Computer-Mediated Communication and Organisational Communication: The Use of New Communication Technology in the Workplace

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ABSTRACT

The evolution of new communication technologies since the 21st century has dramatically changed organisational communication processes. Many companies have begun to treat new communication technologies as an important investment for creating a new paradigm for workplace communication. This is because powerful and effective communication will motivate a workforce to contribute to the company's financial success. This paper examines the use of computer-mediated communication (CMC) as a communication platform in the workplace. The main objectives are to gauge the use of CMC by employees in five Malaysian organisations and to appraise the value and effectiveness of CMC as a communication platform in the workplace. A qualitative research method was adopted. Semi-structured interviews were conducted with communications employees from five private organisations in the Klang Valley, Malaysia. The participation of the respondents was voluntary. The results obtained are manifold: the participants use CMC, face-to-face communication, electronic and print media in their workplace; email and instant messaging are frequently used for communication with superiors and among colleagues, and for remote dissemination of work-related information to a vast number of organisational members in different time zones; and lastly, the participants perceive email as an effective and efficient communication tool in the organisation. The findings indicate that although CMC has been frequently used as a communication platform in the workplace, it has yet to replace traditional communication channels such as face-to-face and print media as effective organisational communication channels.

Keywords: Computer-mediated communication, new communication technology, organisational communication

1. INTRODUCTION

An organisation cannot exist without communication, especially the type of communication to keep the employees well-informed about the organisation's business vision and strategy as well as to help every individual in the organisation work together with a common purpose. Communication is central to organisations because it helps create shared meanings, norms and culture of the organisation (Gumus, 2007). Many companies have begun to treat new

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communication technologies as an important investment for creating a new paradigm for workplace communication.

Technological change is one of the major aspects which have influenced the communication approaches in organisations, especially the practice of new communication technology in organisational communication. "The major developments in technology have found communication being mediated in a number of revolutionary new ways...communication was transformed (Thurlow *et al.*, 2004: 26). The range of technologies introduced into the workplace in recent years such as electronic mail, instant messaging, voice mail, facsimile, audio and video conferencing, computer conferencing, management information system, group decision support system, Internet and World Wide Web as well as wireless networks (Miller, 2009) have impacted organisational communication in terms of communication content, communication patterns and organisational structure.

Looking at the availability of various communication media choices and the effects of organisational communication technology raises the question of how employees of Malaysian private organisations use the new communication technologies as a communication platform in the workplace. The purpose of this study is to explore the perspective of communications employees on the use of computer-mediated communication (CMC) as a communication medium in their workplace. The participants of this study are employees of the communications or public relations department. Communications employees have an extremely significant impact on directing an organisation's internal and external communications (Wright, 1995) as they spend most of their time performing communication activities in the organisation. With this in mind, the participants are able to provide a better insight on the best communication medium for workplace communication.

This paper is organised in the following way. Section 1 elaborates on the introduction of the study while Section 2 comprises a literature review of organisational communication and computer-mediated communication. Section 3 follows with the methodology used. Section 4 presents and discusses the main findings. The final section concludes with a discussion on the limitations faced as well as suggestions for future research.

2. LITERATURE REVIEW

2.1 Organisational Communication

Organisational communication is an academic discipline that includes the study of symbols, messages, media, interactions, relationships, networks, persuasion, and broader discourse within an organisation (Johansson, 2007). It is the sending and receiving of messages by means of symbols that act as a key element of organisational climate with the basic function of affecting receiver's knowledge or behaviour by informing, directing, regulating, socialising, and persuading (Baker, 2002). Organisational communication in today's organisations has not only become far more complex and varied but also more important to overall organisational functioning and success (Baker, 2002). Communication has become the most essential element in an organisation in determining organisational success. The communication between employers and employees is vital because through communication, the employer is better able to understand employees' feelings and the employer can attempt to change an unsatisfactory situation into a satisfactory environment.

Some recent literature has moved a step further by emphasising the issue of organisational communication as a networking tool and that collaboration is important for knowledge creation and transmission (More, 1998). People tend to get updated information in a formal way. The management team will print out formal letters to all employees about the latest changes and news of the organisation. However, in order to spread organisational news in a rapid and effective way, electronic communication technologies will be their choice of media selection. Maier and Warren (2000) assert that electronic communication technologies provide both synchronous communications in which participants are in contact at the same time and asynchronous communications in which there is a significant delay between the transmission of a message and its reception.

