*Journal of Learning and Teaching in Digital Age, 2019, **4**(1), 41-45*
ISSN: 2458-8350 (online)
Research Paper

Motives Behind Preference of Internet Communication Tools Among University Students

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Received 02 July 2018, Revised 07 October 2018, Accepted 12 October 2018

ABSTRACT

Researches on internet communication tool (ICT) patronage among university students are of paramount importance owing to the fact that ICT enriched students with communication skills and prepare them for future jobs as communication accounts for the major time spent at work by managers. The aim of this study is to determine factors that affect university students' preference while choosing ICT. This research was conducted at Near East University, Cyprus during the 2015 spring semester. 99 students voluntarily responded to the questionnaire that was developed by the authors. The data collected was analyzed based on descriptive techniques of mean, frequency, and percentage. It was found that students preferred WhatsApp over other ICTs based on its beautiful styles, compatibility with mobile OS, public influence, cost-effective services, data consumption and ease of use as the key factors toward the preference. To make this research significant to future studies, the finding was discussed in-line with previous researches. The results of this research added empirical data to related studies and could help developers of ICTs, educational technologist, and online administrators.

Keywords: *Social media, ICT, Internet Communication Tools, WhatsApp, Viber, Facebook Messenger, university students*

INTRODUCTION

The basis for determining the success of any technology is based on people's acceptance and decision to use that technology (Hu, Chau, Liu Sheng, & Tam, 1999; Venkatesh, Morris, Davis, & Davis, 2003). While acceptance of any computer-based communication media is significantly influenced by user experience, the decision to choose a communication media might be determined based on the perception of its usefulness and ease of use. The outcome of this research will describe the reasons for preferential differences on the existing ICTs (Internet communication tools) among students and the research might contribute to future studies that involve the adoption of future internet communication tools. The main aim of this research is to identify the most preferred ICT among the existing ICTs that are widely used by students and describe some of the most important functionalities that drive the preference.

Researches on ICT patronage among university students are of paramount importance owing to the fact that ICT enriched students with communication skills and prepare them for future jobs as communication accounts for the major time spent at work by managers (Zhang, Li, Ge, & Yen, 2012). Zhang highlighted that effective communication improves job performance, tasks accomplishment, and broaden workers' view. With the proliferation of mobile technologies requirements of effective communication cannot be realized with the traditional communication tools. The convenience and affordability of ICTs made them a phenomenon that improves corporate performance and became widely accepted (Skierkowski & Wood, 2012). Although ICTs and traditional communication technologies such as SMS share the capability of sending text messages and such likes via mobile devices, but ICT have far more convenient functions of sending unlimited multimedia messages enhanced with emoticons and free from additional service charges (Sultan, 2014). Some researchers have shown that preference and acceptance of communication technology is a function of psychological factors (Bright, Kleiser, & Grau, 2015; Ngai, Tao, & Moon, 2015; Osiceanu, 2015). Sultan (2014) defined that students that are talkative or extroverts naturally tend to be more active social individuals both physically and in virtual environments compared with introvert students, as such extroverts may find the social support of rapid ICTs more appealing. Cavus and Bicen (2009) in their research identified that most preferred communication technologies are those that are cost-effective or offer free services. Church and de Oliveira (2013) added that

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the instantaneous nature of present communication technologies is the motive behind the adoption and acceptance of these technologies. Sprecher (2014) maintained that the richness of computer-based communication channels and expectations to partner with a certain group of people facilitates the affiliative outcome of adopting ICTs. In this era of rapid technological transition, this research will be of great relevance to past and future findings on ICT preference and factors behind it.

METHODOLOGY

This section provides information on the research participants and the data collection tool, it also briefly describes key activities carried out during the study and data analysis. To impose a probabilistic sampling, 120 questionnaires were printed and randomly distributed to the voluntary participants out of which 99 were completely filled and returned. Thus, 82.5% valid response rate was realized. The data collection tool was intuitively composed and carefully refined in line with the research aim. These are further explained in the following sub-sections.

