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Smartphone habit and behavior in Brunei: Personalization, gender, and generation gap

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ABSTRACT

A smartphone is a device which offers advanced technologies, functions similarly to a computer, supports multitasking and makes it easy to remain connected with others. The following survey design research examined the usage patterns of smartphone users across different demographics. The results of this study provide insights into the prevalence of respondents' usage of smartphones and their habits and behavior related to smartphone use itself especially among the younger generation of social disorders such as nomophobia and phubbing. In addition to documenting the experience of smartphone users, the research also examines personality patterns related to smartphone usage, the trends of different age groups, and the effects of gender preferences.

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1. Introduction

A smartphone is more than just a mobile phone that you can use to make and receive calls. It is an essential component in our daily lives (Lenhart, 2012). As our lifestyles become more complex smartphones are changing the way we live, study, think and communicate (Lane & Manner, 2011; Woodcock, Middleton, & Nortcliffe, 2012). We need speed, quality and effectiveness and we want to be able to carry these features in our pockets. The invention of the smartphone has brought many changes to our daily lives, work tools, and learning processes for the users (Lee, Chang, Lin, & Cheng, 2014). One of the most important features of smartphones is internet connectivity, which enables 24/7 connectivity through either a mini browser or apps for countless purposes, including searching for information, connecting to a social network, or downloading music, videos and related content (see Fig. 1).

People rely on smartphones on a daily basis, from doing work to catching up on social networks (Novo-Corti & Barreiro-Gen, 2015).

What makes a smartphone an essential device for daily life is that the applications it offers are on par with the elements of a computer, but are said to be better due to the durability and compact feature of the smartphone (Tossell et al., 2012). The smartphone is an upgraded version of a traditional phone comprising the functions of calling and messaging but at the same time carries many devices such as a calculator, a personal digital assistant, an address book, a music player and a camera all in one handheld device (Himmelsbach, 2013; Novo-Corti & Barreiro-Gen, 2014). Digital mobility and connectivity grow more important every day. Consumers keep their mobile devices nearby, check them frequently, and occasionally use multiple devices at once (Salehan & Negahban, 2013; Wu & Wang, 2005; Wu, Wang, & Tai, 2004). However, what do they actually click on, where do they use their devices and for how long do they spend on them? Answers to these questions would provide valuable input to a number of stakeholders including retailers and government agencies.

The aim of this research, therefore, is to establish the correlations between smartphone activities and individual habits and behavior, gender preference, and different age groups. We surveyed 589 voluntary individuals to see how they used their smartphones to access the mobile web and mobile apps. We also asked them questions about how they use and view mobile devices in their lives. The study shows that smartphone habits may result in

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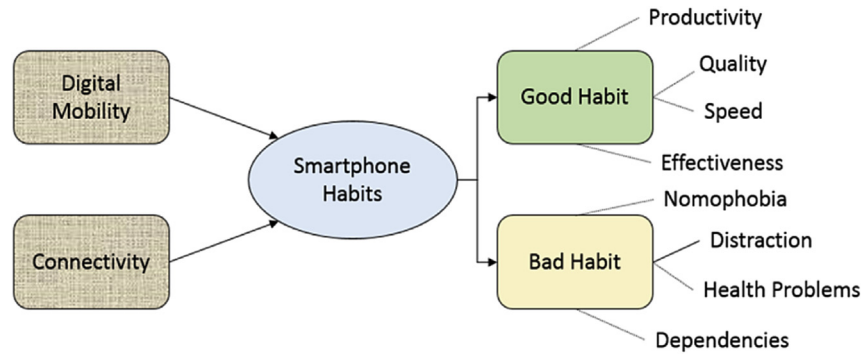
Fig. 1. Smartphone habits.
(Source: Authors' Compilation (2016).)

potential personal challenges of mental disorders such as nomophobia or phubbing. It also identifies smartphone addiction as leaning more towards the younger generation and that gender difference are considered to be statistically significant in terms of smartphone habits. Although this study was conducted in Brunei, the study model can be readily used by other researchers in different settings. In the next section, we present a review of related work. This is followed by an outline of the methodology. Next, we present our analysis and findings as well as the discussion. The final section represents the conclusion.