Computer, interactive video and other information technologies are very useful in informing the employees about important internal messages as well as gathering their new ideas (Wright, 1995). With the adoption of new communication technologies in organisations, the overall level of organisational communication has increased (Miller, 2009). Electronic communication technologies media used in the workplace includes telephone, fax, video-conferencing and Internet facilities such as email, Intranet and social media. Besides electronic technologies, face-to-face communication is also used in workplace communication. Face-to-face communication is a conversation that one has while being face-to-face with the other party. It can be started with formal and informal one-to-one meetings which would comprise eye contact, facial expression, body movement and the tone of message that will show the importance of the message. The way to interpret the message will largely depend on the differences in expression.

2.2 Computer-mediated Communication

Communication media used to support the role of communication within organisations have been and continue to be changed by the evolution of information technology with much of the communication now mediated by computers (D'Ambra *et al.*, 1998). Computer-mediated communication (CMC) dates back to more than fifty years as it has been around since the early 1960s. The rapidly-growing popularity and ubiquity of personal computers has caused CMC to become very attractive to scholarly communication (Thurlow *et al.*, 2004). CMC is a form of human communication using computer and Internet network and this Internet-based communication takes place on a global collection of networks that utilise the Transmission Control Protocol/Internet Protocol (TCP/IP) suite for data exchange (December, 1996). It is a type of communication which allows people to combine numerous media in a single message when conversing. CMC is an interactive channel which allows users to be active and engage in two-way communication. It is therefore an inexpensive way of information-seeking for increased efficiency and productivity (Miller, 2009).

The mediated nature of CMC allows greater manipulation and a more careful construction of personal information; the delayed nature gives participants the opportunity to review, revise or cancel their communications before the information is sent (Heisler and Crabill, 2006). Besides, CMC is a form of asynchronous communication which has the advantages of: (i) eliminating problems created by barriers of time and space; (ii) being costeffective and fairly easy to use; and (iii) has the potential of being more personal and

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customisable (Provenzo, 1986). CMC technologies include computer conferencing, e-mail, online chat, instant messaging, database utilities, multimedia and Web-based environments. In a nutshell, "the new communication technologies offer organisational participants a wide array of interaction and decision-making options that can differ substantially from the traditional ways of working" (Miller, 2009: 241).

3. METHODOLOGY

A qualitative research method was adopted in this study. Qualitative research methods offer certain advantages while studying the case because it (i) allows the researcher to gather in-depth understanding of the phenomenon under investigation; (ii) seeks to understand a given research problem from the perspectives of the selected samples through investigation; (iii) provides detailed descriptions of how people experience a given research issue; and (iv) also allows the researcher to pursue new areas of interest (Wimmer and Dominick, 2006). An intensive interview uses smaller samples but provides detailed background about the use of CMC in the workplace and how the interviewees perceive the value and effectiveness of CMC as a communication platform in the workplace.

3.1 Data Collection and Data Analysis

To collect the data, fifteen semi-structured interviews were carried out face-to-face with communications practitioners of five Malaysian private organisations in the Klang Valley. The selected organisations were from the services industry and medium and small in size. Two organisations were public relations and advertising agencies (Participants A, B, C, G, H and I), a local bank (Participants D, E and F), a food and beverage company (Participants M, N and O) and a property agency (Participants J, K and L). These organisations were selected based on volunteer sampling.

The participants were probed for their perceptions on the media use of communication in the workplace as well as the use of CMC as a communication platform in the workplace. Seven open-ended questions were asked, which included three questions on the types of communication channel used in the workplace, purposes of usage and the most frequently used channel; four questions on how new communication technologies are used by the employees in the workplace and the final question was on the preferred channel used by the employees with their superiors and among colleagues in the workplace.

The interviews were conducted at the participants' offices over an average duration of 45 to 60 minutes. All conversations during the interview were recorded using a radio cassette recorder and were later transcribed for analysis. The data from the interviews were analysed following Miles and Huberman's (1994) framework for data analysis (cited in Creswell, 2007), in which the researcher (i) manually summarised and categorised the raw data into codes and themes; (ii) developed patterns from the codes and themes; (iii) made comparisons between the interviewees' responses; and (iv) directly interpreted the data according to the research questions set in this study.

