

Electronic Mail Management: A Corporate Memory towards Organizational Performance

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ABSTRACT

This study evaluates government practices in electronic mail (email) management to identify perception on the email management's contribution as a corporate memory towards organizational performance. The study uses questionnaires as the instrument and a sample of 250 respondents from various government officers in Putrajaya, Malaysia participated in this survey. The study aims to investigate the practices at the government agencies in applying records management principles to email, such as separating email information from email records in the circulation and dissemination process, storing emails, and applying retention and disposal management. The result reveals that the respondents perceive that the documents send through emails contribute to the better performance of their departments.

Keywords

Electronic Mail Management, Corporate Memory, Perception, Performance, Organization

1.0 INTRODUCTION

An electronic mail message or "email" consists of a digitally stored message and any attached digital documents transferred between computer users. Any organizations either public or private organizations use email for a variety of tasks such as sending and receiving internal and external correspondence, distributing memos, circulating drafts, disseminating directives, transferring official documents, and supporting various business processes of the organizations. Therefore, email constitutes a 'corporate memory' on how an organization conducts its business, evidence of corporate decisions and behavior.

According to Sabah.net (2005), email is provided to enhance the performance of the government. Unnecessarily large email messages or email with unnecessarily large attachments create congestion within and between email systems. This congestion results in long delays and unnecessary costs for the storage and transport of the said email. Just a few excessively large

messages can create a number of email delivery delays and other "performance" failures for many users. Hence, to help manage the potential for email system congestion (and some type of denial of service attacks), controls on interagency and extra-governmental email size should be in place.

Like any other record in any medium, email should be managed according to basic rules and principles. According to Makhura (2005), the management and retention of electronic mail in South Africa is subject to the National Archives and Record Service of South Africa Act (No. 43 of 1996 as amended) and its regulations. Meanwhile in Malaysia, there are guidelines on procedural use of internet and email management established by National Archive of Malaysia and other government agencies such as circulars on email management issued by Jabatan Perkhidmatan Awam (JPA) and Malaysian Administrative Modernization and Management Planning Unit (MAMPU). It is hoped that by establishing the procedures with the compliance to it, Malaysian organizations can create an environment that promotes successful management of email records. According to Sutcliffe (2003), if email is not captured as soon as it is generated, then it may never be captured. Furthermore, once information is published on the Web, it becomes a record, and creates liability for the organization that published it if it has gone through a formal review and approval process.

2.0 PROBLEM STATEMENT

Email has revolutionized communications in the modern working environment. Thousands of valuable email records are created and exchanged by email systems in offices around the world every day. Yet despite this prolific level of usage, the process of managing and preserving email records remains a significant challenge for many organizations. This is not least because of the technical challenge involved in email circulation, but also the accompanying organizational and cultural challenges of raising awareness, achieving compliance, and integrating email management into organizational infrastructures. Email has thus become both a solution and a problem. Failure to properly address these

challenges has already resulted in billion-dollar financial penalties, negative public perception, and corporate embarrassment for a number of high-profile organizations. Such repercussions can only be avoided if action is taken across the life cycle of not only email records but also other, more transient email messages (Pennock, 2006).

Since the envisioning of Malaysia being a developed country in the year 2020 and with the introduction of Electronic Government Flagship Applications in 1996, Malaysian government agencies create many records in electronic formats such as emails, word processed documents, databases and images. Mahfuzah (2004) pointed out; electronic records such as email can be easily manipulated, updated, deleted or altered. There are a lot of problems in managing and preserving electronic records such as technology obsolescence, lack of awareness, security, lack of skills, and one of the main issues in managing electronic records is the lack of standard. This is been supported by Cowper (2005) where he formulated that employers frequently cite their staff as the biggest security risk to their business. Undoubtedly, the only way a company can prevent malicious, offensive or confidential information being transmitted across its network is by invoking the company's ownership of email rights to monitor mail and enforce a consistent and coherent email policy.

