Daily Usage of Smartphone Among Undergraduates In Malaysia

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Abstract

In today's world smartphones had become an essential item that is almost inseparable from oneself. Young people especially the students are very much rely on this device as it help one to be constantly socially connected to the world as it give access to a lot of information and keep them updated in the happenings around them. This study aims to identify the undergraduates' smartphone pattern of usage for integration and social interaction. Moreover this research sampled 385 Malaysian undergraduates between 18 to 27 years from various public and private universities in Malaysia. Overall the result shows that even when they were apart from their family, they use smartphone to keep in close contact with their family and their loved ones. These findings help to understand the nature of smartphone usage among youth.

Keyword: Smartphone, Integration and Social Interaction.

Introduction

The reality that can be seen is the young people have accepted mobile telephony as a normal part of living and will mature with the technology (Fansworth & Austrin, 2005). Modern telecommunication technology started in 1876 when Alexander Graham Bell invented the first telephone (Kling, 2010). Since the development of the first telephone, the telecommunication technology had gone through tremendous development that had led to the introduction of the smartphone. Smartphones are fully featured high-end mobile phones featuring PDA capabilities, enabling applications for data-processing and connectivity to be installed on them (Papagiannakis *et. al,* 2007). It is a device that is able to have computing abilities (Norris, 2007), or simply can be put as a programmable mobile phone (Raento *et al.,* 2009).

Most of today's smartphone comes with additional communication and computing features such as e-mail, video conferencing that requires both extensions to the device and ongoing access to the network. Apart from that consumers can also conduct online transactions (West & Mace, 2010). The technology which has kept on advancing managed to attract the group of young people that could catch up with that kind of development (Freeman, 2013). Furthermore, it was also found that majority of smartphone users were teenagers and young adults (Mohd Azam Osman *et. al.,* 2011).

According to Watkins (2009) after analysing data from their research on youth and technology, they realised that it was clear that technology in young people's live is becoming more than just tools and technology, it had actually became their way of life.

Objective

To identify the users' pattern of usage of smartphones for integration and social interaction.

Literature Review

McQuail (as cited in Miller, 2005) gave few definitions to integration and social interaction which includes gaining insights into circumstances of others, identifying with others and gaining a sense of belonging, having a substitute for a real-life companionship, helping to carry out social roles, and enabling one to connect with family, friends, and society. Smartphone is a devise that is relevant towards youth as it become integrated and used for social interaction (Noor Mayudia Mohd Mothar, *et. al.,* 2013).

Smartphone is a multipurpose device that allows its users to keep in contact with others, search for information, provide entertainment with its ability to download, store video, music, games and also a device that represent its carrier. According to Vorhaus (2009), most people nowadays will use their smartphone not only for talking and texting, but also for other major mobile phone functionality such as e-mail, games console, downloading, alarm clock and calendar, mp3, camera, GPS, Internet, accessing information, and many more.

According to Mohd Azam Osman *et. al.,* (2011), based on their exploratory study, the most common usage of smartphone is still related to making phone calls and sending text messages. Few other researches on mobile phones (Siew Hock & Moon Ting Su, 2004; Gurau, 2009; Nor Shahriza Abdul Karim, *et al.,* 2010; & Mohd Azam Osman *et al.,* 2011) also reported similar findings. This type of usages could be typically categorized as integration and social interaction as it involves users ability to connect with others and fulfilling out social roles. Even though smartphone was first introduced to the world more than a decade ago, the level of familiarity and its usage are still growing.

In Malaysia, university students regarded mobile phone as a necessity as it alters the learning method at the higher learning institutions (Syed Yahya Kamal *et al.,* 2008). For instance, students use smartphone to share notes between classmates, record lectures, as well as take pictures of the assignments for future reference, share examination results via facebook, or even using Bluetooth to share information.

The development of 3G technology represents the latest trend in mobile phones standards offering increased bandwidth and information transfer rates to accommodate web-based applications and phone-based audio and video files. These appeals to the young people as according to Watkins (2009), this type of media offers the young generation the constant opportunity to connect and share lives with close friends and acquaintance. Therefore, by sharing their lives with others via the Internet and mobile phones means that they are constantly will be connected, accessible, and socially available (Watkins, 2009). Smartphones is one type of media that can facilitate opportunities to develop extremely strong, persistent, and real-time ties to their peers while interacting with a wide range of cultural content such as pictures, music, and video (Watkins, 2009). Furthermore the utilisation of the smartphone SMS features and Internet applications has resulted in the expansion of people's social networks and connections with instant personal updates from others within in their social networks (LaRue *et. al.,* 2010).

