the messaging application (e.g. Exchange)	27.72%	84
In the messaging client (e.g. Outlook)	19.80%	60
In the email archival application	11.22%	34
In an electronic document management system	16.17%	49
In an electronic records management system	17.82%	54
In a separate database (e.g. Access, SQL Server, Oracle)	3.30%	10
Printed	22.44%	68
Other	4.62%	14
Do not know or not applicable	37.29%	113
Comments		15
answered question		303
skipped question		72

Respondents indicated that they used almost every mechanism offered as a choice to store their metadata. The least used was a separate database, which is not particularly surprising given that this approach separates the metadata from the message. The top two choices for metadata storage, in the messaging application or printed, are also not surprising.

Q20. How does your organization manage attachments?		
answer options	Response Percent	Response Count
Stored as part of native email file (e.g. .msg)	42.77%	145
Stored as part of imaged file (e.g. TIFF or PDF)	1.77%	6
Separated from message and stored in EDMS	5.90%	20
Separated from message and stored in ERMS	2.95%	10
Separated from message and stored in network share	7.96%	27
Separated from message and stored on user's PC	3.24%	11

Attachments are blocked or deleted automatically	0.59%	2
Printed	12.09%	41
Other	5.31%	18
Do not know or not applicable	17.40%	59
Comments		51
answered question		339
skipped question		36

Where attachments are managed, they are generally either stored as part of the message or printed. Respondents provided a number of comments which generally fell into two areas. For many respondents, there is no organizational management of attachments; instead, users manage attachments as they deem necessary. One respondent noted, "It is up to the individual user to manage attachments; there is no enterprise-wide solution." Another indicated that management of attachments is "Not specifically addressed in the policy -- except the note that attachments can be records. Again, every man for himself." The other common comment was that the organization does, or at least allows, multiple options from the list provided and respondents wanted to select more than one option.

Q21. Does your organization limit the size of attachments allowed?

answer options	Response Percent	Response Count
Yes	43.82%	149
No	40.00%	136
Do not know or not applicable	16.18%	55
answered question		340
skipped question		35

Q22. If so, what is that limit?

answer options	Response Percent	Response Count
Under 5 MB	14.08%	39
5-10 MB	13.72%	38
10.1 - 20 MB	7.58%	21
Larger than 20 MB	5.42%	15
Do not know or not applicable	59.21%	164
Comments		19
answered question		277
skipped question		98

Many organizations limit the size of attachments that can be sent; of those that do, they commonly limit them to 10 MB per attachment (and generally the same per message). By way of comparison, most

commercial web-based email applications support limits of 10MB or 20MB; some of the smaller ones claim to support attachments as large as 1 GB.

As recently as five years ago, the need to send a 10MB or larger attachment would have been unthinkable for all but a few narrow applications such as engineering drawings, graphic design and other creative media applications, or electronic contracting. Today with the proliferation of audio and video files that support business applications, such as work-related podcasts, just-in-time learning, and videoconferencing, even 20 MB is not that large anymore. There are ways to work around this, some of which will be addressed in the conclusions.

Some respondents indicated that their organizations differentiated between attachments received from outside the organizations and those sent between internal recipients; in fact some organizations imposed no limits on internal attachments. One respondent noted, "With or without attachment, an e-mail must be under 10 MB externally, 50 MB internally".

Q23. Does your organization allow the use of instant messaging?

answer options	Response Percent	Response Count
Yes	38.87%	131
No	47.48%	160
Do not know	13.65%	46
answered question		337
skipped question		38

Q24. If so, what tool(s) are allowed in your organization? (Select all that apply)

answer options	Response Percent	Response Count
Enterprise instant messaging clients, e.g. Microsoft Live Communications Server	22.85%	61
Consumer instant messaging clients, e.g. Yahoo! Instant Messenger, AOL Instant Messenger	17.60%	47
Targeted clients, e.g. Reuters, Bloomberg	2.25%	6
Other	7.49%	20
Do not know or not applicable	58.05%	155
Comments		30
answered question		267
skipped question		108

Most respondents indicated that their organizations do not allow the use of instant messaging; even for those that prohibit instant messaging, however, many respondents noted that it is present and used. One comment noted, "Yahoo, AOL, etc. are against policy but still used"; another indicated that it is

"Not permitted, but some users do set up IM accounts and use them clandestinely." Many respondents indicated in the comments that internal usage is allowed but that IMs cannot be sent to users outside the organization.

