# Dynamics of Computer-Mediated-Communication (CMC) as an Organization's Network

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Abstract— This study determined the preferences, knowledge/ literacy, interaction skills, motivation and satisfaction of the employees in using Computer- Mediated —Communication (CMC). Amongst the various media platforms, Facebook predominantly outscored the employees' CMC preference, nevertheless, text messaging prevailed in terms of the users' familiarity, frequency of use and as medium of communicating with people. Similarly, Facebook registered an active communication with friends and family while Email served mostly colleagues and superior in the workplace. Employees were not so engaged in blogging and Twitter. In terms of CMC literacy, the respondents were knowledgeable in using text messaging in contrast with blogging which was rarely used by the employees. More so, text messaging, e-mail, Facebook, and group chat bagged a close dependency and motivation against blogging and twitter which were rarely used by the employees. Generally, these CMC platforms revealed a moderate satisfaction to the respondents. A focus group discussion with participants in extreme cases revealed that text messaging and Facebook were used in disseminating information to students and also colleagues. However, inactive users though they have CMC account attributed their dissatisfaction in using computer- based communication due to poor internet connections and less degree of literacy in using CMC. There were challenges brought by CMC such as netiquette of the users and responsibility of employees in using the technology.

Index Terms— Computer-mediated-communication (CMC), CMC preferences, interaction skills, literacy, motivation, satisfaction, and organization's network

#### 1 Introduction

In the realm of today's organizational landscape, communication and technology emerge as the lifeblood of an organizational management. It becomes prevalent how technologies are utilized in communication right in an organization. Organizations, on the other hand, often focus on their employees' abilities to effectively communicate and share knowledge that may benefit organization's well-being. Nevertheless, developing effective communication strategies likewise requires better understanding of communication sources, the institutional context, and the target audience to encourage desired behavior. In triumvirate, technology-communication-organization adopt the crux of computer mediated communication (CMC) as an organizational network. In this era of technological advancement, the effective use of computer is increasingly associated with competence in computer associated interpersonal and group communication. This emphasizes the need for the development of interaction skills in computer mediated environments and for a systematic educational effort to enhance CMC competence in the academic and professional arena (Bubas, et.al, 2003).

Computer mediated communication (CMC) involves exchanges of information in textual, audio and or video formats that are transmitted and controlled by the use of computer and telecommunication technology. CMC is basically a process of human communication via computer, involving people situated in particular contexts, engaging in processes to shape media for a variety of purposes. (December, 1997)

Diverse forms of computer supported interpersonal and group interactions are commonly denoted as computer mediated communication (CMC). The immense popularity of computer mediated communication (CMC) tools such as texting and social networking sites like Facebook, Twitter ,Instagram, E-mailing,video conferencing, you tube have transformed the nature of social interactions. (Babkirk, et.al., 2015)

On the other hand, communication network in an organization acclaims a personal or professional set of relationships between individuals or organizations, thus, creates a pattern of contacts which establishes the flow of information in an organizational context. (Monge &Contractor, 2003). Further, organizational communication structure is the relatively stable con of communication relationships between various entities (Johnson, 1992). By and large, this study examines the communication structure and relationships of various participants in an academic organization. Verily, the relationships among various entities form an overall pattern that could form a gestalt of the total structure within organizational context.

In essence, various communication strategies to source out and process information such as selecting and evaluating appropriate communication channels denote CMC preferences, contextual communication or content framing like understanding the target audience and controlling the message, and the link between sustainability awareness and behavioral action measures effective communication strategies. Consequently, adoption of information and communication technologies (ICTs) in public organizations promises to better connect managers with citizens, increase public participation in government deci-

sion making, improve the efficiency of service delivery, decrease uncertainty, and improve information dissemination. (Welch &Feeney, 2014). It shows the clear relationships between the tasks that an organization undertake and how social media technology is used for work purposes. Hence, the organizational context cannot be separated from technological context in public organization. (Bozeman & Bretschneider, 1986) For any technology to be successful and to have an impact on organizational performance, it has to be properly adopted by organizations. Organizational usage of social media is changing organizational communication and public relations. Social media enables open communication, which helps organizations to understand customer needs and motivates them to respond proactively and efficiently to those needs (Parveen &Ainin, 2016)

On this premise, this study determines common ground anchored on some theoretical approaches to account both communication and social relationships. Likewise, this study presupposes the interfaced connectivity of the computer mediated communication (CMC) that harness the communication network of Bataan Peninsula State University which in one and various ways impact management of human interplay with technology. This study accounted on CMC as the medium of the employees' communication in determining real time posts and messages that may enlighten or break through hitches and wounds. It will also consider the CMC preferences like Facebook, Twitter, Instagram, E-mail, You Tube, and the like. Building upon these insights, this study is hoped to shed some light on the contentions of meeting mutual understanding and democratic expressions in an organization using the computermediated -communication. More so, this study may illustrate how the technology, organization, and environment integrated framework work for the wellbeing of the organizations communication network. As an outcome, a framework of reference for information dissemination and protocols to strengthen organizational communication may verge responsiveness, efficiency and productivity of the people in the entire university delve in underscoring mandates of Freedom of Information, Data Privacy Act and Freedom of Expression.

## **METHODOLOGY**

This study employed a mixed method of quantitative and qualitative research. For the quantitative method, it used a descriptive survey research design which focuses on the present and prevailing condition. A descriptive survey is applied in the study employing a situational analysis checklist and questionnaire to assess the competence of BPSU employees in using Computer Mediated Communication (CMC) in terms of motivation, knowledge, skills and satisfaction.