3.2 Research Questions

The two research questions that guided the study are as follows:

RQ1: What are the communicative methods used in the workplace and for what purposes?

RQ2: What are the advantages and disadvantages of using computer-mediated communication in the workplace?

4. RESULTS

4.1 Communication Channels Used and Purposes

Communication is the transmission of message from one to another. To communicate effectively, it is important to select the appropriate media to ensure its value and efficiency. From the interviews, the media used for communication in five Malaysian private organisations are summarised as follows (in descending order): computer-mediated communication (CMC), face-to-face communication, electronic and print media.

The interviewees claimed that they use CMC for disseminating work-related information to employees who are working in different areas and time zones; to receive updated information from the management; and as reminders or black-and-white proof of communication after face-to-face interaction with their superior. The CMC channels used are e-mail, intranet, online forum, corporate website, video conferencing and teleconferencing. Participant G stated that "my supervisor normally sends us information and instructions through email because it is more convenient and easy. We will then check our email everyday in order to get updated information about the company."

Other participants said:

Participant B: "I prefer using email or instant messaging at work as everything is then in black and white, thus it will minimise the possibility of errors that we cannot afford."

Participant D: "By using Internet communication, it can help get rid of accusations unlike verbal communication. Since email is used in my organisation, instructions and information are passed down in written form, where the employees can refer to it when needed and there will be no misunderstandings."

Participant O: "Due to the different localities and working time zones, CMC, especially email would be a more effective way of communication."

Face-to-face communication, on the other hand, is used for communicating sensitive issues, building interpersonal relationships between staff and managers, and for project collaboration. Participant L described: "I think face-to-face communication can bridge the gap between supervisor and staff. Besides, it is more convenient to meet your supervisor face-to-face".

Other comments on the use of face-to-face communication in the workplace include:

Participant N: "Face-to-face communication is quicker, more accurate and able to give immediate response when transmitting information to the staff besides giving

them a better understanding of the manager's instructions. If there is anything that the staff are not clear, they can immediately refer to the manager face-to-face."

Participant K: "It's usually every month that the boss will have a meeting with the heads of all departments, then the HOD will disseminate the job-instructions to their fellow workers. We also have a morning meeting session known as the PCC session in which the management will give the job instructions to the employees as we never use online media for that; we meet face-to-face."

Participant O: "When certain tasks are very important, for example, in project collaboration, face-to-face meetings will be more effective because it is rich in content and it saves time when I need to receive feedback from the participants."

Other communication channels used in the organisations include electronic media such as telephone and mobile phone as well as print media such as newsletter, memorandum (memo) and notice, and the written letter. Electronic media is used for giving verbal instructions to employees off-site and for employees to communicate urgent matters with their managers. Some of the comments by the interviewees include:

Participant N: "I will use the mobile phone when there is an emergency, as through the mobile phone, you can easily reach the person that you wish to contact especially when you are not in the office."

Participant A: "The issue of geographical distance should be taken into account. If my colleagues are not available physically in the office, telephone is used for communication with them."

Participant C: "But if we are far apart from our colleagues, the telephone is the best way to communicate."

Alternatively, traditional print media were used for announcing human resources-related matters such as warnings and promotions, awards and activities; and as a reminder and proof of communication after face-to-face interactions. The interviewees claimed:

Participant J: "My head of department will use a memo to disseminate work-related information to us, while a letter is normally used for human resources matter such as promotion."

Participant K: "The traditional media such as the memo is used as a reminder for us to complete our task on time and it also gives us a clearer picture about our task."

Participant M: "We use the letter when issuing warnings, for promoting or to demote a staff."

4.2 Advantages and Disadvantages of Using CMC in the Workplace

This study addresses the use and implications of new communication technology as a communication platform in the workplace. During the interviews, the participants discussed

the advantages and disadvantages of using CMC in the workplace; the frequent use of email and instant messaging; and the preferred use of email as an effective organisational communication channel. In summary, the interviewees agreed that CMC has been pervasively used in their organisations with ten participants out of fifteen preferring to use email and instant messaging and lastly among the ten participants who frequently used CMC, eight perceived email as an effective organisational communication channel.