Of those organizations that do allow instant messaging, usage was almost evenly split between consumer and enterprise instant messaging applications. This is not surprising given that most instant messaging begins with users introducing consumer applications into the organization without IT support or even knowledge.

The next section deals with usage of personal email accounts.

Section 4: Personal (non-organizational) email accounts and usage

Q25. Do you have a personal email account, i.e. separate from your organizational email account?

answer options	Response Percent	Response Count
Yes	88.34%	303
No	11.66%	40
answered question		343
skipped question		32

The overwhelming majority of respondents indicated that they had a personal email account in addition to that provided by their organization. This is in line with other statistics available in the literature that indicate that as many as 90% of users have one or more personal accounts.

Q26. Do you forward business messages to your personal account?

answer options	Response Percent	Response Count
Yes	29.91%	102
No	63.05%	215
Not applicable	7.04%	24
answered question		341
skipped question		34

Almost a third of respondents indicated that they forward messages to their personal account. While comments were not provided for this question, there are a number of reasons suggested in the literature that users do this, including in no particular order:

- To maintain a copy of a particular message "for their own records"
- To have a complete copy of messages sent and received apart from the organization's systems
- To have access to messages outside of normal working hours and/or away from the organization's physical location, either for informational purposes or to be able to respond to them as required

- In order to respond to the message from an account not controlled by the organization, for example to circumvent ethical walls or content or attachment filtering

Q27. Do you ever use your personal email account to respond to business-related messages?		
answer options	Response Percent	Response Count
Yes	15.54%	53
No	77.71%	265
Not applicable	6.74%	23
answered question		341
skipped question		34

While the majority of users did not use personal accounts to respond to business-related messages, more than 15% did. The reason for asking this question is that the literature strongly suggests that messages sent that relate to the organization's business are discoverable when relevant regardless of the account used to send the message. Users who conduct organizational business using a personal account could have those accounts made subject to discovery, litigation holds, etc.; users whose personal accounts are entirely web-based, such as Google Gmail or Windows Live Mail, may find it difficult and/or expensive to comply with those requests (if they can comply at all).

Q28. Does your organization allow users to access personal email accounts using the organization's computers/network?		
answer options	Response Percent	Response Count
Yes	67.35%	229
No	27.65%	94
Not applicable	5.00%	17
answered question		340
skipped question		35

Two-thirds of respondents indicated they have access to personal accounts using organizational resources. This is in line with the literature; a recent survey conducted by Fulbright & Jaworski on litigation trends indicates that 48% of respondents allow access to outside accounts and 72% allow access to organizational resources from home[4].

These almost certainly represent web-based access and most likely represent commercial web-based accounts such as those listed in the previous question's findings. The issue then becomes whether or not users are mixing business and personal business between those accounts and whether the mere accessibility of personal email creates any discovery-related issues.

[4] Fulbright & Jaworski Fourth Annual Litigation Trends Survey 2007, p.23, http://www.fulbright.com/mediaroom/files/2007/FJ6438-LitTrends-v13.pdf

The literature indicates that many users add their personal email accounts to their messaging client such that all messages are delivered into the same inbox; this would certainly seem to at least bring those messages within the scope of litigation hold and review for relevancy.

The next section addresses legal and discovery-related issues as they apply to email and email management.

Section 5: Classification and discovery

Q29. How many times has your organization had to produce email as part of a discovery or formal audit process?		
answer options	Response Percent	Response Count
0	15.04%	51
1	2.65%	9
2-10	16.22%	55
Too many to count	19.47%	66
Do not know or not applicable	46.61%	158
Comments		18
answered question		339
skipped question		36

A significant percentage of respondents indicated that they had had to produce email for an audit or litigation; the larger the organization, the more likely this is to be the case. Many respondents indicated that they had had to produce messages as part of Freedom of Information Act (FOIA) or other similar open records types of requests.