The research instrument used is a standard survey questionnaire adopted from the Spitzberg' CMC competency questionnaire. Some modifications were made with the questionnaire integrating therein some items adopted from other questionnaire like that of Chih-Hsiung Tu's CMC questionnaire as the researcher found it relevant and viable to raise comprehensive data on the project study.

To further enrich the study, a qualitative research method was employed through a Focus Group Discussion

(FGD). FGD is a predetermined semi-structured interview which elicited a maximum amount of discussion among the participants of their actual opinions within a given period of time. Likewise, a focus group discussion verified the respondents' responses as same as the actual preferences elicited from the survey questionnaire. FGD was conducted with a cluster of respondents who extremely utilized Computer- Mediated —Communication. From among the 800 respondents, the twenty (20) top ranked CMC active users in extreme cases university wide was selected as participants to the focus group discussion.

The data gathered from the FGD was treated with utmost confidentiality; likewise, their identification was concealed using letter coding such as ... Respondents A, B, C... An audio recording was utilized to secure accurately the responses of the FGD participants which was then transcribed for data analysis. Prior to the conduct of the focus group discussion, permission to record the information through audio recording was secured from the participants. This was also contained in the informed consent which was signed by the respondents. Subsequently, the recorded interview was kept with utmost security by the researcher unless otherwise be required by the Research Development Office to make it as exhibit of the concurrent investigation and as the need for justification arise.

For the statistical treatment, the data was processed using statistical software called Predictive Analytics Software (PASW) and Statistics version20 (SPSS). The data gathered was analyzed using statistical tools frequency count, percentage, mean, rank and inferential statistics such as independent sample-test and analysis of variance or f-test.

# **RESULTS AND DISCUSSIONS**

1. Demographic Profile of the Respondents in terms of Age, Sex, Educational Attainment, Status of Em-

| PROFILE             | FREQUENCY (F) | PERCENT-<br>AGE (P) |  |  |
|---------------------|---------------|---------------------|--|--|
| Age                 |               |                     |  |  |
| 20-30               | 87            | 25.66               |  |  |
| 31-41               | 93            | 27.43               |  |  |
| 42-52               | 84            | 24.78               |  |  |
| 53-63               | 71            | 20.94               |  |  |
| 64-74               | 4             | 1.18                |  |  |
| Total               | 87            | 25.66               |  |  |
| Sex                 |               |                     |  |  |
| Male                | 160           | 47.20               |  |  |
| Female              | 179           | 52.80               |  |  |
| Educational Status  |               |                     |  |  |
| Undergraduate       | 70            | 20.65               |  |  |
| Bachelor's Degree   | 157           | 46.31               |  |  |
| Post Baccalaureate  | 53            | 15.63               |  |  |
| Post Graduate       | 59            | 17.40               |  |  |
| Employment Status   |               |                     |  |  |
| Permanent           | 170           | 50.15               |  |  |
| Casual              | 95            | 28.02               |  |  |
| Contract of Service | 13            | 3.83                |  |  |
| Job Order           | 59            | 17.40               |  |  |
| Part timer          | 2             | 0.59                |  |  |
| Position            |               |                     |  |  |
| Teaching            | 124           | 36.58               |  |  |
| Non-Teaching        | 215           | 63.42               |  |  |

ployment, and Current Position or Designation

# Table 1 Demographic Profile of the Respondents

Table 1 presents the profile of the respondents. The respondents were comprised of the teaching and non-teaching employees as profiled by age, sex, educational status, employment status and position in the University.

In terms of age it can be gleaned from the table that the most numbered CMC users are in their mid-age of 31-41 years old as indicated by the highest frequency of 93 or 27.43% as seconded by 87or 25.66% gained by the age 21-31 years old respondents. While the least number of CMC users came from respondents of age 64-74 almost of their retirement age with a frequency of four (4) or 1.18% of the total percentage. It can be deduced that all respondents aged 20 and above - 45% of which are born before the advent of internet. Respondents born before the digital age (before 1980; also called as digital immigrants) may experience technological gap particularly in using internet-related means. Digital natives, those who are born after 1980 may have the technological advantage since they were raised during the digital age. Age difference affects preference/familiarity/skills in using more recent CMC technologies.

# 2. Respondents' Computer -Mediated- Communication Preference

## 2.1 Familiarity with CMC Technology

The respondents' CMC profile was ascribed to their familiarity on the types of CMC technology that they were using as well as their knowledge of the technology and for how long they were using it. Various CMC platforms such as e-mail, Facebook, YouTube, group chat, twitter, Instagram, text messaging and blogging were presented to the respondents.

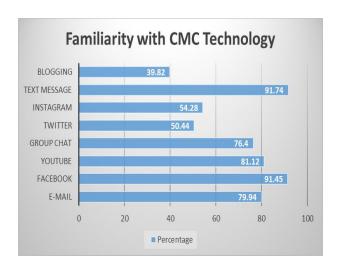


Figure 1. Respondents' Familiarity with Computer-Mediated-Communication

The graph shows the respondents' familiarity of the CMC variety which apparently revealed whether they were aware or not on a particular kind of CMC. It can be gleaned from the table that among the eight identified CMC technology namely: e-mail, Facebook, You tube, group chat, twitter, Instagram, text message and blogging the respondents are most familiar in using text messaging garnering a frequency of 311 or 91.74% as seconded by Facebook with 310 or 91.45%. Very close in their frequency of use is YouTube and e-mail with 81.12% and the latter which raised 79.94%. Meanwhile, blogging got the least awareness with 39.82%, twitter with 50.44% which is closed to Instagram which have a 54.28 % level of familiarity. It can be deduced from the data that most respondents used text messaging due to its immediacy. Variability of use among these CMC can be attributed to accessibility for one. CMC technology comprised of gadgets and devices which are basically used for communication and transmitting information interpersonally, group or in public. Mobile phones are basically used for transmitting message.