Nor Shahriza Abdul Karim *et al.,* (2010) discovered that users used features like SMS, voice calls, music, alarm clock, address book, calendar, and camera for socialisation, and entertainment purposes. Similarly, Mohd Azam Osman *et al.,* (2011) also found that typical smartphone usage apart from phone calls, and SMS, would feature slightly advance usage such MMS, multimedia playing, and operating common applications.

Thus, young people of this generation differ from the previous generation in their extensive used of mobile communication and new media. For the young people, the Internet-based communication channels are part of the new written communication culture (Oksman & Turtiainen, 2004). According to Watkins (2009), in 2007 the Washington Post reported on the dramatic rise of text messaging among young people. According to him, the featured article also included a profile of a seventeen-year-old high school junior who sent 6,807 text messages in one month (Watkins, 2009). This means that the high school junior roughly sent around 230 text messages in a day. That was only the interaction with one media alone.

Methodology

The research was conducted on Malaysian youth age between 18 to 27 years that were enrolling in the bachelor degree at the government as well as private universities. The universities were selected through the simple random sampling. Institutes chosen to represent the public universities were the International Islamic University Malaysia (IIUM), Universiti Putra Malaysia (UPM), and the University of Malaya (UM). On the other hand, Universiti Tunku Abdul Rahman (UNITAR), Universiti Selangor (UNISEL), and Multimedia University (MMU) were selected to represent the private universities. A purposive sampling was used to select 385 respondents for this research.

Pattern of Usage Integration and Social Interaction

According to Yoon (2006), young people's motive in purchasing their first mobile phone was to make contact with their peers. Table 1 showed the pattern of usage for user's interaction with others. The researcher divided the interaction with others in two categories that consisted of the contact of the strong ties and the weak ties. The strong ties were the respondents' parents, brother/sister/family members, close friends, and boyfriend/girlfriend. A high level of emotional closeness is typically defined as strong tie relationships and trust and weak tie is the opposite (Vitak & Ellison, 2012). Studying the result, the researcher realized that the respondents had different frequency of interaction. Here the interaction would include sending/receiving call/text/video call/email/social network/ Instant Messenger.

Table 1: Frequency User's Interaction With OthersVia Smartphone Daily (n=385)

Items	Interaction per day (percentage)									
	None	1-2 times	3-4 times	5-6 times	7-8 times	9-10 times	11-12 times	13-14 times	15-16 times	17-above times
Strong Ties										
Brothers, sisters or other family members	23 (6)	306 (79.4)	21 (5.5)	15 (3.9)	1 (0.3)	8 (2)	2 (0.5)	0 (0)	3 (0.8)	6 (1.6)
Parents or guardian	13 (3.4)	290 (75.2)	45 (11.8)	20 (5.1)	2 (0.5)	6 (1.6)	5 (1.3)	0 (0)	1 (0.3)	3 (0.8)
Close friends	15 (4)	221 (57.4)	41 (10.6)	33 (8.7)	10 (2.7)	26 (6.8)	9 (2.4)	2 (0.5)	5 (1.3)	23 (5.6)
Boyfriend or girlfriend	149 (38.6)	105 (27.4)	22 (5.7)	28 (7.3)	11 (2.8)	26 (6.7)	6 (1.6)	3 (0.8)	2 (0.5)	33 (8.6)
Weak Ties										
Classmates	32 (8.4)	247 (64.2)	41 (10.6)	31 (8)	9 (2.3)	14 (3.6)	5 (1.3)	0 (0)	0 (0)	6 (1.6)
Friends	35 (9)	240 (62.1)	41 (10.6)	34 (8.8)	6 (1.6)	18 (4.8)	5 (1.5)	0 (0)	3 (0.8)	3 (0.8)
Lecturer	159 (41.1)	210 (54.5)	7 (1.8)	5 (1.5)	0 (0)	3 (0.8)	0 (0)	0 (0)	0 (0)	1 (0.3)

Overall, under the strong ties category, apart from boyfriend or girlfriend, more than half of the respondents interacted with their brothers, sisters or other family members (79.4%), as well as their parents or guardian (75.2%), and close friends (57.4%) at least between 1-2 times per day. According to Ran Wei (2006), cell phone helped to strengthen the users' family bonds, expand their psychological neighbourhoods, and facilitates symbolic proximity to the people they call. Smartphone in a way functions to do the same regarding to the smartphone users and their contacts. This suggested that even if they were apart from their family, they use smartphone to keep in close contact with their family and their loved ones.

