

# Chapter 5

## Determinants of Adoption of Location-Based Services in Bangladesh

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### ABSTRACT

*Location-based services (LBSs) are technology related services that can provide individual users with the capability of being constantly reachable and accessing network services while on the move. The growing influence of LBS has attracted significant attention in developing countries like Bangladesh, where LBS is a new tool for the marketers. However, it is yet to become popular among the mass people. It is therefore important to understand the users' intention to adopt and use LBS extensively in their daily life. In this regard, original technology acceptance model (TAM) has been used along with several other factors to develop a conceptual model for this study. Results claim that constructs like self-efficacy, perceived social value, perceived convenience value, personalization, perceived usefulness and perceived ease of use plays vital role in the adoption of LBS in Bangladesh. Accordingly, implications for practice and research, limitations and future research directions of this study are discussed.*

### INTRODUCTION

Location-based Services (LBSs) are network-based services for providing information that has been created, compiled, selected or filtered by taking into consideration the current locations of the users or mobile objects. According to Xu et al. (2009), it is a positioning technology that can provide individual users with the capability of being constantly reachable and accessing network services while on the move. Since LBS is enhanced by and depends on the information about a mobile device's position, it

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has the potential to add significant value by placing information, transactions and entertainment in a location-specific context (Liutkauskas et al., 2015).

Previously, the use of any location-based services required manual input of location data, such as street intersection or zip code, in order to provide geographically-oriented data and information services to users across telecommunication networks (Xu et al., 2011). Over time, LBS have evolved rapidly with current technologies that enable automatic generation and update of location data of individual users in the mobile network, thereby facilitating specific services based on the location information (Junglas & Watson, 2008). Today, LBS includes an array of services like emergency and safety-related services, entertainment, navigation, directory and city guides, traffic updates, location-specific advertising and promotion, and site-based purchasing with e-wallet enabled mobile devices (Unni & Harmon, 2007). Moreover, there are many web services and applications that further add value to LBS like finding the nearest point of interest (POI) such as a restaurant or an ATM, searching for a shopping place in 1 km radius around user's location, and finding a meeting place that minimizes the aggregate travel distance for a group of friends (Hashem et al., 2015).

According to Zickuhr (2013), all these personalized services provided by LBS are becoming increasingly prevalent to the large population of semi-literate users living in emerging economies, due to the low costs and ubiquity of such services. Moreover, the time saving aspect of LBS along with the convenience achieved by the user through LBS can add value to the user's daily operation (Pura, 2005). Despite the fact that LBS represent potential benefits for the users, usage of LBS is often threatened by location privacy threats as it keeps track of the individuals' location (Chen and Mu, 2016). Notable studies upon LBS like Chua et al. (2016) and Wang and Lin (2016) suggest that the risk of disclosing personal privacy hinders consumers from adopting LBS, particularly in the developing countries. This is also true for Bangladesh, where LBS is a new tool for the marketers but being novices in technology, LBS is yet to become popular among the mass people of the country. It is therefore important to understand the perception of users regarding the intention to adopt and use LBS extensively in their daily life in the context of Bangladesh.

Hence, the primary focus of this research is to pinpoint the effects of certain constructs upon the behavioral intention of users in the adoption process of location-based services in Bangladesh. In this regard, original technology acceptance model (TAM) has been used along with several other factors that constructed the conceptual model of this study. The method of Partial Least Squares (PLS) is mainly applied to investigate the underlying relationships related to the perceptions of users towards the adoption of LBS in Bangladesh. Theoretically, drawing upon relevant literature, this study aims to provide a model that is capable of understanding the determinants behind the adoption of LBS in Bangladesh. From a managerial perspective, the findings of this research should provide further insights into understanding and managing potential and current users of all location-based services in Bangladesh. This study can also assist service providers to discover why potential users avoid using the existing forms of LBS in the country.

## **LITERATURE REVIEW**

### **Location-Based Services in Bangladesh**

Despite being a developing country, Bangladesh has come to a fast realization that information and communication technology (ICT) is necessary today for promoting economic growth. As such, many

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