Data revealed high familiarity percentage on text messaging which can be attributed to (a). easy accessibility/means to send SMS- some respondents may not have access to internet/strong signal required to use alternative CMC technology; (b) number of years using the technology; text messaging has the highest number of years of utilization; (c) age bracket of the respondents many of the respondents are aged 40+, who are raised before the digital age (considered as digital immigrants - born before 1980. As a matter of fact, low scoring CMC technologies such as Twitter, Instagram, and Blogging were introduced and popularized later than the rest, hence, may have limited platform for interaction, and requires certain skills and content. As such, respondents are less familiar and may have difficulty using these modes of communication.

# 2.2 Respondents' Computer-Mediated – Communication (CMC) Account

Figure 2 presents the line graph which disclosed the respondents' preference on the type of CMC. As revealed, majority of the respondents claimed an account on Facebook with 89.68% as seconded by e-mail with 79.94% users. The least number of users was attributed to blogging with 7.67 % user's account. Over half of the respondents registered 64.31% account on group chat. Next to blogging, twitter account got the least users. The data depicted that the employees preferred means of communication is mostly on Facebook which supports their access on FB. These results highlighted that respondents mostly have FB accounts. Utilization and familiarity showed that despite these results, employees still prefer text messaging as means of communication, thus, account ownership of CMC technology may have less weight for preference as compared to other factors

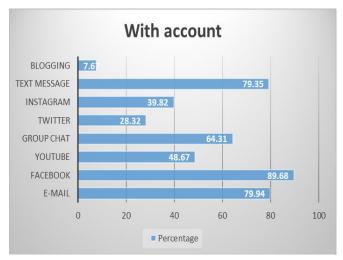


Figure 2. Respondents' Computer-Mediated – Communication (CMC) Account

# 2.3 Number of Years the Respondent Uses CMC Technology

Figure 3 presents the number of years that the respondents were using Computer-mediated-communication such as E-mail, Facebook, YouTube, group chat, twitter, text messaging and blogging.

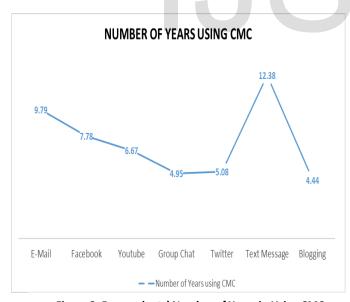


Figure 3. Respondents' Number of Years in Using CMC

In terms of the number of years that the respondents are using the CMC, the data disclosed 12.38 on text messaging. Meanwhile, E-mail ascribed 9.79 in contrast with a 4.44 that the respondent spend their time in blogging Group chat ranked second to blogging with least time of 4.95. Amongst these CMC platforms, it can then be re-

called from the study of Golder, Wilkinson, and Huberman (2007) examined an anonymized dataset consisting of 362 million messages exchanged by over four million Facebook users for insight into Friending and messaging activities. Moreso, Lampe, Ellison, and Steinfield (2007) explored the relationship between profile elements and number of Facebook friends, finding that profile fields that reduce transaction costs and are harder to falsify are most likely to be associated with larger number of friendship links. These kinds of data also lend themselves well to analysis through network visualization (Adamic, Buyukkokten, & Adar, 2003; Heer & boyd, 2005; Paolillo & Wright, 2005).

# 2.4 Respondents' Familiarity with CMC Hardware and Software

Figure 4 shows the respondent's familiarity with hardware and software of Computer-mediated-communication. CMC hardware are physical devices required for communication and interaction between devices on a computer network such as computer units, smart phones, IPad, iPhones, tablets, routers, modems, networking cables, etc.) On the other hand, CMC software is an application or program designed to pass information from one system to another such as skype, video chat, web conferences, short text messaging, etc.)

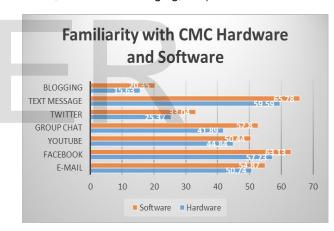


Figure 4. Respondents' Familiarity with CMC Hardware and Software

Outscoring the respondents' preference on text messaging and Facebook, it became evident that users of these two platforms are familiar in using CMC hardware and software. Over half of the respondents registered 65.78% familiarity with CMC hardware and software as seconded by the respondents' knowledge which garnered 63.13%. The respondents' familiarity on both became consistent since a similar. From these data it can be deduced that cellphones were introduced in the Philippines in 1990's while the internet, which supports seven out of eight CMC technologies presented (Facebook, twitter, Instagram, group chat, YouTube, email, and blogging), was introduced later (1994) and was only widely used during 2000s??? While mobile phones with internet were only introduced/widely used recently. This may explain higher number of years spent in text messaging. Thus, it is construed that technology is

around for a longer period of time (as compared to internetdependent CMC Technology); people are more familiar in using it; it is more accessible; and, the technology is still convenient/efficient/fast way to communicate.