The Fulbright & Jaworski survey[5] referenced earlier indicated that approximately 30% of organizations had had to respond to a request for discovery of electronically stored information; while this is not specific to email, analyst firm Osterman Research noted in a survey conducted for LiveOffice that 63% of those respondents had had to produce email as part of a legal action[6]. AIIM International noted in their 2006 Industry Watch, "E-mail Management: An Oxymoron?" that 25% of respondents had had to produce email in response to litigation or internal audit[7].

[5] Id., at 22.

[6] http://www.liveoffice.com/newsroom/PDF/WhatYouDontKnowv2.pdf

[7] "E-mail Management: An Oxymoron?" p. 10, AIIM International, 2006, http://www.aiim.org/viewpdfa.asp?ID=32054

Q30. Does your organization's legal hold process include email?		
answer options	Response Percent	Response Count
Yes	61.00%	208
No	7.62%	26
Do not know or not applicable	31.38%	107
answered question		341
skipped question		34

More than 60% of respondents indicated they include email in the legal hold process. This number is slightly higher than indicated in other sources. In question 4 more than 95% of respondents indicated they conduct business using email, leaving a significant gap between those doing business and those who include email in legal holds.

Q31. Does your organization append legal or other disclaimers to email messages?		
answer options	Response Percent	Response Count
Yes	49.85%	170
No	40.76%	139
Do not know or not applicable	9.38%	32
answered question		341
skipped question		34

Half of respondents' organizations append disclaimers to email messages. No other sources were found regarding the usage of disclaimers, other than some small surveys specific to law firms. However, disclaimers were addressed in a number of sources that questioned their legality and efficacy. Some of the concerns cited included:

- Vague or contradictory wording
- Assertions of privilege and/or privacy that were not legally sound
- Whether their use is consistent across the entire organization, its business units, and its individual users
- Usage of disclaimers for new messages vs. replies and/or forwarded messages
- The fact that disclaimers are almost universally placed at the end of the message, where they presumably remain unread until the user has already read the rest of the message
- The concern that messages have disclaimers while other forms of communication do not use them

The final section asked respondents for their demographic information.

Section 6: Demographics

32. Select the option that best describes your organization:		
answer options	Response Percent	Response Count
Public sector	52.23%	176
Private sector	33.83%	114
Consulting/analyst firm	8.01%	27
Other	5.93%	20
Comments		17
answered question		337
skipped question		38

Other types of organizations cited in the comments include nongovernmental organizations (NGOs), individual/freelancer/retired, and private higher education.

Q33. Select the option(s) that best describe your sector/industry: (Select all that apply)		
answer options	Response Percent	Response Count
Education (higher)	15.57%	52
Education (primary)	1.20%	4
Energy	9.28%	31
Engineering	2.69%	9
Financial services	7.19%	24
Government, federal	9.28%	31
Government, local	12.57%	42
Government, state/provincial	18.56%	62
Healthcare	3.29%	11
Insurance	2.69%	9
Legal	5.99%	20
Manufacturing	6.89%	23
Non-profit	6.89%	23
Pharmaceutical	2.69%	9
Retail	3.59%	12
Telecommunications	2.10%	7
Other (enter in comments below)	17.66%	59
Other (please specify)		66
answered question		334
skipped question		41

Other common responses included business services/consulting, hospitality, real estate, utilities, transportation, and hardware/software solutions providers.