Participants

99 valid responses were recorded from the voluntary participants studying at the Near East University in Northern Cyprus. The following is the percentage of those who participated in the study based on departments; 15.2% (N=15) from Department of Computer Information Systems (CIS), 19.2% (N=19) from Department of Business Administration (BusAdm), 12.1% (N=12) from Economics (Econ), 5.1% (N=5) from International Relations (IR), 7.1% (N=7) are from Banking and Finance (Ban&Fin), 5.1% (N=5) are from Computer Engineering (ComEng), 3% (N=3) are from Electrical Engineering (EleEng), 12.1% (N=12) are from Civil Engineering (CivEng), 4% (N=4) are from Mechanical Engineering (MechEng), 2% (N=2) are from Petroleum Engineering (PetrEng), 1% (N=1) from Bio-Medical Engineering (BioMedEng) while 14% (N=14) are from other departments. The study was conducted during the 2015 spring semester.

The participants are entirely from two faculties of Engineering, and Arts and Applied Sciences. The participants are 75.8% male and 24.2% female, 12.1% are indigenes of Turkish Republic of Northern Cyprus, 5.1% are from Turkey, 43.4% are from Nigeria, 10.1% are from Iraq, 5.1% are from Zimbabwe, 7.1% are from Libya, 6.1% are from Syria and 11.1% are bearing other nationalities. 13.1% are first-year undergraduate students, 11.1% are in the second year, 19.2% are in the third year, 16.2% are in the fourth year while 31.3% are master's students and 9.1% are PhD students.

Data Collection Tool

In addition to the data gathered via the questionnaire to find out the opinion of students toward a preference of ICT (Internet Communication Tool), a literature survey was also used to gather general information about the background of the study. The questionnaire was intuitively prepared by the authors and the reliability scale of its items' as responded yielded a Cronbach's Alpha value of 0.84. The questionnaire has three main sections. The first section has five questions for obtaining personal details. The second section has seven questions that curtailed data about a group of people that participants regularly communicate with, the most frequent purpose of communication, monthly internet subscription budget, and choices of most preferred ICT, mobile operating system and type of network connection. The third section comprises of 25 items categorized into five dimensions so as to ascertain the ICT functionalities that attracted participants to an ICT chosen in the second section. The dimensions are based on an ICT beautiful styles (Questions 1-6), compatibility issues (Questions 7-9), audiences that inspired participants to use an ICT (Questions 10-14), cost-effective services offered by an ICT (Questions 15-19) and optimal data consumption rate when compared to other ICTs (Questions 20-25). These questions were prepared with the aim of collecting data and finding out the preferences of ICT among participants and also determining the driven factors to the preferences. The 25 responses in the third section of the questionnaire are to depict motives behind the preference of the ICT chosen in the second section. Thus, these responses are rated based on a 5-point Likert scale from "Strongly Agree" with a value of 5 to "Strongly Disagree" which has a value of 1.

DATA ANALYSIS

Data were collected using a questionnaire. After that SPSS 20 was used to analyze the collected data. Simple descriptive statistical techniques of mean, standard deviation, frequency and percentage were used during the analysis process.

RESULTS

Opinions on Functional and Social Influences

The means and standard deviations of each question in the last section of the questionnaire are shown in Table 1 below. The results have shown that; the overall contribution of functional specifications to the preference of an ICT is above average but highest contributing factor was found under non-functional dimensions.

The highest mean (M=4.38) among the driven factors to preference of an ICT according to the table was under the dimension of "audience influence". The highest mean is recorded on question number 10 "A lot of my friends are using it". This might be a clear indication that the popularity of an ICT among friends plays a vital role during preference. The second highest mean (M=4.21) was recorded on item number 1 "The App saves conversation" which is under the "style of App" dimension. Hence, there is a likelihood that students want to always review the conversation they recently engaged in with their colleagues. Thus, the functional capability of an ICT can be vital to its popularity. The affordability of powerful mobile devices amid students might be the reason of recording the lowest mean (M=3.02) under the dimension of "compatibility issues". Forbes (2012) and Sultan (2014) stated that users that socialize and wish to stay connected longer using ICT tend to prefer technologies that provide free and effective services. Thus "Services" and "Data Transfer" dimensions provided slightly average responses. With these average responses, we might also describe the availability of numerous technologies that offer free internet communication services and accessibility of free wireless network connection within the campus as the relevant determining factors to these responses. Sultan (2014) mentioned that popular computer-based communication technologies are making users feel more knowledgeable by enabling more text-based communication. Thus, in this research, the item with the highest value under "data transfer" dimension is "The App allows sending a lengthy text than others" (M=3.93), this might implies that preferred ICT allow participants to feel increasingly knowledgeable.