# 2.5 Utilization of CMC on Communicating with other People

Figure 5 presents the respondents' utilization of CMC in communicating with people personally (family, friends, relatives, peers) or professionally (colleagues, superior, clients, workplace)

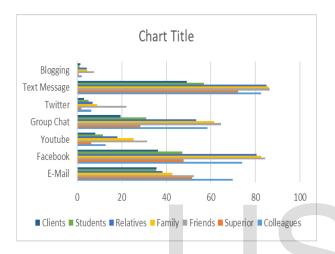


Figure 5. Respondents' Utilization of CMC in Communication

In terms of CMC utilization in communicating with people, the respondents raised the highest percentage on text messaging that is apparently useful in communicating with colleagues having 82.62%; superior with 72.27; friends with 86.43% family 86.14%; relatives with 84.96; students 56.93 and clients with 49.26. it

Text messaging accrued highest percentage of utilization in communicating with people; garnering active interaction with friends, family, and relatives. Similarly, Facebook registered an active communication with friends and family. While Email served mostly colleagues and superior in the workplace. Employees were not so engaged in blogging and Twitter.

Implicitly, text messaging ensued the user's preference to text-based CMC as conversational like. Textual exchanges attested the user's experience with CMC as fundamentally alike to spoken conversations despite CMC being produced and received by the interactants.

## 2.6 Frequency in Using CMC

Table 2 presents the frequency of using computermediated-communication by the respondents. The respondents' engagements in various CMC platforms indicates the period of time that they utilize the CMC technolo

gy. Frequency reciprocates the duration of time in a cycle and as

Table 2
Frequency of Using CMC

| CMC Technology | Mean | Descriptive Rating |
|----------------|------|--------------------|
| E-Mail         | 4.00 | Often              |
| Facebook       | 4.48 | Often              |
| YouTube        | 3.87 | Often              |
| Group Chat     | 4.20 | Often              |
| Twitter        | 2.46 | Often              |
| Text Message   | 4.76 | Always             |
| Blogging       | 1.61 | Rarely             |

In terms of frequency in using CMC, the respondents were 'always' engaged frequently in text messaging as reflected by its mean of 4.76 in contrast with blogging with a mean score of 1.61 ascribed to be 'rarely' used by the employees. Apparently, the employees' exposure on text messaging and Facebook, these CMC platforms were often used for interaction in the workplace, thus revealed the users' satisfaction. More so, text messaging, e-mail, Facebook, group chat, and group chat raised a close dependency and motivation against blogging and twitter which are rarely used by the employees. Generally, these CMC platforms revealed a moderate satisfaction to the employee respondents.

# 3. Competence of the Employees in Using the CMC as described in terms of:

- 3.1 literacy/ knowledge;
- 3.2 interaction skills;
- 3.3 motivation, and
- 3.4 satisfaction?

# 3.1 Employees' Competence in terms of Literacy

Table 3 presents the respondents literacy in using Computer-Mediated-Communication technology. The respondent's literacy is synonymously described as their knowledge of CMC. Likewise, CMC knowledge is the cognitive comprehension of content and procedural processes involved in conducting appropriate and effective interaction in the computer-mediated context. Significantly, the respondents 'competence in terms of knowledge evidently indicated that the respondents were 'always knowledgeable about computer-based techniques' and 'can figure out

quickly how to use such a kind of text messaging' more than CMC technology. Generally, text messaging had been often used than the other platforms. In contrast, the respondents were rarely knowledgeable in blogging. Among the eight CMC platforms, blogging ranked least in literacy. It can be inferred that the respondents often experience frustration when dealing with new technological change in relation to CMC - balanced out by respondents' confidence in fixing/being knowledgeable in using said CMC. Appertaining thereto, an intersection of knowledge is with the multidimensional constructs of familiarity, expertise, use, and literacy (LaLornia & Sidowski, 1990; Smith et al., 1999; van den Hooff, Groot, & Jonge, 2005). In accord to Smith, et,al. (1999). CMC use and experience, therefore, represent a confluence of both content and procedural knowledge as well as skills (Smith et al., 1999). It is not surprising, therefore, that computer use is positively related to Internet skill over time (Kraut et al., 2002). Hunter and Allen (1992) likewise found" ease of learning" was positively related to email satisfaction and usage frequency

