

THE EFFECTIVENESS OF EMAIL USE BY MALAYSIA GOVERNMENT MINISTRIES

Wan Maisara Wan Mohamad, Noor Hazarina Hashim
Faculty of Management and Human Resource Development
Universiti Teknologi Malaysia

This study used a mystery email approach to investigate the effectiveness of email use by Malaysian Government agencies. The ministries had difficulty in providing quality email response across the five criteria, prompt, polite, professional, personal and promotions. The poor responsiveness and quality by the ministries illustrate that better email policies and training would give the ministries an immediate competitive advantage via improved email customer service. The article closes with practical suggestions to improve email and future research

Keywords: Electronic government, Information technology, online services, email

1. INTRODUCTION

E-government can be defined as the application of information and communication technology (ICT) to improve the efficiency, responsiveness, transparency, and accountability of government (Sobhan, Hossain, & Chowdhury, 2004). Common applications of e-government include online delivery of government information and services, computerized licensing and registration, web-based tender notification and procurement, web-enabled complaints submission, and online public comment for draft legislation. Computerization and networking among computers is an important steps towards e-government; replacing the manual government process (Basu, 2004). E-government aims to streamline relationships between government, business, and citizens through effective use of ICT (Welp, Urgell, & Aibar, 2007).

The level e-government application differs from one country to another. Studies identified three levels of e-government services, which vary in sophistication from the most basic to the most sophisticated (Sobhan et al., 2004). The most basic function is where the government provides information before evolving into providing transaction facilities on the next stage. Countries such as Singapore, the US and Australia has advanced to the highest level where the government provides integrated services involving several government agencies.

Nevertheless, the e-government application is not limited to website *per se*. Email, the most popular Internet application, is one of the communication mean that citizens could use. As Henry Hareveldt, the principal travel analyst at Forrester Research note in Sharky (2003), "Email is no longer an acquisition tool; it is a retention tool, too, to facilitate your relationship with your customer." Yet, research related to email use in e-government is limited. Studies examines the website design and use (see for example:) but to the authors' knowledge, very few study has investigated the effectiveness of email use in an electronic government.

The Ninth Malaysia Plan indicated a total of RM 2.2 billion was allocated to the development of ICT for public sector in 2005. This figure us projected to grow at the rate of 10% annually. Given the already massive spending amount in ICT and potential future investment, this study argues that an assessment could perhaps shed a new light on the

success of Malaysia's e-Government applications. The Malaysian government appears in conceptual terms to be committed to public engagement and responsiveness but many questions arise on the actual practice. Are government ministries responding to query made via email? Are their response timely, accurate and of reasonable quality?

Thus, this study aims to test one component of e- government responsiveness: the basic capacity to answer a simple question posted by email and time taken to respond. As noted by Mohamed (2008), "While it is important to have email addresses available on government websites, they serve no purpose unless someone actually reads and responds to the messages received".

2. DEFINITIONS OF E-GOVERNMENT

E-government is an instrument of the public sector modernisation agenda in management, markets and monitors (Beynon-Davies and Martin, 2004). The definition of what e-government is still subject to changes over the years. For instant, Curtin et al. (2004) define e-government as:

. . . the use of any and all forms of information and communications technology (ICT) by governments and their agents to enhance operations, the delivery of public information and services, citizen engagement and public participation, and the very process of governance.

In this definition, e-government is seen as a lever for modernisation. It is particularly seen as a lever for process change amongst government administrations with significant potential for performance improvement in the public sector. The definition also includes consideration of interaction with external agents particularly through the use of ICT to enable and enhance democratic participation (Basu, 2004).

Turban and King (2003) defined e-government is the application of information technology and e-commerce to the process of government. It is also an efficient and effective way of conducting business transactions with citizens and other business and within government themselves. Some use the term e-government to mean an extension of e-commerce to government procurement. This use of the term views e-government only in the realm business to government transactions (International Trade Center Executive Forum, 2000).

In addition, Rayport and Jaworski (2001) defined e-government as federal, state and local government applications that elicit payment or documentation submission over the net. Almost all federal and state government agencies have websites, although many do not have good websites. Many of the sites have static webpages that offer only a description of the department and a phone directory. A survey done by the Taubman Center for Public Policy at Brown University in 2000 shows that only a third offered frequently ask questions and only 22 percent offered any online services. The same study found that few government websites offer a security and privacy policy on their web. In fact, it is shows that most government websites do not offer the ability to do transactions may be for the best, especially since governments often deal with very sensitive data that could compromise the privacy of the user.

In the late 1990s, as governments began offering services online, many struggled to integrate sometimes decades-old processes with modern technology. As government officials and staff members have grown more comfortable with e-government, and residents have come to expect online services, many cities and counties and their leaders now are focused on ensuring that those services consistently follow public policy. Using advances in e-government technology, agencies are streamlining even the most complex processes, and their department managers are tailoring

their own business applications. But, the applications still need to maintain citywide policy standards, which are best set by the top administrative leaders (Fink, 2000).