Based on the findings of the interviews, CMC has a number of advantages such as (i) increasing speed of interaction; (ii) acting as a fine tool for communication in remote areas or in different time zones; (iii) providing black-and-white reference or acting as reminders after face-to-face interactions; (iv) reducing misunderstandings and problems; (v) providing clear and written instructions; and (vi) delivering routine information to employees such as work instructions and job function. The comments on the advantages of CMC include:

Participant O: "Email would be the best choice because sometimes the face-to-face method might not get the task done immediately due to different time zone and areas."

Participant A: "CMC is the best formal method of communication...no misunderstanding will occur if the instructions were written down in black and white."

Participant G: "My manager normally sends us the routine job instruction through email because it is more convenient and easy as we usually check our email everyday to get updated information."

Participant D: "CMC can enable us to think through our request or situation before giving any reply. It is good because receivers can refer to the email content from time to time and make a better judgment."

Participant I: "From time-to-time, we will post information and awards on the organisational intranet so as to appreciate employees' contribution. The intranet also allows employees to voice their feedback or provide new ideas for our organisational development."

However, the interviewees claimed that the disadvantages of computer-mediated communication are insufficient infrastructure of the new media in the organisation; difficulty of access in some organisations; and lack of non-verbal cues especially facial expression and body languages. A few interviewees stated the following:

Participant K: "In some situations, we are unable to access the Internet to check emails especially when we are outstation."

Participant J: "Some employees never check their emails or might not check their emails frequently, finally it resulted in communication reaching late and a delay in completing the tasks."

Participant F: "If you communicate through CMC, some employees might think differently or ignore your message because there is no facial expression and body language...misunderstandings can also occur due to different interpretation of cues."

Participant L: "We cannot use CMC sometimes because it is too slow and cannot reach all the people in the organisation as not everyone has Internet access."

According to ten interviewees, the most frequently used CMC channels in the workplace are email and instant messaging as compared to other new media such as intranet, online forum, corporate website, video conferencing and tele-conferencing.

Participant H claimed that "email has been frequently used to interact with each other in the organisation... helps build relationship among co-workers... compared to other types of communication tools such as meetings or face-to-face interaction."

Other comments on the frequent use of email and instant messaging are as follows:

Participant D: "Email is the most common tool used in our bank and communicating via email is a daily affair."

Participant E: "Email is the commonest but we also communicate through instant messaging with fellow colleagues."

Participant I: "Email will be the most frequent communication tool used in our organisation because it is able to reach all the employees at the same time...keeps the employees updated constantly on any organisational change or latest information in a fast and convenient way."

Participant C: "In any informal discussion in the workplace, I would prefer to use instant messaging."

Participant B: "We will normally use instant messaging for any discussion of private and confidential matters in the organisation or for confirming and updating each other."

From the interviews, eight participants perceived email as an effective organisational communication channel. Emails have been used for various purposes such as for delivering work related information to colleagues; a formal communication tool between the manager and staff; communicating formal issues with staff who are physically not available in the office; and as a tool for receiving work instruction.

The interviewees claimed that:

Participant A: "Email is the best option for accurate feedback."

Participant B: "For work-related problems, I prefer using emails as it allows me to explain the full extent of the problem which people usually read to the end before responding...."

Participant O: "Email is an effective method for communicating to those who work in different time zones or are based outstation."

Participant E: "Personally, I prefer to use email when communicating work-related information in the workplace because a written email can reduce misunderstandings."

5. DISCUSSION AND CONCLUSION

The primary purpose of this study was to investigate the perspectives of employees from the communications or public relations department of five private organisations in the Klang Valley on the use of new communication technology in the workplace. This study employed communications employees because they have a huge role in communicating with other employees in the organisation. Besides, many communication functions are managed by communications or public relations employees (Wright, 1995). Organisations see public relations as representing a broader group of activities, even encompassing all communication activities of an organisation (Shockley-Zalabak, 2009); hence, they could better provide insights on the effectiveness of communication media in employee communication.