According to Cleemput (2010), close friends used all communication media at their disposal to connect with each other. This also helps to strengthen the claim that the availability of the smartphone in a way

became a medium that is convenient and provide easy access to stay connected with their friends. However, it was also revealed more than one third of the respondents who did not make any contact with boyfriend or girlfriend in the strong ties categories. This situation was most probably happening because the respondents were not involved in any romantic relationship at the moment. In this research, it was also found that there was one respondent that contacted his or her boyfriend/girlfriend between 279 to 310 times per day. This signified that the smartphone became the way for the respondents to maintain closeness with others especially their boyfriend/girlfriend.

Bond (2010) identified mobile phone as an object, and the content and material associated with it, is considered vehicle for intimacy and closeness. The smartphone is a suitable device for this as not only that it offered mobility but it is more personalised and less cumbersome than any other media. According to Yoon (2006), the mobile phone functions as a medium for conforming 'old' local boundaries and partly constructing new social relationship. In this case the 'old' refers to their relationship to the family members and new social relationship refers to the friends and peers and most of their motives for purchasing their first mobile phone were to make contact with either old or new relationship.

The weak ties category's frequencies of the contacts were almost similar with the strong ties categories. For instance, more than half of the respondents interacted with their classmates (69.2%), friends (62.1%), and lecturers (54.5%). It was also revealed that, nearly half of the respondents did not contact their lecturer at all. This was probably because they may be only seeing their lecturers only once or twice a week due to classes they are required to attend, thus there will be no reasons to contact their lecturers on a daily basis. Compared to their friends that they probably meet everyday, less than 10 % of respondents reported that they did not contact their friends at all. It was obvious that smartphone was regularly used in the interaction between classmates and friends. Hence, this supported the findings that help to prove the relevancy of smartphone in the interaction

between people as findings by Axelsson (2001) revealed about what contributed.

Table 2 shows the different ways which the respondents socialised with others. There were six items in the table and the respondents were asked to write how many times that they have used these features in a day. Based on the result, most respondents engaged with others through their smartphone by sending and receiving text messages. This was a basic feature that even a standard mobile phone would have. Nearly half of the respondents tend to send or receive text messages more than 100 times in a day. The researcher realised that the reasons text messaging is still popular with the respondents was because currently sending SMS is cheap and just cost the users around RM0.10 to RM0.15 per SMS, and most of the telecommunication companies give around 200 to 600 free SMS to its customers based on the plan that they subscribed. In previous research it was also found that text messaging or SMS is popular with young adult as the majority of them admitted that they mostly text their family, friends, and colleagues (Axelsson, 2010; Lenhart *et. al.,* 2010 & Nor Shahriza Abdul Karim *et. al.,* 2010). In this research there were also few respondents (1%) that admitted to have been sending or receiving text messages up to 500 times in a day. This is possible because most of the smartphone in today's market enable users to send text messages to multiple receivers with a click of a button.

Table 2: Frequency User's Socialize/ Communicate
with Others Daily (n=385)

Media	Socializing/communicating per day (percentage)									
	None	1-2 times	3-4 times	5-6 times	7-8 times	9-10 times	11-12 times	13-14 times	15-16 times	17-above times
Send/ receive text messages	12 (3.1)	23 (6)	38 (9.9)	44 (11.4)	16 (4.2)	60 (15.5)	25 (6.5)	0 (0)	12 (3.1)	155 (40.3)
Send/ receive instant messages (IM) to friends	158 (41)	52 (14)	16 (4.2)	33 (9)	10 (2.6)	35 (9.1)	15 (4)	0 (0)	10 (2.6)	50 (13)
Use/ log social networking sites	76 (19.7)	88 (22.9)	42 (10.9)	47 (12.2)	14 (3.6)	48 (12.5)	19 (4.9)	0 (0)	1 (0.3)	50 (13)
Send/ receive call	13 (3.4)	61 (15.7)	74 (19.2)	88 (22.9)	17 (4.4)	63 (16.4)	21 (5.5)	0 (0)	8 (2.1)	40 (10.4)
Send/ receive email to each other	161 (42)	101 (26)	31 (8.1)	30 (7.8)	7 (1.8)	18 (4.7)	11 (2.9)	0 (0)	2 (0.5)	24 (6.2)
Send/ receive video calls to/ from someone on your smartphone	227 (59)	93 (24.1)	12 (3.1)	16 (4.2)	7 (1.8)	12 (3.1)	7 (1.8)	0 (0)	0 (0)	11 (2.9)

The second most popular features that the respondents use to socialise or communicate were the Instant Messages (IM) feature and Social Networking (In this research the social networking sites would include "Facebook", "MySpace", "Twitter", "Flickr", "Bebo", "LinkedIn", "LiveJournal", "Ning", "Hi5", "Orkut", "Tagged", "deviantArt", "Badoo", "Netlog", "Friendster"). The findings confirmed Axelsson (2010) claim that IM seems to be used most heavily by teenagers and young adults. Both features required internet connection, and there are free of charges as long as they are connected to the internet.