3. METHODOLOGY

This study used a mystery email method to obtain the response. Similar to mystery shopping where a company sends mystery shoppers to evaluate their service, this study used a mystery email to ministries. Mystery shopping, used extensively in retail and hospitality sectors, helps companies monitor their service quality and identify areas needing improvement (Beck & Li, 2003; Wilson, 1998). The mystery email asked the ministries to respond to a short message asking about the agencies under each ministry. A pre-test to 2 ministries in Singapore and Indonesia helped familiarize the researcher with the process.

The Malaysia government website (<http://www.malaysia.gov.my>) provide website and email addresses directory for all ministry in Malaysia government. There are 24 url's Ministries, complete with the portal and email address, phone and fax numbers. The population was a census of 24 ministries in Malaysia government 2009. This study assessed email reply quality as a measure of effective email use. This study uses five criteria derived from previous email studies to evaluate the email response (Matzler, Pechlaner, Abfalter, & Wolf, 2005; Murphy, Olaru, Schegg, & Frey, 2003). Table 1 lists the five criteria.

Table 1 Features and description for quality email reply

Features	Description
<i>Prompt</i>	1. Replied within 24 hours
<i>Polite</i>	2. Opened with 'Dear' 3. Thanked the recipient 4. Used 'Please' 5. Closed politely such as 'Best regards'
<i>Personal</i>	6. Greeted recipient by name 7. Closed with sender's name 8. Included sender's title
<i>Professional</i>	9. Answered question 10. Used proper English
<i>Promotion</i>	11. Signature file 12. Slogan or other promotional messages

The email was sent individually as studies using a mystery email technique suggest sending the email individually to avoid information overload and spam filters (Murphy et al., 2003). Further, to eliminate country of origin biases, this study used a English name and a Gmail email address ending in a global domain, adambrown991@gmail.com. The 24 personalized emails were sent on August, 25 2009.

Copying the responses into a Microsoft Word document allowed the researcher to investigate the presence of each feature in the response. Using Microsoft Words search function, the researcher searched for words included in the 12 criteria such as "Thank you" and "Dear" and any spelling or grammar errors in the reply.

4. DISCUSSION OF FINDINGS

Out of the 24 emails sent to the 24 ministries only two (8%) ministries replied and 17% of the email bounced and undelivered (see Figure 1).

Figure 1: Mystery email response rate

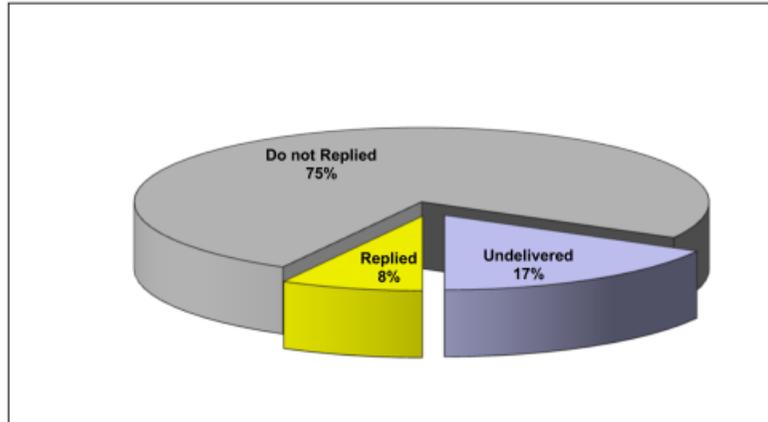


Table 2 shows the email quality reply for the two ministries replying the email

Table 2 Email reply with the 13 features

Feature	% with feature
1. Prompt – Replied within 24 hours	50
Average politeness score: 50%	
2. Polite - Opened with 'Dear'	100
3. Polite - Thanked the recipient	50
4. Polite - Used 'Please'	0
5. Polite - Closed with 'Best regards'	50
Average personalisation score: 100%	
6. Personal - Greeted recipient with name	50
7. Personal - Closed with sender's name	100
8. Personal - Include sender 's title	0
Average professionalism score: 100%	
9. Professional - Answered question	100
10. Professional - Used proper English	100
Average professionalism score: 100%	
11. Promotion - Signature file	0
12. Promotion - Slogan or other promotional	0

messages	
Average promotional score: 0%	

The two ministries that response to the email scored the highest in providing personal replies and professionalism. The two ministries answered the email more than 24 hours and thanked the recipient for the enquiry (50%). None of the two ministries use ‘Please’ in their email and one out of two ministries (50%) closed their email politely such as with ‘Best regards or ‘Yours sincerely’. One of two ministries (50%) greeted the recipient by name. Only one ministry included the sender’s name, but none (0%) included their title or position in the response. All the ministries answered the questions (100%) with proper English. The ministries failed to use email as a promotional tool with none (0%) including promotional message and signature files on their email.

