UNIVERSITI PUTRA MALAYSIA

FACTORS INFLUENCING COMMUNICATION SATISFACTION AMONG E-MAIL USERS IN SELECTED PRIVATE ORGANISATIONS IN INDONESIA

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UPM

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By

TUTI IRIANI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Doctor of Philosophy

Februari 2006

UPM

Special Dedication

This thesis is dedicated to Bapak Drs. H. Suyadi, MP and Ibu Hj. Sri Rahayu Suyadi
My beloved husband, Dr. Joko Prihatno
My Son, Rangga, My daughters, Laras and Ambar,
Brothers and sisters.

For their invaluable love, understanding, prayers, support and constant faith.
Their encouragement made me possible to complete my study successfully

Abstract of thesis presented for the Senate of Universiti Putra Malaysia in partial fulfilment of the requirements for the degree of Doctor of Philosophy

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By

TUTI IRIANI

February 2006

Chairman : Narimah Ismail, PhD

Faculty : Modern Languages and Communication

The most popular method of computer mediated communication in organisation is e-mail. A large number of the uses of e-mail in an organisational setting could in fact be classified into the dimension of task related use and social use. Therefore, it is the aim of this study to determine the influence of e-mail use factors (experience, task, and social related e-mail usage and user characteristics) on communication satisfaction of e-mail users. The study investigated the difference between user characteristics and communication satisfaction; relationship between e-mail usage factors and communication satisfaction; and predictors of e-mail usage factors towards communication satisfaction among e-mail users.

The present study used survey design in order to achieve the objectives of the study. Purposive sampling was used to select a total of 305 employees of four selected private companies. The study used self-administered structured questionnaires as the

research instrument. Statistical analyses used in this study were the Chi-Square, Pearson Product Moment Correlation and Stepwise Multiple Regression.

This study discovered that the employees experienced moderate to high level of communication satisfaction while using e-mails to communicate. There were no significant differences on the communication satisfaction between gender, age, educational attainment and position respectively.

Frequency of using e-mail icon influenced communication satisfaction of e-mail users, while number of years of using e-mail did not influence communication satisfaction. Task related e-mail usage (exchange information and decision making) and social related e-mail usage (interpersonal need and relationship development) had significant positive relationship with communication satisfaction. Task related e-mail usage and social related e-mail usage was a significant predictor of communication satisfaction. However, relationship development is a major determinant influencing communication satisfaction among e-mail users.

This study recommended that task and social related e-mail usage should be considered as interdependent dimensions by e-mail users as both would contribute towards communication satisfaction that have potential impact on the organisations.

Abstrak tesis yang dikemukaan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk mendapatkan ijazah Doktor Falsafah.

FAKTOR YANG MEMPENGARUHI KEPUASAN BERKOMUNIKASI DI ANTARA PENGGUNA E-MEL DI ORGANISASI SWASTA TERPILIH DI INDONESIA

Oleh

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E-mel merupakan kaedah komunikasi berasaskan komputer yang paling popular dalam organisasi. Sebahagian daripada penggunaan e-mel dalam sesebuah organisasi boleh diklasifikasikan kepada dimensi penggunaan berkaitan tugasan dan penggunaan berkaitan sosial. Oleh itu, tujuan kajian ini adalah untuk menentukan pengaruh faktor penggunaan e-mel (pengalaman, tugasan, faktor sosial dan ciri-ciri pengguna) terhadap kepuasan berkomunikasi di kalangan pengguna e-mel. Kajian ini telah menyelidik perbezaan di antara ciri-ciri pengguna dan kepuasan berkomunikasi, hubungan di antara faktor penggunaan e-mel dan kepuasan berkomunikasi serta peramal kepada faktor penggunaan e-mel terhadap kepuasan berkomunikasi pengguna.

Kajian ini telah menggunakan kaedah tinjauan untuk menjawab semua objektif kajian. Persampelan bertujuan telah digunakan untuk memilih sejumlah 305 pekerja daripada empat syarikat swasta yang terpilih. Kajian ini telah menggunakan borang soal selidik

berstruktur sebagai instrumen kajian. Analisis statistik yang digunakan dalam kajian ini adalah Khi-Kuasa dua, Korelasi Pearson dan Analisis Regresi Pelbagai.