Q34. How large is your organization?

answer options	Response Percent	Response Count
1 - 10 employees	5.39%	18
11 - 100 employees	12.28%	41
101 - 1,000 employees	32.93%	110
1,001 - 20,000 employees	36.53%	122
20,000 - 100,000 employees	9.88%	33
100,001+ employees	2.99%	10
answered question		334
skipped question		41

Q35. In what country is your organization based?

answer options	Response Count
	332
answered question	332
skipped question	43

Responses were as follows:

United States:	202
Australia:	89
Canada:	27
Other:	14

Q36. If you are willing to discuss your responses in more detail, please enter your email address below. Note that your responses will remain confidential.

answer options	Response Count
	79
answered question	79
skipped question	296

Q37. Please enter any additional comments.	
answer options	Response Count
	41
answered question	41
skipped question	334

The final question asked for any additional comments; these comments often echoed responses to earlier questions, particularly those that did not offer comments. The three comments listed here are emblematic of the overall results of the survey.

1. "While there are best practices that can be derived from survey data like this, there are also legal and jurisdictional issues associated with managing e-mail. There is no disputing that e-mail is a record and can be entered as evidence in legal proceedings. What is challenging is getting organizations to recognize this and get their practices into line with requirements, so that e-mail can be used effectively as evidence."

2. "Currently, e-mail messaging is the most frequently-occurring form of official records for the organization. They cannot be treated as one homogenous class for retention and disposition purposes; such decisions should be risk- and evidence-based, and related to the business functions supported, the same as for any other forms of records."

3. "My company is too small to worry about managing and controlling email." This comment was included not because it is representative of a significant portion of respondents' comments but because it is representative of many smaller organizations' positions as identified during the literature review. In survey after survey and article after article, comments were left to this effect. Numerous vendors, analyst firms, and other sources offer the same, not particularly rhetorical question: "If you had to provide all of your messages between certain individuals and for certain date ranges, could you?"

Conclusions

The first result of this research is to acknowledge that much more research needs to be done. The survey responses provoked a number of other areas to research further, and the comments in particular were often insightful. The respondent base also needs to be broadened to include more typical users and organizations.

Organizations are not doing everything they could to manage email. Where they do anything at all, they generally address email management from a technology and operational perspective – reducing the amount of email stored in order to reduce the amount of storage required or the length of the backup window. Policies are in place to ensure users do not use email for obnoxious behaviors. But very little has been done to ensure that messages are managed according to the value of the individual message, including its attachments and metadata.

Some of the behaviors described in the literature and confirmed by the survey can substantially increase the risk and liability to the organization. The most visible example of this is in setting mailbox size limitations in the absence of any other control mechanisms; this approach rewards users for keeping their inboxes empty or nearly so, but at the potential risk of their deleting important messages that should be retained as records.

And even where organizations have policies and procedures in place, and where they have implemented technology in support of those policies and procedures, for too many organizations compliance with that governance structure remains the exception rather than the rule. It is clear that organizations are not auditing their employees' compliance with the policies and procedures, which also substantially increases the risk to the organization.

ARMA has published several standards reports designed to address effective email management, including ANSI/ARMA 9-2004, *Requirements for Managing Electronic Messages as Records*, and ANSI/ARMA TR2-2007, *Procedures and Issues for Managing Electronic Messages as Records*. There are a number of additional resources available as listed in Appendix B, References and Additional Resources; organizations should review these resources, most of which are available on the Web at no charge, and audit their current practices in light of those outlined in the references.

Organizations should review their email, information technology, and communications policies to ensure that messages are treated just as any other type of information and that they are managed appropriately throughout the lifecycle. They must train users on expectations for managing email messages, whether the management tool is the email client, an email archiving solution, or some other type of technology approach. Finally, organizations without technology to manage messages in their native format should strongly consider implementation of that technology. Ideally this solution would include records management capabilities, such as an enterprise content and records management solution. But even an email archiving solution provides more effective management capabilities for email than simply leaving them in the messaging application, the client, or personal archive files, or allowing users to store them if, where, and how they choose.

Appendix A: Survey Instrument

This survey is designed to determine how organizations and individuals manage email and other forms of messaging today. It is completely anonymous; I do not track your IP address or email address; the only tracking is done at your end using a cookie that stores your responses until you submit the survey.

The results of the survey will only be used for the ARMA International Education Foundation research project and will not be shared with anyone else.