Most respondents in the study paid for the Internet connection via their service provider. However for those who did not subscribe to Internet connection, they use the Internet connection via free wireless spot that is available in their surroundings. It was reported that more than 10% of the respondents would at least send/received IM, and use/log on to the social network site up to two times in a day. Although both features are popular among the respondents, it was also revealed that almost half of the respondents did not use IM feature at all. This was because, IM feature were mostly popular for Blackberry smartphone as they can use the IM feature (known as BBM for Blackberry users) to communicate among Blackberry users. In this research it was earlier disclosed that Blackberry was the third most popular brand among the respondents. This could explain the popularity of IM among the respondents as Blackberry e-mailing and messaging are perfect for quiet and secure interpersonal communications when they do not want to use their phone in public places (Sweeny, 2009).

It was also said that the rise in smartphone ownership and affordable phone plans prompt the rapid increase in mobile social networking (Ellis, 2011). According to Nielsen Report, it was found that a quarter of social network users used mobile platform to access these sites and half of them are those below 35 years old (as cited in Ellis, 2011). This supported the research's findings as social network was also the second most important feature that the respondents used to socialise or communicate with others. Other than that, apart from using social network site to message friends and family, the respondents may be logging on to social network site to update their online status (Harris Interactive, 2008).

The third important feature was sending or receiving call. It was revealed that 23% of the respondents sent or received call five to six times daily. Petric *et al.* (2011) stated that telephone was usually used for talking to whom the caller is close or intimate. It was revealed earlier in this research that most respondents contacted their family regularly and this feature may contribute to such findings. Axelsson (2010) reports that majority of younger adults' phone call were

between one to four minutes long. The researcher suspects that the respondents' calling/receiving call activities were brief and that allowed them to receive or make this many calls in a day. Also currently, the telecommunication companies in Malaysia offer cheap rates for calling that is around RM0.12 to RM0.15 per minute, and their customers can enjoy few hours of free call based on the plan that they subscribed to. Another feature that the respondents used to socialise or communicate with others was sending or receiving email. This research revealed that at least 26% of the respondents use their smartphone to send or receive email up to two times in a day. Unlike calling and receiving call, the email feature is important because of its ability to include many and mostly is used for interaction with those who are perhaps less intimate (Petric *et al.,* 2011).

The smartphone was also used to make or receive video calls. Although in this research more than half of the respondents did not even use the feature to socialise or communicate with others, some of the respondents still used this feature. The researcher expected that more respondents would be using this feature as almost all of the smartphones today allow users to make video call on their smartphones and the technology for video call was always improving in the latest smartphone's model. This only led the researcher to believe that the reason video call was not popular among the respondents was because it was more expensive than making a voice call. The video call will cost RM0.30 per minute, which was almost double the price for voice call. Even though most telecommunication companies in Malaysia such as Celcom, Maxis, and Digi, offers free video call to its users, the call is usually limited and it is only free within the same network. In the end, price continue to be the reason for voice and plain SMS to still be the only services adopted by majority of the mobile phone users (Harno, 2010).

According to Axelsson (2010), young adults mostly have individual and social needs that can be fulfilled by this technology as communication and coordination of activities were quite important and calling or text messaging could fulfil the needs. It could be possible that the

respondents would use the smartphone technology to accomplish these needs and this could explain the amount of contacts made with their smartphones. In comparison to the standard mobile phone, the smartphone is a fully featured phone that offers various ways to connect with their friends and family.

Conclusion

Based on the finding it was clear that young people rely heavily on their smartphones to conduct their daily activities as well as keeping in touch with other people. The social interaction that they had been mostly related to those that they have close relationship and text messages still remain as the best medium to communicate. These findings help to understand the nature of smartphone usage among youth. However, at this moment there are only few researches done regarding the social usage of smartphone in Malaysia, thus leaving researchers to be guessing the impact smartphone has on its users. Therefore the researcher hopes the findings will provide additional information and provide us a better understanding of the situation.

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