Kajian ini menunjukan bahawa pekerja organisasi yang dikaji tersebut mengalami kepuasan berkomunikasi dari tahap sederhana ke tinggi semasa menggunakan e-mel untuk berkomunikasi. Selain itu, tiada perbezaan yang signifikan dalam kepuasan berkomunikasi antara jantina, umur, pencapaian akademik dan jawatan pekerja. Frekuensi menggunakan ikon e-mel mempengaruhi kepuasan berkomunikasi manakala bilangan tahun menggunakan e-mel tidak mempengaruhi kepuasan berkomunikasi di antara pengguna e-mel. Penggunaan e-mel berkaitan tugasan (pertukaran maklumat dan membuat keputusan) dan penggunaan e-mel berkaitan sosial (keperluan interpersonal dan pembentukan hubungan) setiap satunya mempunyai perhubungan yang positif yang signifikan dengan kepuasan berkomunikasi. Penggunaan e-mel berkaitan tugasan dan penggunaan e-mel berkaitan sosial merupakan penyumbang yang signifikan kepada kepuasan berkomunikasi. Walau bagaimanapun, pembentukan hubungan merupakan penentu yang utama dalam mempengaruhi kepuasan berkomunikasi di kalangan pengguna e-mel.

Kajian ini mengesyorkan bahawa pengguna e-mel perlu mengambil kira penggunaan e-mel berkaitan tugasan dan sosial sebagai dua dimensi yang saling bergantungan kerana kedua-duanya mempengaruhi kepuasan berkomunikasi yang berupaya memberikan impak kepada organisasi.

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CHAPTER I

Introduction

Background of Study

Since the 1960s, innovations in computers and telecommunication have created a wide array of new communication media. Computer-based communication technologies such as e-mail, video conferencing, voice messaging, facsimile and computer bulletin board are dramatically changing the way people work in organisations. Computer mediated communication (CMC) undoubtedly plays a central role in the transformation of organisations (Johnson, 1993).

Given the advent of new CMC, Miller (1999) noted a number of characteristics pertaining to these new technologies. First, many of these technologies allow faster message transmission. Second, these new technologies permit communication among geographically dispersed participants. Third, these new technologies allow asynchronous communication between individuals at different points in time. In summary, communication technologies offer organisational participants a wide array of interaction and decision making options that substantially differ from traditional way of working by allowing faster communication especially for distantly located participants at different points of time.

According to Fox (2001), among the many CMC e-mail has perhaps achieved the most widespread acceptance in organisations. E-mail is defined as a computer system for the exchange of messages and other information that may include text and numerical data, computer programs, video, graphics and sound (Kettinger & Groven, 1997). E-mail is a form of information interchange in which messages are sent from one personal computer to another via modems and telecommunication system (Anderson, Bikson, Law & Mitchell, 1995). Hence, e-mail can be used to send simple messages to targeted individuals, broadcast information to a large organisational group, chat with collaborators across the country or world or exchange and revise long and complex documents (Miller, 1999).

The use of e-mail has grown profoundly since it first traversed the Arpanet in 1969. The Electronic Messaging Association (EMA) estimated that as many as 30 to 50 million people use e-mail worldwide (Pavlik, 1998). Additionally, according to the research conducted by industrial analysts in the United States, the number of e-mail users worldwide is estimated to increase about 138 % from 505 million users in 2000 to 1.2 billion in 2005 (Onggo, 2002).

Many management consultants see e-mail as an enabling technology for corporate reform, increasing organisational communication efficiency to such a great degree that the ranks of middle management are significantly thinned and makes communication more direct and less multi-layered. In some

workplaces in the corporate world, e-mail has become the pervasive communication medium to the extent that at Microsoft for example, 99% of communication takes place via e-mail, and it is said that the phone never rings (Waldvogel, 2001).

E-mail is ranked third after face-to-face communication and telephone as the most used medium among the top management in private organisations (Hasrina, 2001). Thus, with the extensive use of e-mail, an organisation is able to process and distribute vital information which is an asset to the organisation to boost its efficiency and work effectiveness.

