Chapter 86
A Survey Study of Smartphones Behavior in Brunei:
A Proposal of Modelling Big Data Strategies

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ABSTRACT

The use of smartphones is generating large amounts of data. The term "big data" has become popular in describing a massive data, both structured and unstructured. Big data refers to high volume, high velocity, and high variety. This study used an inductive approach involving the distribution of a questionnaire to gain an understanding of smartphone users' habits in Brunei. Then, the authors identified several concerns that became the focal point of further analysis in the use of smartphones in daily activities. The findings is correlated to the growing of trends of big data application for users' benefit. The finding suggests that there is growing demand from smartphone users could create better services and value through big data application. The authors propose a big data approach that will enable service providers to enhance smartphone users' experiences. Big data application will enable smartphones to become smarter in terms of service and value.

1. INTRODUCTION

The advancing of technology like smartphones has made life so much easier. It has been created for a good faith thus increasing the productivity by associating work into life. People have become highly dependent on smartphones. The mounting obsession for Smartphones among the users has brought concerns for psychologists and others. Obsession that has consequences that ranges from minor where teenagers no longer use proper English grammar in messages to major con like car accidents due to texting while driving. When people get too dependent to their smartphones to do most of their jobs, addiction will eventually develop. Along with addiction, there will also be negative outcomes such as the negative emotions that emerge when one cannot use smartphone, the inability to reduce the usage of smartphones by free will and extensive usage for enjoyment (Chen, Zhang & Zhao, 2015).

Over the years, smartphones have been advancing rapidly. Smartphone was first known in the 1992 (Tweedie, 2015). In the past, Smartphones were only affordable by corporate and businessmen. As of today, people at all ages can afford to purchase at least one smart phone. The myriad capabilities of Smartphones like the competency to assess the internet using Wi-Fi. The myriad capabilities of smartphones like the competency to assess the internet using Wi-Fi. Thus, these capabilities have caused the society to be independent of cameras, maps, address books and more. Each smart phone is designed to fulfil every need of communication, work and most importantly entertainment (Ali Imram, 2011). Smartphones capabilities of storing social networking applications have made it convenient for people to stay connected with others regardless of the distance. Social networking sites such as Facebook, Instagram, WhatsApp and more. In general, the invention of the smartphone has brought many changes to our daily lives, work tools, and learning processes for students.

In addition, we are now in the 'Big Data era' as a new fuel of an important asset. Big data implies a vast amount of any data type with a high speed data processing in which organizations derive value from it especially to make decision making, and one of the big data source comes from smartphone activities. Big data arose in response to the rapid growth in the volume of data being produced worldwide. This massive amount of data was no longer able to be processed by standard computers (Schönberger & Cukier, 2013). Therefore, more powerful computers and operating systems were developed that were able to process this data efficiently. Big data are collected both online and offline. These data can be obtained from a range of online sources such as social media (Facebook or Twitter posts, etc.), and can be used by organizations to monitor activity by both people and machines, e.g. using smart meters to record how much electricity, water, or even gas is being consumed (Watson, 2014). This data can then be analyzed to reveal usage patterns. In this way, it can help organizations to understand their customers' habits and use this knowledge to improve their services and make profit. Similarly, users may benefit from the availability of comprehensive information to assist in their own decision-making.

This study examines smartphone users' habits and surveyed 589 respondents in Brunei to discover their habits and preferences regarding smartphone use, as well as their online activities. Even though this study was conducted in Brunei, it is hoped that the findings will prompt other researchers to investigate different contexts and scenarios. While, a big data approach was used to analyze our results because the changing business landscape that requires sustainability of service-oriented and innovation. In the next section, we present a review of related work. Section 3 outlines the methodology. We present our smartphone's behavior in Section 4 and propose big data model in Section 5. Our conclusions are presented in Section 6.

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