None of the questions is required; that is, you may answer all, some, or none of the questions. However, the more users answer the questions, the more valid the results will be.

The survey should take 10-20 minutes to complete; if you need to stop or want to change an earlier response, you may do so at any time until you complete and submit the survey. Once it is submitted you may not make changes.

Section 1: General
The first section deals with individual email usage.

1. How many email messages do you receive per day?

- o Less than 10
- o 10-50
- o 51-100
- o More than 100
- o I don't use email

2. How many of those emails are business-related?

- o 0-25%
- o 26-50%
- o 51-75%
- o 76-100%

3. How many of those email messages need to be saved to document business activities?

- o 0-25%
- o 26-50%
- o 51-75%
- o 76-100%

  Comments: _____

Section 2: Organizational email policies
In this section, consider only policies and procedures created by your organization.

4. Does your organization use email to conduct business or official transactions?

- o Yes
- o No
- o Do not know

5. Does your organization set a limit on your mailbox size?

- o Yes
- o No
- o Do not know

6. If so, what is that limit? (If there is more than one size allowed, indicate the size of your mailbox)

- o Up to 50 MB
- o 51-100 MB
- o 101-250 MB
- o Larger than 250 MB
- o Do not know or not applicable

  Comments: _____

7. Does your organization set a time limit on messages, e.g. all messages older than 30 days are automatically deleted?

- o Yes
- o No
- o Do not know

8. If so, what is that time limit?

- o 30 days or shorter
- o 31-60 days
- o 61-120 days
- o 121 days or longer
- o Do not know or not applicable

  Comments: _____

9. Does your organization allow users to archive their own email (using any techniques including drag & drop, save to .PST/.NSF file, print, etc.)?

- o Yes
- o No
- o Do not know

10. Does your organization have a policy that addresses retention of individual messages?

- o Yes, as part of records management policy
- o Yes, as separate policy (e.g. "email policy")
- o No
- o Do not know or not applicable
- o Comments: _____

11. Have you been trained on your organization's policy regarding retention of messages?

- o Yes
- o No
- o Do not know or not applicable

12. Does the organization declare those email messages that relate to the organization's business as records?

- o Yes
- o No
- o Do not know or not applicable

13. If so, where are those records stored? (Select all that apply)

- o Email messaging application (e.g. Exchange)
- o Email archival application or service (e.g. EMC emailXtender)
- o Electronic document management system
- o Electronic records management system
- o Individual archive file (e.g. .PST, .NSF)
- o As individual messages on a shared drive
- o As individual messages on the user's PC
- o Printed
- o Other
- o Do not know or not applicable

  Comments: _____

14. If so, in what format are they stored? (Select all that apply)

- o Native format (e.g. .msg, .eml)
- o Plain text (e.g. .txt)
- o TIFF
- o PDF
- o Word processing format (e.g. Microsoft Word .doc)
- o Printed
- o Other
- o Do not know or not applicable

  Comments: _____

15. Does your organization archive email?

- o Yes
- o No
- o Do not know

16. If so, what approach(es) does the organization use? (Select all that apply)

- o Backup tapes
- o Email archival application or appliance

- o Hosted/outsourced
- o Personal archives, i.e. .PST or .NSF files
- o Print and file
- o Other
- o Do not know or not applicable

  Comments: _____

Section 3: Email metadata and attachments, and instant messaging

This section addresses capture and storage of email message metadata and attachments. At the end of this section are a couple of questions that address instant messaging specifically.

17. Do you capture metadata for each message stored?

- o Yes
- o No
- o Do not know or not applicable

18. If so, what metadata do you capture? (Select all that apply)

- o Sender (e.g. From:)
- o Recipient (e.g. To:)
- o CC:
- o BCC:
- o Subject line
- o Attachment names
- o Date sent/received
- o Time sent/received
- o Other
- o Do not know or not applicable

  Comments: _____

19. If so, where is that metadata stored? (Select all that apply)

- o In the messaging application (e.g. Exchange)
- o In the messaging client (e.g. Outlook)
- o In the email archival application
- o In an electronic document management system
- o In an electronic records management system
- o In a separate database (e.g. Access, SQL Server, Oracle)
- o Printed
- o Other
- o Do not know or not applicable

