Chapter 5
Are We Ready to App?
A Study on mHealth Apps, Its Future, and Trends in Malaysia Context

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ABSTRACT

In Malaysia, adoption of the mobile application for smartphones and tablet computers are growing in number and are actively applied in healthcare. However, limited studies were found looking at mHealth app that is focusing on Malaysia context. This study aims to examine the current mHealth app that is available in Malaysia. This study also seeks to rank the pricing of top paid apps from two major platforms, Apple iOS, and Android PlayStore. In mid-2016, the authors overviewed the Medical app and Health and Fitness category from two dominant platforms; Apple iOS and Android Play Store. The only app that was related to human healthcare, described in Bahasa Malaysia or English, was examined. Most app that is designed specifically for Malaysia is informational apps, which provide information on healthcare and medical information. The study also reveals that most consumers in Malaysia are ready and are willing to pay for mHealth app. Majority of app price is between RM10.01 to RM25.

INTRODUCTION

The evolution of smartphone production has led to an enormous increase in the demand for mobile applications. The simplest tools for individuals who seek a modern lifestyle, mobile devices have become ubiquitous. Clear evidence shows that out of 5.3 billion worldwide mobile phone subscriptions, 3.8 billion (73 percent) are from developing countries (Marshall, Lewis, & Whittaker, 2013). The recent statistic also revealed that the numbers is projected to grow from 2.08 billion in 2016, to be 2.69 billion of users by the year of 2019 (Statista, 2014).

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A mobile application is defined as a “software program for a computer or phone operating systems” (Chun, Chung, & Shin, 2013). In the healthcare environment, a mobile app also called an mHealth app offers assistance to individuals by providing health info and personal self-administration tools (Handel, 2011). It also acts as an aids to the professionals who engage with patients, expanding the reach of their practices and possibly bringing down health care costs (Boyce, 2014). An mHealth app makes self-monitoring of ailments and illnesses possible (Marshall et al., 2013; Sidney et al., 2012; Cole-Lewis & Kershaw, 2010) in an interactive way (Aitken, 2013). Current statistics (Abt, Bader, & Bonetti, 2012) suggest that there are currently 40,000 available medical apps and that the figure is gradually increasing.

As this ubiquitous technology takes root and grows, little known about how consumers are currently using mobile technologies in healthcare (Atienza & Patrick, 2011), and far too little consideration has been paid to Asian countries, particularly Malaysia. Malaysia is one of the prominent countries in using the mobile technology, yet there has been little discussion on the mHealth app. The overall smartphone adoption market in Malaysia is unclear, and the statistically evidences are hardly available (Osman, Zawawi Talib, Sanusi, Yen, & Alwi, 2011). The research to date on mHealth app has tended to focus on a literature review (Hussain et al., 2015), the usage perception by medical students or expertise (Kwee Choy Koh, MMed et al., 2014, Ming et al., 2016), a conceptual framework (Fadzilah & Arshad, 2015), and general smartphone usage. No previous studies have dealt with pricing issues in mHealth app in Malaysia.

This chapter will provide a review of the mHealth app with an emphasis on the Malaysian context. The central purpose of this chapter is to identify the minimum and maximum prices in Malaysia Ringgit, on the most downloaded mHealth apps, as most literature is based on the US dollar. All of apps that were evaluated were selected from Apple iTunes Store and Android Play Store marketplace. Designated platforms are chosen as they were the global leaders in app marketing and distribution (BinDihm, Freeman, & Trevena, 2012). The term “mHealth application” and “mHealth app” will be interchangeably used in this study.

There are two primary aims of this study:

- To identify the mHealth apps that are designed specifically for the Malaysian context and to categorize them based on functionality.
- To analyze the top paid mHealth app in Malaysia from two major platforms, Android Play Store and Apple iOS platform, and to rank pricing in the Malaysian Ringgit (RM).

LITERATURE REVIEWS

Mobile Technologies and Healthcare

Mobile technology is described as “wireless devices and sensors (including mobile phones) that are intended to be worn, carried, or accessed by the person during normal daily activities” (Kumar et al., 2013). First digital mobile phones appeared in the early 1990s, and since then mobile technologies have continued to advance with various features and better networks (Fiordelli, Diviani, & Schulz, 2013).

With the growth in adoption of mobile technologies, the number of health-related applications has also grown. The concept of mHealth refers to the use of “mobile computing, medical sensor, and communication technology for healthcare” (Liu, Zhu, Holroyd, & Seng, 2011). Closely connected to