In Indonesia, the Internet is a part of the Information and Communication Technology (ICT) and is called "Telematika". A recent study by Satriya (2004) indicated that the development of "Telematika" is at an infant stage compared to other countries like India, China dan Malaysia.

There are number of reasons as to why Indonesia has been so slow to adopt the Internet. The main causes are lack of access to computers and the Internet; limited awareness and mastery of the medium; little content of relevance to Indonesians and speakers of Bahasa Indonesia. Other reasons are socio-cultural the equating of information with power, a desire for less openness, comfort with ambiguity and unease with clarity, a managerial

culture that values hierarchy and seniority and other traditional values (Owen, Sulaiman, Baldia & Mintz, 2001)

Nevertheless, business opportunities in the "Telematika" sectors have marked an increase in the number of computers in schools, homes and offices. The number of Internet subscribers in Indonesia is also increasing dramatically. The data indicated that in 1999, Indonesia had 78,139 corporate users and 242,224 personal users. In 2003, the number of users increased enormously to 148,526 corporate users and 591,046 personal users. Table I displays the number of personal and corporate Internet subscribers in Indonesia from 1999 through 2003. Indonesia has on average 23% of annual Internet growth (http://www.insan.co.id-info@insan.co.id)

Table I: Internet Subscribers in Indonesia

Years	Personal users	Corporate Users	Total
1999	242,224	78,139	320,362
2000	307,717	85,952	393,670
2001	409,042	103,143	512,185
2002	472,838	123,770	596,608
2003	591,046	148,526	739,571

Source: Indonesia Internet Statistic (CIC/MARS)

A survey conducted by AC Nielsen and Castle Asia stated that 60% of the industries in Indonesia are connected to the Internet. The findings showed

that 96% of industry players use the Internet to send and receive e-mail, 90% of industries make use of the Internet to communicate with buyers and 48% with suppliers (Bisnis Indonesia, 27/9/2001).

With regard to the e-mail development in Indonesia, there is no documented information on when the era began. Rahmat (2000) stated that standalone e-mail was in use since early 1960s as a channel to exchange information between computer mainframe operators. At the time, the email format was very simple whereby it was only a file that can be attached by other users. Whereas network mail or now often called as e-mail was used by Arpanet in the mids of 1970s. This network mail was further developed by a group of workers *"MSGgroup"* by using mailing list starting from 1975. Since the beginning of 1980s, there was a script which could be used to send messages or e-mail to all staff. Since then, "message" with *Unix* and *Ethernet* was developed in 1983.

Based on the history of e-mail usage in Indonesia, three things can be said as the mark of the second generation from the usage of mailing list in Indonesia. Firstly, the availability of hardware (modem and personal computers); secondly, the activities of Indonesian community who started to experiment the usage of hardware and finally, the Indonesian community abroad (especially student) started to use e-mail for communication. At the end of 1980s, mailing list that emerged were the Indonesia *Development Studies*

(IDS, 1988); *UKIndonesian* (UK, 1989); *INDOZNET* (Austalia, 1989); *ISNET* (1989); *JANUS* (Indonesians@janus.berkeley, edu).

During 1990s, sophisticated personal computers which were fully equipped with operational system such as *SCO Xenix* and *SCO Unix.* This system support many types of hardware and application of business. However, this system needs expensive licensing and are difficult to be modified without the source code. In 1991, *Linus Torvalds* introduces Kernel Linux through newsgroup *comp.os.minix* which was accepted by the community of programmers. In 1994, commercial Internet providers started to emerge in Indonesia namely *Sustainable Development Network* Indonesia which uses *Linux* outside of the research community. A year later, Indo Internet started to adapt *Linux* system. In 1997, *Linux* started to develop fast as Internet was gaining its popularity in Indonesia.

The above discussion has shown us how prevalent the Internet use is today. With the wide usage of e-mail in organisations, one's concern is that people spending a lot of time behind closed doors looking at computer screen and communicating electronically with other users while spending very little time interacting directly with other managers; when face-to-face communication becomes rare in an organisation, management decisions may suffer because of the lack of information which can be passed on only through interpersonal