Nussey (2002) further expound that larger organizations do not manage the email channel properly because they do not focus on internal cost savings opportunities or investments necessary to improve performance. Executives at these corporations do not manage their internal email management expenses and processes well. Most organizations fail to realize that for every dollar spent on third-party services and solutions, corporations spend at least another dollar on internal costs.

3.0 OBJECTIVES OF THE STUDY

The objectives of this study are to examine the practice of email management in public agencies and to capture the staff perceptions on the contribution of electronic mail management towards organizational performance.

4.0 METHODOLOGY

This study used the survey method. The questionnaires were distributed to a total sample of 250 staffs in five government departments in Putrajaya. Putrajaya was chosen because it is the administrative center for the Federal Government. It is also located within the Multimedia Super Corridor which equipped with the latest infrastructure and high technology facilities. The response rate was 91% with 228 returns.

The questionnaire was designed by partly adapting from the Doctoral Degree thesis entitled "The Contribution of Records Management towards Organizational

Competitive Performance" prepared by Makhura. There were 67 variables focusing on the management of electronic mail and perception on its contribution towards organizational performance. The data were analyzed using descriptive analysis through SPSS 12.0. In addition to the survey, one of the authors of this study is a former system analyst at the National Archive of Malaysia. She also had an experience in checking the email management guideline and did the feasibility study of the guidelines whether it can be implemented in government agencies.

5.0 FINDINGS

5.1 Profiles Of Respondents

The sample of 228 respondents is made up of 29.4% of those who work more than 10 years, 25.4% between 5 to 10 years, 19.7% working between 3 to 4 years, 18.9% between 1 to 2 years and the rest less than 1 year. Only 8.3% and 0.9% of the respondents have academic qualification of Master and PhD respectively. Most of the respondents are bachelor (37.7%) and diploma (34.6%) graduate. The others are STPM (6.6%) and SPM (11.8%).

5.2 Practice Of Email Management

Respondents were asked regarding their filing system management and types of documents that they normally receive, refer, disseminate, store and dispose through email.

Table 1: Formal filing system and procedures manual

	Yes n (%)	No n (%)	Not Sure n (%)
Department has formal filing system for e-records?	90 (39.5%)	49 (21.5%)	89 (39.0%)
Department has filing procedures manual for e-records?	99 (43.4%)	39 (17.1%)	90 (39.5%)

Based on Table 1, 39.5% of the respondents agree that they have a formal filing system for electronic records, 21.5% did not agree and the rest (39.0%) were unsure. For filing procedures, 43.4% agrees that their department have a filing procedure manual, 17.1% did not agree and the rest (39.5%) were also unsure.

The respondents were further asked to rate their filing system for electronic documents received through emails. However, looking at Table 2 below, the data

shows only 26.8% of the respondents rate their filing system as good.

Table 2: The rating of the filing system in the respondents' department/ division

Rating	Frequency (%)
Good	61 (26.8%)
Average	141 (61.8%)
Poor	19 (8.3%)
Very poor	1 (0.4%)
Total	222 (97.4%)
Missing	6 (2.6%)
Total	228 (100.0%)

A small percentage rates their filing system as poor (8.3%), very poor (0.4%) and more than two percent did not answer the question. Majority (61.8%) say their filing system as average. This finding might indirectly disclose that the respondents are fully familiar with their departments' filing system and procedures on electronic documents received through emails.

Table 3: Summary statistics for the type of documents received from email

Type of documents	Yes n (%)	No n (%)
Reports	173 (75.9%)	55 (24.1%)
Minutes	167 (73.2%)	61 (26.8%)
Newsletters	151 (66.2%)	77 (33.8%)
Circulars	150 (65.8%)	78 (34.2%)
Brochures	139 (61.0%)	89 (39.0%)
Policies & manuals	129 (56.6%)	99 (43.4%)
Business plan	80 (35.1%)	148 (64.9%)
Invoices	45 (19.7%)	183 (80.3%)

Table 3 reveals that the type of documents mostly received by the respondents are reports (75.9%), minutes (73.2%), newsletters (66.2%), circulars (66.1%), brochures (61.0%) and policies and manual (56.8%).