Table 3
Respondents' Literacy in Using Computer-Mediated-Communication

| Computer- Mediated<br>Communication (CMC)<br>LITERACY                                   | E-<br>mail  | Face<br>book | You-<br>tube | Grou        | 松胜<br>er    | Text<br>Mess | aging<br>Blog<br>ging |
|---|-------------|--------------|--------------|-------------|-------------|--------------|-----------------------|
| I. I am knowledgeable<br>about computer-based<br>communication<br>techniques.           | 4.03<br>(O) | 4.5<br>(O)   | 4.04<br>(O)  | 4.2<br>(O)  | 2.5<br>(R)  | 4.7<br>(A)   | 1.91<br>(R)           |
| 2. I can almost figure out<br>quickly how to use a kind<br>of CMC.                      | 3.96<br>(O) | 4.3<br>(O)   | 3.89<br>(O)  | 4.11<br>(O) | 2.63<br>(S) | 4.55<br>(A)  | 2.01<br>(R)           |
| 3.I feel completely capable of using almost all currently available CMCs.               | 3.91<br>(O) | 4.22<br>(O)  | 3.78<br>(O)  | 4.01<br>(O) | 2.67<br>(S) | 4.36<br>(O)  | 2<br>(R)              |
| 4.I am anxious when I have<br>to learn how to use a new<br>communication<br>technology. | 2.92<br>(S) | 3.1<br>(S)   | 2.87<br>(S)  | 2.89<br>(S) | 2.33<br>(R) | 3.14<br>(S)  | 2.02<br>(R)           |
| 5.1 generally can diagnose<br>or fix when any problem<br>exist in using CMCs.           | 3.18<br>(S) | 3.37<br>(S)  | 3.15<br>(S)  | 3.3<br>(S)  | 2.43<br>(R) | 3.66<br>(O)  | 1.96<br>(R)           |
| 6. I understand the hardware or software of a new CMC.                                  | 3.48<br>(S) | 3.56<br>(O)  | 3.38<br>(S)  | 3.5<br>(S)  | 2.72<br>(S) | 3.77<br>(O)  | 2.23<br>(R)           |
| 7.I am very familiar with communication network.  | 3.88<br>(O) | 4.15<br>(O)  | 3.87<br>(O)  | 3.91<br>(O) | 2.96<br>(S) | 4.23<br>(O)  | 2.4<br>(R)            |
| 8. I am very satisfied with<br>my communication abilities<br>using computer media.      | 3.97<br>(O) | 4.21<br>(O)  | 3.88<br>(O)  | 4.07<br>(O) | 2.88<br>(S) | 4.32<br>(O)  | 2.33<br>(R)           |
| 9.I find changes in<br>technologies very<br>frustrating.                                | 2.46<br>(R) | 2.59<br>(S)  | 2.49<br>(R)  | 2.5<br>(R)  | 2.11<br>(R) | 2.6<br>(S)   | 1.92<br>(R)           |
| 10. I feel very competent in learning and using communication media technology.         | 3.88<br>(O) | 4<br>(O)     | 3.83<br>(O)  | 3.91<br>(O) | 3.06<br>(S) | 4.14<br>(O)  | 2.61<br>(S)           |
| Composite   | 3.24<br>(S) | 3.45<br>(S)  | 3.2<br>(S)   | 3.31<br>(S) | 2.39<br>(R) | 3.59<br>(O)  | 1.94<br>(R)           |

#### Interaction Skills

ceive any message with clarity.

Table 4 presents the respondent's interaction skills in using Computer-Mediated-Communication technology.

As revealed in the table that among the CMC platforms text messaging accrued the highest mean of 3.65 against blogging with a the lowest mean of 1.63, hence, it shows that the respondents were 'often' engaged in text messaging than blogging and twitter which 'rarely' project the respondents' interaction skills. Meanwhile, e-mail, Facebook, You tube and group chat were 'sometimes' displayed the respondents' interaction skills. It becomes relative that the respondents were skillful at showing concern for and interest in the person conversing within the CMC; likewise, skillful at revealing composure and self-confidence in CMC interactions. Verily, these shows that the respondents often find that using text messaging as an efficient/effective way to communicate. They find confidence in

Table 4
Respondents' Interaction Skills in Using Computer-MediatedCommunication

using the medium since they are able to convey and re-

| Computer-<br>Mediated -<br>Communication<br>(CMC)  | ·=          | Facebook    | You-tube              | Group Chat          | ter                 | ext Messaging | Blogging    |
|--|-------------|-------------|-----------------------|---------------------|---------------------|---------------|-------------|
| INTERACTION SKILLS 1. display a lot of   | E-mail      | Face        | ло <sub>/</sub><br>з. | Grou                | Twitter             | Text          | Blog        |
| L. display a lot of certainty in the way Lexpress my CMC message.                                      | 3.5         | 3.77        | 3.<br>1<br>7<br>(S    | 3.<br>57<br>(O      | 2.<br>54            | 4.02          |             |
| 2. Lam very  | (S)         | (0)         | 3.                    | )                   | (S)                 | (0)           | 1.7 (R)     |
| articulate and vivid<br>in my CMC<br>messages.   | 3.6<br>(O)  | 3.83<br>(O) | 1<br>8<br>(S          | 3.<br>61<br>(O      | 2.<br>41<br>(R      | 4.01<br>(O)   | 1.8 (R)     |
| 3. My interactions using CMC are   | (0)         | (0)         | 3.                    | 3.                  | ,                   | (0)           | 1.8 (K)     |
| consistently accurate and clear.   | 3.77<br>(O) | 3.97<br>(O) | 5<br>(S<br>)          | 81<br>(O<br>)       | 2.<br>55<br>(S)     | 4.17<br>(O)   | 1.86<br>(R) |
| 4. I send comforting<br>messages to others<br>when I sense they<br>are down                            | 2.25        | 3.95        | 2.<br>7<br>5<br>(5    | 3.<br>71            | 2.<br>27            |               |             |
|  | 3.26<br>(S) | (0)         | )                     | (0                  | (R<br>)             | 4.19<br>(O)   | 1.64<br>(R) |
| 5. I am skillful at<br>showing concern<br>for and interest in<br>the person I 'm<br>conversing with in | 3.55        | 3.95        | 2.<br>9<br>3<br>(S    | 3.<br>79<br>(O      | 2.<br>36<br>(R      | 4.1           | 1.77        |
| the CMC.   | (0)         | (0)         | 3.                    | )                   | )                   | (0)           | (R)         |
| <ol> <li>I have no trouble<br/>expressing my<br/>opinions forcefully<br/>on CMC.</li> </ol>            | 3.34        | 3.6         | 0<br>4<br>(S          | 3.<br>52<br>(O      | 2.<br>38<br>(R      | 3.78          | 1.83        |
| 7. I am skillful at  | (S)         | (0)         | 3.                    | )                   | )                   | (0)           | (R)         |
| revealing<br>composure and self-<br>confidence in my<br>CMC interactions.                              | 3.54<br>(O) | 3.78<br>(O) | 1<br>7<br>(S          | 3.<br>61<br>(O<br>) | 2.<br>46<br>(R<br>) | 3.93<br>(O)   | 1.8 (R)     |
| 8. I am good at<br>managing the<br>timing of my CMC<br>conversations with<br>others.                   | 3.61<br>(O) | 3.85<br>(O) | 3.<br>2<br>4<br>(5    | 3.<br>75<br>(O      | 2.<br>51<br>(S)     | 4.02<br>(O)   | 1.87<br>(R) |
| 9. I generally get what want out of my CMC interactions.   | 3.51<br>(O) | 3.7         | 3.<br>1<br>6<br>(S    | 3.<br>63<br>(O      | 2.<br>41<br>(R      | 3.86<br>(O)   | 1.78<br>(R) |
| 10.My CMC interactions are always very appropriate to the relationship.                                | 3.72<br>(O) | 3.97<br>(O) | 3.<br>3<br>4<br>(S    | 3.<br>81<br>(O      | 2.<br>5<br>(R       | 4.12<br>(O)   | 1.88<br>(R) |
| COMPOSITE  | 3.22<br>(S) | 3.49<br>(S) | 2.<br>8<br>5<br>(S    | 3.<br>35<br>(S)     | 2.<br>22<br>(R<br>) | 3.65<br>(O)   | 1.63<br>(R) |