  Comments: _____

20. How does your organization manage attachments?

- o Stored as part of native email file (e.g. .msg)

- o Stored as part of imaged file (e.g. TIFF or PDF)
- o Separated from message and stored in EDMS
- o Separated from message and stored in ERMS
- o Separated from message and stored in network share
- o Separated from message and stored on user's PC
- o Attachments are blocked or deleted automatically
- o Printed
- o Other
- o Do not know or not applicable

  Comments: _____

21. Does your organization limit the size of attachments allowed?

- o Yes
- o No
- o Do not know or not applicable

22. If so, what is that limit?

- o Under 5 MB
- o 5-10 MB
- o 10.1 - 20 MB
- o Larger than 20 MB
- o Do not know or not applicable

  Comments: _____

23. Does your organization allow the use of instant messaging?

- o Yes
- o No
- o Do not know

24. If so, what tool(s) are allowed in your organization? (Select all that apply)

- o Enterprise instant messaging clients, e.g. Microsoft Live Communications Server
- o Consumer instant messaging clients, e.g. Yahoo! Instant Messenger, AOL Instant Messenger
- o Targeted clients, e.g. Reuters, Bloomberg
- o Other
- o Do not know or not applicable

  Comments: _____

Section 4: Personal (non-organizational) email accounts and usage

These questions are about individual email accounts not issued by the organization, such as GMail, Microsoft Live Mail/Hotmail, Yahoo! Mail, or individual ISP email accounts.

25. Do you have a personal email account, i.e. separate from your organizational email account?

- o Yes
- o No

26. Do you forward business messages to your personal account?

- o Yes
- o No
- o Not applicable

27. Do you ever use your personal email account to respond to business-related messages?

- o Yes
- o No
- o Not applicable

28. Does your organization allow users to access personal email accounts using the organization's computers/network?

- o Yes
- o No
- o Not applicable

Section 5: Classification and discovery

These questions deal with how messages are classified and how they are produced as part of litigation.

29. How many times has your organization had to produce email as part of a discovery or formal audit process?

- o 0
- o 1
- o 2-10
- o Too many to count
- o Do not know or not applicable

  Comments: _____

30. Does your organization's legal hold process include email?

- o Yes
- o No
- o Do not know or not applicable

31. Does your organization append legal or other disclaimers to email messages?

- o Yes
- o No
- o Do not know or not applicable

Section 6: Demographics
This page asks for basic demographic information. As with all of the other questions, these are optional.

32. Select the option that best describes your organization:

- o Public sector
- o Private sector
- o Consulting/analyst firm
- o Other
  Comments: _____

33. Select the option(s) that best describe your sector/industry: (Select all that apply)

- o Education (higher)
- o Education (primary)
- o Energy
- o Engineering
- o Financial services
- o Government, federal
- o Government, local
- o Government, state/provincial
- o Healthcare
- o Insurance
- o Legal
- o Manufacturing
- o Non-profit
- o Pharmaceutical
- o Retail
- o Telecommunications
- o Other (enter in comments below)

Other (please specify) _____

34. How large is your organization?

- o 1 - 10 employees
- o 11 - 100 employees
- o 101 - 1,000 employees
- o 1,001 - 20,000 employees
- o 20,000 - 100,000 employees
- o 100,001+ employees

35. In what country is your organization based?

36. If you are willing to discuss your responses in more detail, please enter your email address below. Note that your responses will remain confidential.

37. Please enter any additional comments.

Appendix B: References and Additional Resources

These are the major resources used to conduct this research and to develop the survey instrument. In the case of the blogs and websites research typically involved reading all posts relating to email management, or in the case of sites dedicated to those topics, to all posts dating from January 2006. There are simply too many posts and articles to list all of them.