The following data as shown in Table 4 illustrates the respondents' answer to the question of the people who consult or refer to their emails.

Table 4: Summary statistics for people who refer to their email

People who refer to their email	Yes n (%)	No n (%)
Internal staff members	186 (81.6%)	42 (18.4%)
Management	115 (50.4%)	113 (49.6%)
Auditors	45 (19.7%)	183 (80.3%)
Researchers	34 (14.9%)	194 (85.1%)
None	27 (11.8%)	201 (88.2%)

The data shows the internal staff members (81.6%) refer and consult mostly to their emails. This is followed by management (50.4%), auditors (19.7%) and researchers (14.9%).

In the case of dissemination of documents using email, the percentage is high for reports (69.3%) and minutes (66.2%), as shown in Table 5. The other components of document disseminations such as circulars, policies and manuals, newsletters, brochures, business plan and invoices are below fifty percent.

Table 5: Summary statistics for type of documents disseminate through email

Type of documents	Yes n (%)	No n (%)
Reports	158 (69.3%)	70 (30.7%)
Minutes	151 (66.2%)	77 (33.8%)
Circulars	107 (46.9%)	121 (53.1%)
Policies & manuals	101 (44.3%)	127 (55.7%)
Newsletters	98 (43.0%)	130 (57.0%)
Brochures	87 (38.2%)	141 (61.8%)
Business plan	55 (24.1%)	173 (75.9%)
Invoices	38 (16.7%)	190 (83.3%)

Based on Table 3, Table 4 and Table 5, there is an indication of email as an important medium for public servants in conducting their work and daily tasks where they receive, use, store and disseminate important document such as minutes, reports, circulars and policies.

The data in Table 6 depicts the respondents' opinion regarding the storage duration and retention of documents they received from emails. More than half of the respondents kept minutes (59.6%) and business plan

(55.4%) in electronic form less than one year. While for report and policies and manuals the percentage is slightly lower (49.8% and 45.9% respectively). The percentage of those who kept the documents more than one year is about thirty percent or lower.

Table 6: The duration of storage and retention of documents received through email

Duration of storage	Types of Document Received from Email			
	Minutes n (%)	Report n (%)	Policies & Manuals n (%)	Business Plan n (%)
Less Than 1 Year	127 59.6%	107 49.8%	94 45.9%	103 55.4%
1-2 Years	56 26.3%	69 32.1%	54 26.3%	48 25.8%
2-4 Years	9 4.2%	13 6.0%	15 7.3%	7 3.8%
More Than 4 Years	21 9.9%	26 12.1%	42 20.5%	28 15.1%

Table 7: Permission to dispose electronic documents in the job

Allow dispose electronic documents in your job	Frequency (%)
Yes	105 (46.1%)
No	123 (53.9%)
Total	228 (100.0%)

Table 7 illustrates the respondents view whether they are allowed to dispose electronic documents in their job or not. Most of them (53.9%) are not allowed to do so whereas (46.1%) says yes.

5.3 Policy on Email Management

The respondents were asked on the existence of policy in their department or division governing email storage and retention. The percentage of those with positive answer is almost seventy percent (69.7%). Only five percent denied they have email management policy. The rest were unsure whether the policy exist or otherwise (25%).

Table 8: Existing policy in dept/ div. governing email storage and retention

Existing policy in governing email storage & retention	Frequency (%)
Yes	159 (69.7%)
No	12 (5.3%)

Not sure	57 (25.0%)
Total	228 (100.0%)

5.4 Perception on the Importance of Email Practice and the Contribution Towards Organizational Performance

Respondents were also asked on the types of document which they percept as contribute most to the department's better performance. About a quarter percentage of the respondents choose report (39.9%), followed by minutes (39.0%), circulars (38.6%), policy and manuals (28.9%) and newsletter (26.8%).