#### Scale:

4.51- 5.00 - (A) Always 2.51 3.51 - 4.50 - (O) Often 1.51

2.51 – 3.50 – (S) Sometimes 1.51 – 2.50 – (R) Rarely

1.00 - 1.50 - (N) Never

Generally, the skills are the repeatable, goal-oriented behavioral tactics and routines that people employ in the service of their motivation and knowledge. Specifically, at the microscopic level, interpersonal skills reduce to four basic skill clusters: attentiveness (i.e., displaying concern for, interest in, and attention to the other person or persons in the interaction), composure (i.e., displaying assertiveness, confidence, being in control), coordination (i.e., displaying deft management of timing, initiation and closure of conversations, topic management, etc.), and expressiveness (i.e., displaying vividness and animation in verbal and nonverbal expression). This typology of skills has been confirmed in a variety of measurement studies (Spitzberg, 1994b; Spitzberg, Brookeshire, & Brunner, 1990).

# 3.3 Employees' Competence in terms of their Motivation

Table 5 presents the respondents 'competence in terms of their motivation in using CMC technology. Motivation can be indexed positively by a range of constructs such as willingness to adopt new communication technologies, satisfaction, gratifications, and positive attitudes toward such technologies.

As gleaned from Table 5, the respondents accumulated a close mean ranging from 3.53 to 4.01 which ascribed that the respondents 'often' enjoy communicating via computer media. Conversely, blogging and twitter got the least mean which indicated that the respondents' were 'rarely 'motivated to use CMC technology. Generally, the respondents were 'sometimes' motivated to use e-mail Facebook, You-tube, group chat and text messaging against blogging and twitter which respondents 'rarely' enjoy. This goes to show that text messaging yielded the highest satisfaction rating. However, respondents find the medium too restrictive and time-consuming – which is an understandable flaw due to its simplistic nature.

Table 5
Respondents' Motivation in Using Computer-Mediated-Communication

| Computer- Mediated-<br>Communication<br>MOTIVATION                            | E-mail      | Face-<br>book | You-<br>tube | Group<br>Chat | Twitter     | Text<br>Mes-<br>saging | Blog-<br>ging |
|---|-------------|---------------|--------------|---------------|-------------|------------------------|---------------|
| I am a heavy user of<br>computer-mediated-<br>communication.                  | 3.35<br>(S) | 3.67<br>(O)   | 3.28<br>(S)  | 3.56<br>(O)   | 2.21<br>(R) | 3.95<br>(O)            | 1.59<br>(R)   |
| 2.I look forward to<br>sitting down at my<br>computer to compose<br>messages. | 3.19<br>(S) | 3.36<br>(S)   | 2.72<br>(S)  | 3.26<br>(S)   | 2.12<br>(R) | 3.58<br>(O)            | 1.64<br>(R)   |
| 3. I got a tremendous amount accomplished through CMC.                        | 3.38<br>(S) | 3.4<br>(S)    | 2.79<br>(S)  | 3.24<br>(S)   | 2.12<br>(R) | 3.6<br>(O)             | 1.64<br>(R)   |
| I rely heavily upon<br>my CMCs for getting<br>me through each day.            | 2.97<br>(S) | 3.05<br>(S)   | 2.63<br>(S)  | 2.9<br>(S)    | 1.87<br>(R) | 3.34<br>(S)            | 1.53<br>(R)   |
| 5. I can easily go a week without any CMC interactions.                       | 3.11<br>(S) | 3 (S)         | 2.8<br>(S)   | 2.88<br>(S)   | 2.58<br>(S) | 2.97<br>(S)            | 2.34<br>(R)   |
| I enjoy communi-<br>cating via computer<br>media.                             | 3.53<br>(O) | 3.86<br>(O)   | 3.35<br>(S)  | 3.72<br>(O)   | 2.38<br>(R) | 4.01<br>(O)            | 1.82<br>(R)   |