Archival and Preservation

Boudrez, Filip and Sofia Van den Eynde. *Archiving e-mail,* Digitale Archivering in Vlaamse Instellingen en Diensten (DAVID), v1.0, August 2002

From digital volatility to digital permanence: Preserving email. Digital Preservation Testbed, Dutch National Archives and the Dutch Ministry of the Interior and Kingdom relations, April 2003

Pennock, Maureen. "Curating E-Mails: A life-cycle approach to the management and preservation of e-mail messages", *Digital Curation Centre Digital Curation Manual,* v1.0, July 2006, S. Ross, M. Day (eds)

Policies and guidelines

ANSI/ARMA 9-2004*, Requirements for the Management of Electronic Messages as Records*, ARMA International, October 2004

ANSI/ARMA TR2-2007*, Procedures and Issues for Managing Electronic Messages as Records*, ARMA International, 2007

E-mail guidelines for solicitors, The Law Society (UK), November 2005

Email Management Infokit, Joint Information Systems Committee (JISC), 2007

Flynn, Nancy, and Randolph Kahn, Esq. *E-Mail Rules: A Business Guide to Managing Policies, Security, and Legal Issues for E-Mail and Digital Communication,* AMACOM Books, 2003

Flynn, Nancy. *Instant Messaging Rules*: A Business Guide to Managing Policies, Security, and Legal Issues for Safe IM Communication, AMACOM Books, 2004

Management of Email as Official Records: Policy, Guidelines and Technical Considerations, State Records of South Australia, v2.1, Feb 21, 2006

Policy Builder by Fortiva and The Electronic Communications Compliance Council (TEC3), http://www.policy-builder.com

Russell, Eleanor. *Guidelines on developing a policy for managing email,* The National Archives (UK), 2004

Technical resources

DOD5015.2-STD, *Design Criteria Standard for Electronic Records Management Software Applications*, United States Department of Defense, Office of DASD (Deputy CIO), 4/25/2007

Model Requirements for the Management of Electronic Records, Cornwell Management Consultants plc for the IDA Programme of the European Commission, March 2001

Programming Internet Email, David Wood. Sebastopol, CA: O'Reilly & Associates, 1999.

Blogs and websites

About.com:Email
http://email.about.com

Archiving101 blog
http://www.archiving101.com/

Cryoserver blog
http://cryoserver-archiving.blogspot.com/

Dennis Kennedy's blog
http://www.denniskennedy.com/blog/

E-Discovery 2.0 blog
http://www.clearwellsystems.com/e-discovery-blog/

E-Discovery Team blog
http://ralphlosey.wordpress.com/

Ed Brill's blog
http://www.edbrill.com/ebrill/edbrill.nsf

EDD blog
http://eddblogonline.blogspot.com/

EDD Update blog
http://commonscold.typepad.com/eddupdate/

Electronic Discovery and Evidence blog
http://arkfeld.blogs.com/

Electronic Discovery Law blog
http://www.ediscoverylaw.com/

EmailTide blog
http://www.emailtide.com/

Ferris Research blog
http://blog.ferris.com

Forrester Information and Knowledge Management blog
http://blogs.forrester.com/information_management/