Table 1. Means and Standard Deviations of each item from the third section of the questionnaire

Dimensions	Items	Mean	SD
Style of App	1. The App saves the conversation	4.21	.88
	2. The App is easier to operate than others	4.08	.82
	3. The App has more beautiful icons than others	3.75	.97
	4. The App has a lot of emotions/similes/symbols	3.82	.96
	5. The App support variety of alphabets	3.65	1.05
	6. The App indicate online/offline users	3.78	1.14
Compatibility	7. The App is quicker than others	4.07	.90
	8. The App is better because my phone is weak	3.20	1.24
	9. The App is available for a variety of phones	3.87	1.08
Audience	10. A lot of my friends are using it	4.38	.87
	11. A lot of my teachers are using it	3.55	1.07
	12. A lot of my family are using it	4.08	.93
	13. The App is popular in my country	4.08	.90
	14. The App allows writing in my native language	3.60	1.20
Services	15. The App download and registration is free	4.19	1.03
	16. The App services are free	3.81	1.00
	17. The App collaborate with many other Apps	3.61	1.06
	18. The App gives word suggestions during typing	3.76	1.11
	19. The App has a language translator	3.27	1.20
Data Transfer	20. The App consume less data than others	3.72	1.03
	21. The App consume less memory than others	3.71	1.00
	22. The App allows sending longer audio than others	3.57	1.04
	23. The App allows sending a lengthy text than others	3.93	1.00
	24. The App allows higher picture resolution	3.64	1.03
	25. The App allows sending longer video than others	3.47	1.14

Preferred Internet Communication Tool

Based on the analysis in Table 2, it is obvious that WhatsApp seems to be the most preferred ICT to almost half of the participants, Viber and Facebook Messenger also got reasonable audiences.

Table 2. Preferred ICT

Tool	Frequency	Percent
WhatsApp	49	49.5
Viber	21	21.2
Facebook Messenger	18	18.2
Tango	1	1.0
Line	1	1.0
Skype	4	4.0
BBM	3	3.0
Others	2	2.0
Total	99	100.0

WhatsApp deserves such turnout as it enables users to achieve numerous advanced communication requirements such as exchange location information, multimedia messages instantly to individuals and groups of friends free of charges (Church & de Oliveira, 2013).

Preferred Mobile OS

Table 3 has shown that Android mobile operating system with the overall choice of 67.7%, is the most utilized among the participants. iOS followed with 16.2% usage among the participants.

Table 3. Mobile Platform

Platform	Frequency	Percent
Android	67	67.7
iOS	16	16.2
Blackberry OS	8	8.1
Windows	4	4.0
Others	4	4.0
Total	99	100.0

Android has become one of the most reused mobile operating systems as such numerous robust devices and ICTs are coming with Android OS support (Khomh et al., 2012). Sheikh et al., (2013) while comparing mobile operating systems identified Android as the most preferred in terms of platform support, functional performances and growth in the mobile market.

Preferred Network Connection

The most accessible type of network connection to participants according to Table 4 is a Wi-Fi network connection. This might be due to free Wi-Fi provided within the campus.

Table 4. Network Connection

Network Type	Frequency	Percent
3G	42	42.4
Wi-Fi	55	55.6
Others	2	2.0
Total	99	100.0

Another reason might be the fact that the Wi-Fi network connection was determined to support the fast exchange of multimedia contents due to high speed and higher bandwidth than 3G (Lehr & McKnight, 2003).

CONCLUSION

With the foregoing discussion and descriptive analyses, the basic concept of ICT preference has been identified to be guided by several factors ranging from functional feasibilities of an ICT, to friends' influence, accessibility of adequate network connection and mobile platform. However, it is very hard to point out single ICT as the most superior in terms of all aspects of communication requirements. WhatsApp have been the most preferred among the research participant, it might just be regarded as a temporal achievement especially in this speedy technological era which might drive us to more and more advances in internet communication technologies. So, while choosing an ICT a collection of the foregoing factors plays different roles based on individual or group satisfaction. This research did not only follow the theoretical trends in ICT preference but tried to understand certain functionalities that are considered important to students of Near East University while choosing an ICT. The significance of this descriptive study will provide a clue on how competitive ICTs should be developed by considering and realizing both functional and non-functional specifications of the preferred ICT. Insights on developing competitive ICTs for students is of great importance to software developers, online administrators as well as educational technologists.

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