| 7. I spend a lot of time just exploring CMCs just to see what I can do with them. | 3.03       | 3.32        | 2.96        | 3.11        | 2.12        | 3.49        | 1.7         |
|---|------------|-------------|-------------|-------------|-------------|-------------|-------------|
|   | (S)        | (S)         | (S)         | (S)         | (R)         | (S)         | (R)         |
| I am more efficient<br>using CMC than other<br>forms of communica-<br>tion.       | 3.4<br>(S) | 3.53<br>(O) | 3.06<br>(S) | 3.43<br>(S) | 2.22<br>(R) | 3.74<br>(O) | 1.76<br>(R) |
| If I can avoid using a computer for communicating, I do.                          | 2.98       | 3.07        | 2.96        | 2.96        | 2.66        | 3.03        | 2.42        |
|   | (S)        | (S)         | (S)         | (S)         | (S)         | (S)         | (R)         |
| 10. My CMC interactions are more productive than my face- to - face interactions. | 2.88       | 2.99        | 2.59        | 2.84        | 2.06        | 3.1         | 1.67        |
|   | (S)        | (S)         | (S)         | (S)         | (R)         | (S)         | (R)         |
| Composite   | 2.89       | 3.02        | 2.65        | 2.9         | 2.03        | 3.16        | 1.65        |
|   | (S)        | (S)         | (S)         | (S)         | (R)         | (S)         | (R)         |

#### Scale:

4.51- 5.00 - (A) Always 2.51-3.50 - (S) Sometimes 3.51-4.50 - (O) Often 1.51-2.50 - (R) Rarely 1.00-1.50-(N) Never

## 3.5 Employees' Competence in terms of Satisfaction

Table 6 presents the respondents' competence in terms of their satisfaction in using CMC. The CMC users' satisfaction can be attributed to the contentment that the respondents feel in using CMC technology such as email, Facebook, You-tube, group chat, Twitter, text messaging and blogging.

As shown in the table, the respondents were rarely satisfied as revealed by a composite mean ranging from a highest mean of 2.3 raised by text messaging which is followed by Facebook with 2.23 mean score. In contrast, Twitter got a lesser satisfaction rating of 1.52 mean score which next to the least mean score bagged by blogging. Conversely, despite its composite rating ascribed by its 'often' satisfaction as indicated by mean scores of 3.58- 3.9, the respondents find their CMC conversations very satisfying. Generally, text messaging yielded the highest satisfaction rating. However, respondents find the medium too restrictive and timeconsuming - which is an understandable flaw due to its simplistic nature. Hence, the respondents rely heavily on the CMC and are often comfortable in using it as compared to other medium. They even prefer the medium to use for communication than a face-to-face interaction. This findings upkeep the relative value of information contributed and technology-specific competence which appeared to increase a person's motivations to contribute to an organizational information commons as affirmed by Fulk, et al., 2005. Likewise, this acclaimed the study of Hiltz & Johnson (1990) on the user's satisfaction with Computer mediated Communication Systems which even identified the factors which comprised subjective satisfaction with computer mediated communication systems (CMCS) and examined how different classes of variables can be used to predict satisfaction

Table 6
Respondents' Satisfaction in Using Computer-Mediated-Communication

| Computer- Mediated-         |        | ¥        | þe       |               | Ι.      | 9                 | E I      |
|-----------------------------|--------|----------|----------|---------------|---------|-------------------|----------|
| Communication (CMC)         | .≣     | oqe      | 亨        | 유坦            | 횰       | تقط إ             | gi       |
| SATISFACTION                | E-mail | -acebook | You-tube | Group<br>Chat | Twitter | Text<br>wessaging | Blogging |
| 1. I find most of my CMC    | 2.1    |          | 2.0      |               | -       | 2.4               |          |
| conversations               | 8      | 2.28     | 6        | 2.14          | 1.8     | 4                 | 1.7      |
| frustrating.                | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |
| 2. I end wasting a lot of   | 2.3    |          | 2.2      |               | 1.9     | 2.5               | 1.7      |
| time trying to get things   | 2      | 2.47     | 7        | 2.3           | 3       | 1                 | 8        |
| done on CMC.                | (R)    | (R)      | (R)      | (R)           | (R)     | (S)               | (R)      |
| My projects are often       |        |          |          |               |         |                   |          |
| screwed up because the      | 2.2    |          | 2.1      |               | 1.8     | 2.3               | 1.7      |
| CMC medium is too           | 5      | 2.33     | 6        | 2.18          | 9       | 4                 | 5        |
| restrictive.                | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |
| 4.My CMC conversations      | 3.5    |          |          |               | 2.4     |                   | 1.8      |
| are very satisfying.        | 8      | 3.76     | 3.3      | 3.69          | 6       | 3.9               | 7        |
|                             | (0)    | (O)      | (S)      | (O)           | (R)     | (0)               | (R)      |
| 5. I never seem to know     | 2.6    |          | 2.3      |               | 2.0     | 2.7               | 1.7      |
| how to say things the way   | 3      | 2.7      | 9        | 2.57          | 4       | 5                 | 3        |
| I mean them using CMC.      | (S)    | (S)      | (R)      | (S)           | (R)     | (S)               | (R)      |
| 6. I don't enjoy my CMC     | 2.2    |          | 2.2      |               | 1.8     | 2.3               | 1.7      |
| relationships as much as I  | 7      | 2.39     | 1        | 2.23          | 8       | 9                 | 5        |
| would like.                 | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |
| 7. I often end up saying    | 1.8    |          |          |               | 1.6     | 2.1               | 1.4      |
| things in CMC that turn out | 8      | 2.11     | 1.9      | 1.96          | 6       | 9                 | 7        |
| to offend the other person. | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (N)      |
| 8. I get anxious/nervous    | 1.9    |          | 1.8      |               | 1.6     | 2.0               | 1.5      |
| using CMC.                  | 2      | 2        | 4        | 1.9           | 6       | 7                 | 4        |
|                             | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |
| 9. I spend more time        |        |          | ١٠٠      |               | 4 0     |                   | , ,      |
| learning about and fixing   | 2.2    | 0.00     | 2.2      | 0.00          | 1.8     | 0.5               | 1.7      |
| CMCs than actually using    | 6      | 2.39     | 7        | 2.29          | 9       | 2.5               | 2        |
| them.                       | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |
| 10 .Communication media     | 1.8    | 0.40     | 1.9      | 0.04          | 1.6     | 2.1               | 1.4      |
| often don't allow me to get | 9      | 2.12     | 6        | 2.01          | 5       | 6                 | 4        |
| my work done.               | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (N)      |
| COMPOSITE                   | 2.1    | 2.23     | 2.0      | 2.12          | 1.7     | 2.3               | 1.5      |
|                             | 1      |          | ~        |               | Ι.      |                   |          |
|                             | (R)    | (R)      | (R)      | (R)           | (R)     | (R)               | (R)      |