As a suggestion, the related parties must take this issue as a serious issue and immediately action must be taken to ensure that the emails will be answered properly. Special group or individual that responsible in answering the emails must be created in proper timing. This situation must be handled with seriously to keep the image and fulfil the overall government mission of the website and emails as a delivering tool with the citizens.

5. CONCLUSION

The poor response rates indicate poor email management by the ministries. This reflects that emails are not taken seriously as a tool for public inquiries. The emails can be seen as only a tool in appearance and in serious implementation. Efficient email handling is a critical business success factor (Coussement & Van den Poel, 2008). The ministries should provide email addresses but must avoid problems such as bounced emails, low reply quality or worse, no reply to enquiries as these harm the ministry’s service quality. Ministries should train their staff on email policies or use automatic email classification to improve their online customer services (Coussement & Van den Poel, 2008). In addition, ministries could analyse their email response and address common email questions through an FAQ section on their websites (Murphy et al., 2003; Schegg, Murphy, & Leuenberger, 2003).

REFERENCES

- Bagchi, K., Gallup, S., Cernveny, R. (2001) An Empirical Study on E – government Readiness: The Roles Of Institutional Efficiency And Interpersonal Trust. *Journal of International E – government* 5, 22-51.
- Basu, S. (2004) Government and Developing Country: An Overview. *The Journal of International Review of Law Computers* 18, 109-132.
- Batini C., V., G., Cherubini, D. (2009) GovQual: A Quality Driven Methodology for E – government Project Planning. *The Journal of Government Information Quarterly*, 2, 106-117.
- Chen, S. C., Chen, M., Zhao. N., Hamid, S., Chatterjee, K., Armella, M. (2009) Florida Public Hurricane Loss Model: Reaserch in Multi - Disciplinary System Integration Assisting Government Policy Making. *The Journal of Government Information Quarterly* 3, 1-9.
- Coussement, K., & Van den Poel, D. (2008). Improving Customer Complaint Management by Automatic Email Classification using Linguistic Style Features as Predictors. *Decision Support Systems*, 44(4), 870-882.
- Curtin, G. G., Sommer, M. H., and Vis-Sommer, V. (2004). *The World of E-Government*. New York: Haworth Press.

- Davies, P. B. (2007) Models for e-government. *The Journal of Transforming Government: People, Process and Policy* 1, 7-28.
- Deconti, L. (1998) Planning and Creating a Government Website: Earning For the Experience of United States. *The Journal of Information Systems for Public Sector Management*, 4, 23-61.
- Duyne, D. K. V., Landay, J. A., Hong, J. I. (2007) *The Design of Sites: Patterns For Creating Winning Web Sites.*, United States, Pearson Education.
- Fink, D., Laupase, R. (2000) Perception of Website Design Characteristics: A Malaysian/Australian Comparison. . *The Journal of Electronic Networking Applications and Policy* 10, 50-55.
- Flavian, C., Torres, E., Guinaliu, M. (2004) Corporate Image Measurement: A Further Problem for the Tangibilization of Internet Banking Services. *The International Journal of Internet Bank Marketing* 22, 366-384.
- Gao, Y. (2005) *Web System Design and Online Consumer Behaviour*, United Kingdom, Library of Congress Cataloguing-in-Publication Data.
- Garcia, A. C. B., Maciel, C., Pinto, F. B. (2004) A Quality Inspection Method To Evaluate Government Sites. *The Journal of Information Quarterly* 4, 211-222.
- Government, M. (2009). Publication. Retrieved 10 Jun 2009: www.malaysia.gov.my
- Gunawan, G., Chadwick, F. E., King, M. (2008) An Empirical Study on the Uptake of Performance Measurement by Internet Retailers. *The Journal of Internet Research*, 18, 361-381.
- Gupta, M. P., Jana, D. (2003) E – government Evaluation: A framework And Case Study. *The Journal of Management and Technology* 4, 365-387.
- Haak, M. J. V. D., Jong, M. D. T. D., Schellensp. J. (2009) Evaluating municipal Websites: A Methodological Comparison of Three Think – Aloud Variants. *The Journal of Information Quarterly* 26, 193-202.
- Jaeger, P. T. (2008) User – Centered Policy Evaluations of Section 508 of the Rehabilitation Act: Evaluating E-government Websites for Accessibility for Persons with Disabilities. *The Journal of Disability Policy Studies* 19, 24-33.
- Heeks, R. (2006). *Understanding and Measuring eGovernment: International Benchmarking Studies*. Hungary. (D. I. Group o. Document Number).
- Hong, S., Katerattanakul P., Lee, D. H. (2008) Evaluating Government Website Accessibility: Software Tool Vs human Expert. *The Journal of Management Research News* 31, 27-40.
- Kamal, M. M., Weerakkody, V., Jones, S. (2009) The case of EAI in Facilitating E – government Service in Welsh Authority. *The International Journal of Information Management* 2, 161-165.
- Kim, H. K., Davis, K. E. (2009) Toward A Comprehensive Theory of Problematic Internet Use: Evaluating the Role of Self – Esteem, Anxiety, Floe and the Self - rate Important of Internet Activities. *The Journal of Mass Communication*, 23, 490-499.
- Knuckles, C. D., Yuen, D. S., (2005) *Web Applications: Concept and Real World Design*. , United States, John Wiley & Sons.
- Lazar, J. (2001) *User-Centered Web Development.*, United States, Library of Congress Cataloging-in-Publication Data.
- Matzler, K., Pechlaner, H., Abfalter, D., & Wolf, M. (2005). Determinants of Response to Customer E-mail Enquiries to Hotels: Evidence from Austria. *Tourism Management*, 26(2), 249-259.