Forrester Social Technologies blog
http://blogs.forrester.com/charleneli/

Fortiva blog
http://blog.fortiva.com/fortivablog/

Gilbane collaboration blog
http://gilbane.com/collaboration/

Gmail blog
http://gmailblog.blogspot.com/

Grey Consulting blog
http://www.grey-consulting.com/blog/

IBM Lotus Domino blog
http://www.dominoblog.com/dominoblog/dblog.nsf

iMessengr blog
http://www.imessengr.com/

In Re Discovery blog
http://sochaconsulting.com/inrediscovery/

Information Governance Engagement Area
http://infogovernance.blogspot.com/

Instant Messaging Planet
http://instantmessagingplanet.com/

John R. Levine blog
http://weblog.johnlevine.com/

Law.com Legal Technology blog
http://www.law.com/jsp/legaltechnology/index.jsp

Messaging Blogs
http://www.messagingblogs.com/

Messaging News website
http://www.messagingnews.com/

MSDN Outlook Team blog
http://blogs.msdn.com/outlook/

On Message blog
http://www.messagingnews.com/onmessage/

Osterman Research blog
http://www.ostermanresearch.com/blog/

OutlookPower Magazine blog
http://www.outlookpower.com/

Reply to All blog
http://replytoall.typepad.com/

Roger Matus' Death by Email blog
http://www.deathbyemail.com/

Simplicato's Weblog
http://simplicato.wordpress.com/

Sonian Archiving blog
http://blog.soniannetworks.com/

Sound Evidence blog
http://soundevidence.discoveryresources.org/

SpenceatNorthSeas blog
http://spenceatnorthseas.blogspot.com/

The Sedona Conference website
http://www.thesedonaconference.org/

You Had Me at EHLO
http://msexchangeteam.com/default.aspx

Appendix C: Email Management Vendors

This list of vendors is not meant to promote or recommend any of the listed vendors' services. It instead should be used as a starting point from which to conduct research. Similarly, the absence of a vendor in this volatile market should not be construed as a negative; it simply reflects the reality that the market is changing almost on a daily basis.

As with any technology, selection of the appropriate solution should be based on the organization's requirements and technology infrastructure.

The vendors are listed in alphabetical order by company along with the vendor's website.

ArcMail	http://www.arcmailtech.com
Athena	http://www.athenaarchiver.com
Autonomy Zantaz	http://www.zantaz.com/
AXS-One	http://www.axsone.com/
Barracuda Networks	http://www.barracudanetworks.com
C2C Systems	http://www.c2c.com
CA MDY	http://www.mdy.com
Captaris	http://www.captaris.com
Clearview	http://www.clearviewecm.com
CommVault	http://www.commvault.com
Computhink	http://www.computhink.com
Digitech Systems	http://www.digitechsystems.com
Electric Mail	http://www.electricmail.com
Email Systems	http://www.emailsystems.com
Forensic & Compliance Systems	http://www.cryoserver.com/
EMC	http://www.emc.com
Fortiva	http://www.fortiva.com
GFI	http://www.gfi.com
Global Relay Communications	http://www.globalrelay.com
Google Postini	http://www.postini.com
Group Technologies	http://www.group-technologies.com
HP	http://www.hp.com
Hyland	http://www.hyland.com
IBM	http://www.ibm.com, http://www.filenet.com
InBoxer	http://www.inboxer.com
Integro	http://www.integro.com
Interwoven	http://www.interwoven.com
Iron Mountain	http://www.ironmountain.com
IronPort	http://www.ironport.com
LiveOffice	http://www.liveoffice.com
Marshal	http://www.marshal.com

MessageLabs	http://www.messagelabs.com
MessageOne	http://www.messageone.com
Message Partners	http://www.messagepartners.com
MessageSolution	http://www.messagesolution.com
Messaging Architects	http://www.messagingarchitects.com
metaLogic	http://www.metalogic-inc.com
Microsoft	http://www.microsoft.com
Mimosa Systems	http://www.mimosasystems.com
Mobius	http://www.mobius.com
MX Logic	http://www.mxlogic.com
NorthSeas	http://www.northseasamt.com
Open Text	http://www.opentext.com
Optical Image Technology	http://www.docfinity.com
Oracle Stellent	http://www.stellent.com
Orchestria	http://www.orchestria.com
Overtone Software	http://www.overtonesoftware.com
Privacy Networks	http://www.privacynetworks.com
Quest Software	http://www.quest.com
Recommind	http://www.recommind.com
RPost	http://www.rpost.com
Sherpa Software	http://www.sherpasoftware.com
Sonian	http://www.soniannetworks.com
Symantec	http://www.symantec.com
Tangent DataCove	http://www.datacove.net
Titus Labs	http://www.titus-labs.com
Tumbleweed	http://www.tumbleweed.com
Waterford Technologies	http://www.waterfordtechnologies.com
Weird Kid Software	http://www.weirdkid.com
ZL Technologies (formerly ZipLip)	http://www.ziplip.com
Zylab	http://www.zylab.com