#### Scale:

4.51- 5.00 - (A) Always 2.51-3.50 - (S) Sometimes 3.51-4.50 - (O) Often 1.51-2.50 - (R) Rarely 1.00-1.50-(N) Never

Overall, the findings revealed that text messaging gained the highest results in CMC in terms of knowledge with 3.59 mean scores; interaction skills accrued 3.65; motivation bagged 2.3; and satisfaction garnered a 3.16 mean scores. The respondents often experience frustration when dealing with new technological change in relation to CMC – balanced out by respondents' confidence in fixing/being knowledgeable in using said CMC

In terms of their interaction skills the respondents \*often\* find that using text messaging as an efficient/effective way to communicate. They find confidence in using the medium since they are able to convey and receive any message with clarity

Similarly, text messaging yielded the highest satisfaction rating. However, respondents find the medium too restrictive and time-consuming – which is an understandable flaw due to its simplistic nature. Their dependency relied heavily on the CMC and are often comfortable in using it as compared to other medium. They even preferred the medium to use for communication than a face-to-face interaction.

# Focus Group Discussion: Impact of CMC in the Organization's Network

For the focus group discussion, there were ten (10) participants in extreme cases were selected; those whose scores range the first ten highest and last ten lowest ranked in their scores in the survey. As regard, the employees proficiency in using CMC active users claimed to be very good users of text messaging and Facebook as they were using it in disseminating information to students and also colleagues. However, inactive users though they have CMC account attributed their dissatisfaction in using computer- based communication due to poor internet connections. The respondents affirmed that their communications skills were improved by using CMC. Through these computer based communication they can keep abreast of the current trend of technology communication. The virtual world of information converge reality in terms of easy access of information and facility of communication. In terms of benefits to their professional and personal life. Personally, it augmented the employees' medium of communication to their family relatives, and friends; distance may set them apart but through CMC it made them closer to their families, as it became true that information and message is just a text away. Moreover, that became useful in the workplace as every phase of communication need not a face to face and personal appearance of interlocutors. Nonetheless, mostly CMC though used with personal matters inseparably merged with the professional activities due the entire day life use of CMC. Nevertheless, there were challenges brought by CMC such netiquette of the users and responsibility of employees of using technology.

## SUMMARY AND CONCLUSIONS

In light of the findings of the study, the following conclusions were drawn:

- 1. The respondents comprised of the teaching and non-teaching employees in their middle age which are mostly female raised the highest percentage. Permanent employees registered the most number of respondents and majority in their baccalaureate degree are in a non-teaching position.
- 2. Amongst the various media platforms, Facebook predominantly outscored the employees' CMC preference, nevertheless, text messaging prevailed in terms of the users' familiarity, frequency of use and as medium of communicating with people garnering active interaction with friends, family, and relatives. While Email served mostly colleagues and superior in the workplace.

- 3. In terms of CMC literacy, the respondents were knowledgeable in using text messaging in contrast with blogging which was rarely used by the employees. Apparently, with the employees' exposure on text messaging and Facebook, these CMC platforms were often used for interaction in the workplace, thus, revealed the users' satisfaction.
- 4. More so, text messaging, e-mail, Facebook, group chat, and group chat bagged a close dependency and motivation against blogging and twitter which were rarely used by the employees. Generally, these CMC platforms revealed a moderate satisfaction to the respondents.
- 5. In terms of benefits to their professional and personal life, it augmented the employees' medium of communication to their family relatives, and friends. However, inactive users though they have CMC account attributed their dissatisfaction in using computer- based communication due to poor internet connections and less degree of literacy in using CMC.
- 6. There were challenges brought by CMC such as netiquette of the users and responsibility of employees in using the technology.

#### RECOMMENDATIONS

- Upgrading of the employees' competency in using various technology must be sustained through trainings and seminars to keep abreast with the technological advancement brought by CMC.
- 2. The University should provide strong internet connection and installation of units to be used by the employees.
- 3. There should be proper education on the ethics of using CMC; communication protocol be strengthened through proper mechanisms like filtering system and every employee must have their official account other than their personal account
- 4. Office messages must be transmitted through official account and should not be posted as personal nor rendered publicly. Grouping of viewers and message receivers is necessary to classify private and public posts.
- 5. There were challenges brought by CMC such as netiquette of the users and responsibility of employees in using the technology, hence, the university should create concrete policies on proper etiquette of using CMC, in account of the employees freedom of expression corresponded by the responsibilities of CMC users.

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