Table 9: Summary statistics for type of documents recognized as contribute most to department better performance

Document contributes most to dept./div better performance	Yes n (%)	No n (%)
Minutes	89 (39.0%)	139 (61.0%)
Reports	91 (39.9%)	137 (60.1%)
Circulars	88 (38.6%)	140 (61.4%)
Policy and manuals	66 (28.9%)	162 (71.1%)
Newsletters	61 (26.8%)	167 (73.2%)
Group total	228 (100.0%)	

6.0 RECOMMENDATIONS AND CONCLUSION

Using emails for communication is easy and it is a form of communication for personal or official affairs, as the study reveals that 81.6% of the internal staff members and 50.4% of the management consult or refer to their emails. The types of documents mostly received and disseminated by the respondents via emails are shown in Table 3 and Table 4 respectively. There are more respondents who receive the different types of documents than there are respondents who disseminate them but the difference is not high. Apparently, reports and minutes have the highest two percentages. The findings also present the types of document which said to contribute most to department's better performance: report (39.9%), minutes (39.0%), circulars (38.6%), policy and manuals (28.9%), and newsletter (26.8%). Based on the types of documents being received or disseminated via emails by the respondents, it is important to note that some of these emails can be classified as records.

As the usage of emails is quite high, based on the results discussed previously, a clear and guided filing system is required for emails just as it is required for paper records. The study reveals 39.5% of the respondents

agree that a formal filing system for electronic records is available but 39% of them are not sure, and 21.5% says it is not available. The same results can be seen in the percentages of the respondents who agree that a filing procedure manual is available (43.4%), not sure about the manual (39.5%) and not available (17.1%). When asked about the rating of the filing system in the departments, the majority agrees that it is just average (61.8%). 26.8% of the respondents think that the filing system is good and only 8.3% says it is poor. If a formal filing system for electronic records is available, or if a filing procedure manual is available, then, based on the above results, the departments should look into providing awareness to the staff. In addition, a case study can also be conducted to understand the issues with the existing electronic records filing system and the issues with the existing filing procedure manual with the aim to improve them.

In addition to a proper filing system for emails, retention and disposal of emails should also be incorporated in the email management. Table 6 shows that the majority of the document types received via emails are stored for less than a year. The study also reveals, in Table 7, the respondents' view whether they are allowed to dispose electronic documents in their job or not. Based on the findings, it cannot be confirmed if the practices stated in Table 6 and Table 7 follow any email retention and disposal policy even though the majority of the respondents (69.7%) are aware of an existing policy governing email storage and retention in their departments, based on Table 8.

The number of email users may increase over time and the types of documents received and disseminated through emails may also expand, and hence, it can be implied that the need to enforce the email management policy (if available), to develop new email management policy, or to improve the existing one becomes vital. This is because records as evidence of departments' activities contain valuable corporate information and the information can be used for various purposes: to assist in strategic planning, to assist in decision making, to identify lessons learned from past experience, to keep identity, to ensure reliability, to ensure integrity, etc. Furthermore, government departments have the responsibility to manage records according to the guidelines specified by the National Archives of Malaysia, as stated in the National Archives Act 2003.

Moreover, if the management of official emails is to contribute to the organizational performance, then the aim is to manage them as records. The way emails are stored, retrieved, and managed technically can vary due to the varieties of email systems being used. Nevertheless, the principles of records management should be incorporated in email management. Hence, the study suggests the following: (1) government departments should have in place email management policy and guidelines, (2) corporate assignment of

responsibility must be addressed, (3) to continuously communicate to the staff regarding the policy and guidelines, the responsibility, and the importance of email management from its creation, dissemination, storage, retention, and disposal, and finally, (4) to implement the email policy and guidelines.

