Chapter 6

Big Data in Mobile Commerce: Customer Relationship Management

Muhammad Anshari
Universiti Brunei Darussalam, Brunei

Syamimi Ariff Lim
Universiti Brunei Darussalam, Brunei

ABSTRACT

The purpose of this chapter is to identify the opportunities of big data application that allows Customer Relationship Management (CRM) strategy to gain deeper insights into customer retention and let the businesses make innovation in term of sales, service, and marketing. This chapter is motivated from the concept of big data in CRM by proposing a conceptual model to address mobile commerce in an organization. It examines the progress of big data in creating value for m-commerce. Researchers employed thematic literature analysis and discussed broader issues related to customer behavior in using smartphone and its internet habit activities. Despite the limitation of the study, CRM with big data remains an important area for future research in mobile commerce setting.

INTRODUCTION

Smart mobile devices and smartphone have made mobile commerce (m-commerce) spread very quickly, creating a revolution in e-business. The search costs in e-commerce puts business under increased price competition, resulting in converging prices and ultimately eliminating any extraordinary profits (Bakos, 1997; Benjamin and Wigand, 1995). M-commerce will be a competitive necessity to ensure business survivability and prosperity. Business organizations collect large amount of transactional data, capturing a large amount of information about their customers, suppliers, and operations. Millions of networked sensors are being embedded in the smart mobile devices that generate data in the age of big data (Anshari & Alas, 2015). Organizations activities have been relying on data accuracy and reliability, whether it is census data, climate data, satellite images, transport data, health data, research data, logistic data, energy consumption data, and any data relates to economic transactions that can stimulate innovation on new business opportunities, accelerate business transactions, and produce knowledge sharing across the users.

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In addition, business organizations generate customer relationship management (CRM) data to help them managing their customers. Customers’ data have become a critical asset for any organization similar to their other recourses such financial, raw materials, and human capital including massive data from smartphone activities. Big data optimizes capabilities process, high growth, and diversified data that generate value for any organizations. A good customer relationship creates better understanding and trust, which in turn satisfy customers and generate loyalty (Richard and Ronald, 2008; Anshari et al., 2012). In contrast, failure managing a good customer relationship affects customers’ distrust and dissatisfaction that may risk the survivability of the organization. CRM aims to create loyalty and awareness of their products or services and organization should realize the expectations of customers in services poses a challenge to fulfil high customers’ expectations.

Smart mobile devices have become important big data source and enabled mobile CRM for organizations. Customers have become more dependent on a smartphone and they use smartphone due to habitual. They check smartphone repeatedly for a purpose, unconsciously scroll just to recheck text messages or email, have phone in hand all the time, check phone before go to bed are examples of smartphone habit. This can be such as being unaware of their surroundings. People would spend more time conversing on through online instead of having a face to face conversation. Some applications that offers a convenient to order varieties of items. For instance, people are utilizing social media applications also promoting their online business where previously it could actually be done without the smartphone. The study presents how customers’ smartphone habit can become important CRM strategies in big data scenario.

Organization seeks to create long lasting values by embracing the opportunities related to the usability of the important resources, which is data and information. This study focuses on service-oriented sustainability through CRM in response to the massive adoption of smartphone among users and how it generates big data for CRM analysis. The study is aimed to format a model on next generation of CRM in supporting m-commerce that can enhance customers’ experiences in response to the big data era. Even though, the study is conceptual approach, the discussions may trigger other researchers to expand into different context and scenarios. Big data is used to analyses the next phenomenon of CRM due to the changing of business environment mainly caused by big data deployment. The structure of this report presents on the view of smartphone habit from literatures including the background of theories in Section 2. Section 3 shows methodology followed by discussion in Section 4. Section 5 is conclusion.

BACKGROUND

Mobile Commerce

It is rare nowadays to go to places where only a few people are not looking at their smartphones. Usually, especially in public places such as coffee shops are where almost everyone would be preoccupied with their smartphones (BoHyun, 2013). Smartphones have the capability of downloading applications such as WhatsApp, Instagram, Twitter, applications that could edit photos or videos and so on. However, with these applications that exist in the Smartphones could make the people become addicted to the Social Medias, predominantly the young adults. The number of adolescents owning phones increment.

Messaging has turned into a more agreeable and favored correspondence between today’s young adults, permitting teenagers the capacity to control what they compose before sending it. Getting to the Internet has additionally gotten to be well known on smartphones (Soun, 2014). With the growth of