The findings of this study are manifold: the employees use CMC, face-to-face communication, electronic and print media in their workplace; CMC is the most frequently used channel for communication in their organisation; email and instant messaging are used for communication with superiors and among colleagues in the workplace, and dissemination of work-related information to a large number of organisational members in remote or different time zones; the interviewees perceived email as an effective and efficient communication tool in the organisation; and lastly, when asked about the preferred channel of communication in the workplace, the interviewees claimed that they still preferred face-to-face communication as compared to CMC.

The results of this study provide an interesting insight that the most frequently used channel as a communication platform in an organisation may not be the respondents' preference of an effective organisational communication channel. This can be explained by the observation that there are individuals who have different communication styles such that some media are favoured regardless of any circumstances and the individual employee may choose to communicate in a more familiar way and not an appropriate way (Murray and Peyrefitte, 2007).

A wide array of academic research has focused significantly on CMC in the past decades indicating the importance of CMC in organisational communication (Lee and Varey, 1998; Van der Meijden and Veenman, 2005; An and Frick, 2006; Hearn *et al.*, 2009). The findings of this study are consistent with previous research because the majority of the interviewees agreed that CMC is the most common channel used for transmitting work-related information in the workplace as well as a communication channel used to interact with the superiors. CMC has become one of the most widely-used communication modes (An and Frick, 2006) in organisations with the advent of the Internet. This may be caused by the pervasiveness of communication technology usage in organisations; moreover employees have developed the necessary skills to use CMC effectively in the workplace (Murray and Peyrefitte, 2007).

Despite the wide use of new communication technologies in organisational communication, the communications employees in this study still preferred face-to-face

communication and perceived it as an effective communication channel in the workplace. When the interviewees were asked on the preferred channel for communication in the workplace, the majority of them cited face-to-face communication because of the advantages of direct feedback, two-way communication, multiple information cues and as a good tool for relationship building.

The interviewees claimed:

Participant F: "Face-to-face is a lot more personal as the communication process between two parties will be done in a very direct manner."

Participant J: "Face-to-face is still a best way to understand the employees' needs and wants better especially in job-related issues."

Participant G: "I would prefer face-to-face because it is easier for me to ask questions and clarify anything that is unclear to me as it will increase the efficiency of my work performance."

Participant N: "I prefer to use face-to-face communication when disseminating jobrelated information in the company because it is quick and more accurate...paperless and straightforward."

Participant B: "In my opinion, face-to-face using verbal communication enables us to gauge emotions or feelings, helps get messages across to employees, and eases office and co-worker relations...thus, face-to-face communication can lead to better relationships and communication among colleagues."

Participant C: "Face-to-face is rich in content... portrays human expression and tone of voice to help us understand the situation better."

Participant K: "Traditional face-to-face meetings allow me to interact better with each other in the office... provides me a clearer picture about my task and helps in strengthening my relationship with my boss. Besides, we can seek justification and explanation from the management about the instructions given by meeting them face-to-face."

This study revealed that even though CMC has been pervasively used in the workplace as a communication platform, traditional media such as face-to-face and print media still play an important role in workplace communication. Besides face-to-face communication, two of the interviewees preferred print media as the effective communication tool in the organisation. They stated that "memo is effective as a reminder to complete our task on time" (Participant F); and "in my opinion, print media is an effective way of communication in an organisation" (Participant O).

Thus, one implication of this study is that organisations should be aware of the use of face-to-face and CMC and its impact in organisational communication. The management of organisations needs to be educated on the appropriate use of communication media when communicating with the employees or to communicate work-related information throughout the organisation.

5.1 Limitations and Recommendations

This is an exploratory study on five private service-oriented organisations in the Klang Valley, thus, it is not possible to generalise the findings of this study to other types of organisations in Malaysia. Nevertheless, the findings from this study could help shed insights into employee perspectives of the use of new communication technologies in the workplace as compared to the traditional communication media. Therefore, similar studies could be conducted with employees of various types of organisations in Malaysia.

Another limitation relates to the methodology used in this study. The use of only one method with a volunteer sample may result in significant bias in the results of the study which may lead to inaccurate estimates of the populations from which the sample was drawn. However, volunteers are more sociable, generally younger and able to provide data that support a researcher's research questions (Wimmer and Dominic, 2006). Thus, this study will serve as a pilot study for future research. Consequently, a methodology with a mixed approach and a random sample can be recommended for better validity of the results. Future studies may consider investigating the motives of using CMC and face-to-face communication in organisational communication.

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