2. Literature review

Smartphones' capacity for easy access to communication, entertainment, and paying bills online has meant that they are essential in running our daily activities (Skierkowski & Wood, 2012). As smartphones have advanced, there are now plenty of applications that allow people to socialize which may contribute to unintended negative behavior. Smartphones can lead to changes in behavior such as using mobile devices while driving or walking. Some users turn out to be ignorant about their surroundings as they focus more on their screen. In this section, we review some relevant analysis from previous studies to identify problems and theories of smartphone habits.

2.1. Smartphone and habits

Smart mobile devices or smartphones play a large role in our daily lives. Their convenience and the rapidly growing number of apps being developed means that they have become very powerful devices (Alas, Anshari, Sabtu, & Yunus, 2016). The main usage of smartphones is for communication. However, through rapid technological advancement, they are now used for other purposes such as entertainment, bill payments, audio and camera recordings and internet browsing. These smartphones have been embraced by all age groups, young and old and are likely to become an addiction to both generations (Boulos, Wheeler, Tavares, & Jones, 2011; Thompson, 2012b).

The world number of smartphone users in 2013 totalled 1.4 billion and this is expected to rise to 2.76 billion users by 2018 (Nerea, 2014). The numbers also seem to be spread out across different age groups. Church and de Oliveira (2013) conducted a study of smartphone users in Spain, whose ages ranged between 20 and 60 years old and found that smartphones are commonly used for their convenience in communication. Similarly, a Saudi Arabian research project carried out on individuals ranging in age between 18 and 55 years reported that smartphones are mostly utilized for their communication and entertainment purposes (Alkhunaizan &

Love, 2013). These studies indicate that smartphones really play an important role in life and have become a necessity for users of all ages.

Smartphones' technological features mean that the majority of users will experience such an impact from using it, that their usage will soon become a habit. In the UK, Schraube (2014) emphasized that smartphone habits are automatic routines that people are not fully aware of while performing and impossible to avoid. A study of smartphone usage in the UK of people aged 17–49 years old found that smartphones, specifically the WhatsApp feature was frequently used by individuals to express their problems to their peers. They found that the younger generation aged between 16 and 24 years old were more likely to use social networks such as Facebook and Twitter. Younger adults also like to stream videos online through YouTube and play online games as well (O'Hara, Mitchell, & Vorbau, 2007).

Falaki et al. (2010) on diversity of smartphone usage in Europe showed that users interact with their phones on an average of 10–200 times a day with each interaction spanning from 10 to 250 s. They also used up about 1–1000 MB of data per day. While diversity of personal behavior plays a huge role in smartphone usage. In South Korea, more than 10 million smartphone users do mobile shopping in Tesco's South Korean network of shops. Commuters can do their shopping online while waiting for the train home from work. The walls of the subway stations are covered with pictures of Tesco's products, each labeled with QR codes. The user can scan this code with their mobile device, and even if their train arrives before they have finished shopping, they can still shop from inside the train (Douglas, 2011).

With many useful Apps available, the smartphone market is growing rapidly and it is very lucrative. Both old and new players are competing for a share of the growing market by offering innovative products. Amongst those players are Apple, Nokia, LG Electronics, HTC, Samsung, Acer, BlackBerry, Sony, Huawei, and Google. Nowadays, the strongest competitor is Samsung, which accounted for 24.9% of global market share in Q2 2014, more than double that of Apple, which had 11.7% of the market. Other major players are Huawei (6.7%), Lenovo (5.2%), and LG (4.8%) (IDC, 2014).

Smartphone companies are competing to produce greater and improved smartphones to attract consumers and thus dominate the world smartphone market. Smartphone ownership also influences individuals' status through the eyes of society therefore driving people to get at least one to own with the idea of it as a necessity (Anshari, Alas, & Guan, 2015). In addition, there is now a huge demand for innovative services and products that are accessible through smartphones, and this requires a response from service providers. For instance, people who drive vehicles want an attractive navigation system in their smartphone that displays the