There are several standards and guidelines available on email management which addresses some of the issues of email management. The email guidelines tested by the National Archives of Malaysia (ANM) in 2005/2006 were developed by ANM and the Malaysian Administrative Modernization and Management Planning Unit (MAMPU). Prior to e-SPARK¹ project, ANM has produced a guideline for email management to be used internally. The significance of this guideline is that it covers email retention and disposal. Another guideline in email management was developed by MAMPU. The focus of the guideline is towards the security of using emails to send out official messages. The third guideline for email management was produced as a result of the e-SPARK project. The guideline distinguishes email management using electronic records management systems from email management using email application software.

Those guidelines developed by ANM and MAMPU provide no standard solution for storage and retrieval of email records and even though the guidelines are not able to address all the issues of email management, they are sufficient for an interim measure to save, store, and manage official emails immediately. In order for email management to contribute as a corporate memory towards organizational performance, a policy in managing emails should be comprehensive and corporate assignment of responsibility must be conveyed to all the government staff, and not only to the IT administrators maintaining the email systems. Email management involves the management, email users and administrators; i.e. the creator of emails, the receiver of emails, the IT administrators, as well as the high level management staff who have the authority to enforce email management policy. Users have obligations to use email systems and protect information transmitted through email systems in accordance with the organization's policies and guidelines. Therefore, email users and administrators need training and support to understand and practice the policy.

REFERENCES

Arkib Negara Malaysia. (2002). *Garis panduan penggunaan dan pengurusan mel elektronik* (No.

¹ e-SPARK is a product of the National Archives of Malaysia. It started as a project focused on records management strategy for government departments. As a result of the e-SPARK project Phase I, the National Archives of Malaysia was able to produce the business model for records management and the records management standards and policies.

- Siri PRETM: 1/2002). Kuala Lumpur, Malaysia: Arkib Negara Malaysia.
- Arkib Negara Malaysia. (2004) *e-SPARK Guidelines for the Management of Electronic Records*. Kuala Lumpur, Malaysia: Arkib Negara Malaysia.
- Cowper, Jamie. (2005, January 7). *The threat within - why businesses need to manage and monitor employee e-mail usage*. Retrieved September 20, 2007 from <http://www.continuitycentral.com/feature0164.htm>
- Nussey, Bill. (2002). *Best practices in email channel management*. Retrieved October 3, 2007 from <http://www.emory.edu/BUSINESS/readings/SilverpopWhitepaper.pdf>
- Mahfuzah Yusof. (2004, September 27). Problems in preserving electronic records & standard for electronic records management in Malaysia. *Proceedings of National Seminar on Management of Corporate Memory: Key Challenges, Issues and Trends*. Shah Alam: UiTM, Faculty of Information Management: 27-34.
- Makhura, Mphalane Moses (2005). *The contribution of records management towards an organization's competitive performance*. Unpublished doctoral dissertation, University of Johannesburg. . Retrieved August 11, 2007, from <http://etd.uj.ac.za/theses/available/etd-05112005-120710/>.
- MAMPU. (2003). *Garis panduan mengenai tatacara penggunaan internet & mel elektronik di agensi-agensi kerajaan* (Pekeliling Kemajuan Pentadbiran Awam Bil.1 Tahun 2003). Putrajaya, Malaysia: MAMPU. Retrieved January 1, 2008 from <http://www.mampu.gov.my/mampu/pdf/pkpa012003.pdf>
- Pennock, Maureen. (2006). *Managing and preserving emails*. Retrieved October 7, 2007 from <http://www.information.net>
- Sutcliffe, Paul (2003). Building the corporate memory in the eenvironment. *Records Management Journal*, 13(2), 51-53. Retrieved September 29, 2007, from <http://www.emeraldinsight.com>
- Unit Kemajuan IT Negeri (2005). *It policies and standards: electronic mail*. Sabah: Kementerian Pembangunan Sumber Kemajuan Teknologi Maklumat. Retrieved February 20, 2008, from <http://www.kit.sabah.gov.my/policy/mail.htm>