- Mohamed, N. (2008) Internal Users Self – Assessment of Malaysia's E – government Flagship Applications in Lead Implementation Agencies. *The Journal of Information Systems for Public Sector Management*, 2, 13-21.
- Mullarkey, G. W. (2004) Internet measurement Data – Practical and Technical Issues. *The Journal of Marketing Intelligence and Planning* 22, 42-58.
- Murphy, J., Oлару, D., Schegg, R., & Frey, S. (2003). The Bandwagon Effect: Swiss Hotels' Website and E-mail Management. *Cornell Hotel and Restaurant Administration Quarterly*, 44(1), 71-87.
- Nielsen, J. (1999) User interface directions for the Web. *Journal of Communications of the ACM*, 42, 65-72.
- Nijnik, M., Zahvoyska, L., Nijnik, A. Ode, A. (2008) Public Evaluation on Landscape Content and Charge. *The Journal of land Use policy* 26, 77-86.
- Pollitt, C. (2005). *International Experience of Public Management Reform: Lesson Which We Can Learn* o. Document Number.
- Powel, T. A. (2002) *The Complete Reference: Web Design*, United States, McGraw Hill.
- Publication. (2009). Retrieved 10 Jun 1009, from Malaysia Government: www.pmo.gov.my.
- Raus, M. F., B., Boutellier. (2009) Electronic Customs Innovation: An Improvement of Governmental Infrastructures. *The Journal of Government Information Quarterly*, 4, 1-11.
- Rayport, J.F., Jaworski, B.J. (2001) *e-Commerce*, New York: McGraw-Hill/Irwin
- Schuppan, T. (2009) E-government In Developing Countries: Experiences from Sub – Saharan African. *The Journal of Government Information Quarterly* 26, 118-127.
- Seize the day: The Silent Commerce Imperative [Electronic. (2002). Version]. Retrieved 12 July 2009, from www.accenture.com/silentcommerce.
- Sharkey, J. (2003) Email is big factor in recovery. *The New York Times*, <http://www.nytimes.com/2003/04/15/business15ROAD.html>.
- Sidoroff, T., Hyvonen, E. (2000) Semantic E – government Portals. *The Journal of Information Technology*, 4, 112-127.
- Skaleerud, D., Ove, Nils, Ivar, Hamar. (2003) Method an A System for Email Evaluation. *The Journal of International Research Report* 17, 137-149.
- Smith, A. G. (2001) Applying Evaluation Criteria to New Zealand Government Websites. *The Journal of Information Management* 4, 137-149.
- Sobhan, F., Shafiullah, M., Hossain, Z., Chowdhury, M. (2004) Study of eGovernment in Bangladesh. Bangladesh, Bangladesh Enterprise Institute.
- Themistocleous, M., Sarikas, O. D. (2005) Thoughts on E-government. *The Journal of Enterprise Information Management* 18, 508-510.
- Tsai, N., Choi, B., Perry, M. (2009) Improving the Process of E – government Initiative: An In – Dept Case Study of Web - Based GIS Implementation. *The Journal of Government Information Quarterly*, 74, 508-510.
- Turban, E., King, D., Lee, J., Warkentin, M. and Chung, H.M. (2002). *Electronic Commerce 2002: A Managerial Perspective*. New York

Welp, Y., Urgell, F., & Aibar, E., (2007) From Bureaucratic Administration to Network Administration? An Empirical Study on E-Government Focus on Catalonia. *Public Organization Review*, 7 (4), 299-316.

Wilson, A. M. (1998). The Role of Mystery Shopping in the Measurement of Service Performance. *Managing Service Quality*, 8(6), 414-420.