Determinants and Effects of Mobile Service Customization: 
An Empirical Study of A2P SMS Adoption

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ABSTRACT

Service customization enables users to custom-made services for their specific needs while service providers can use custom outputs to offer superior services for their users. Less attention, however, has been paid to what factors influence individuals to customize mobile service differently and how custom outputs affect their intentions to use the services. The article proposes a new framework to examine the effects of information seeking and user experience on service customization (service configuration and custom outputs) and the effect of the service customization on users’ intentions to adopt mobile services through the three values of mobile services—utilitarian value, hedonic value, and social value. The application-to-person short messaging service (A2P SMS) is used as the domain of study. The structural equation modeling (SEM) technique was used for data analysis. The results indicate that information-seeking and user experience regulate users’ abilities to customize mobile services. Specifically, information seeking affects custom outputs while user experience affects service configuration. The results also show that custom outputs influence users’ intentions to adopt mobile services through the perceived values of mobile services’ utilitarian value, hedonic value, and social value. Hedonic value and social value have direct effects on mobile service adoption. This article broadens knowledge and understanding of mobile service adoption and provides guidance to service providers for effectively utilizing their customization strategies to enhance users’ adoption of their services.

KEYWORDS

A2P SMS, Configuration, Customization, Experience, Information Seeking, Mobile Service Adoption, Service Values

INTRODUCTION

In today’s market, users of technology services are heterogeneous and demand specific services for their needs. Configuration technologies allowing users to custom-make their services can easily and cost-effectively cope with the users’ demand. Service providers, on the other hand, can obtain accurate information on what users actually want from the custom outputs and increase their profits by providing the services that better fit their users’ requirements (Jun & Holland, 2012). Customization strategies aiming at providing customers with individually tailored products/services and facilitating

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customers’ usage intentions are extensively studied in the marketing literature (Franke, Keinz, & Steger, 2009). However, less attention in the information systems (IS) literature has been paid to factors affecting a mobile service’s customization and the effects of this service customization on mobile service adoption.

Previous studies have questioned on the condition where customers can benefit from service customization (Sigala, 2010). Franke et al. (2009) argued that customers should have skills and knowledge to express their preferences and clearly understand their own preferences to make an effective customization. Thus, user experience in a configuration technology and the purposive seeking of desired information referring to information seeking behaviour are the important factors influencing effective service customization. Users can use their experiences to customize the service they want while information seekers have a clear determination of the custom outputs they want.

Many studies in information systems applied individuals’ perceived values to explain mobile service adoption. Utilitarian value and hedonic value are considerably used to evaluate individuals’ intentions to adopt mobile services (e.g., Yang & Forney, 2013; Yang & Lee, 2010). Previous studies also found that people use technologies not only to accomplish their goal-oriented task (utilitarian value) and personal pleasure (hedonic value) but also to position their images in a society (social value). Accordingly, the perceptions of utilitarian value, hedonic value, and social value of mobile services are the important factors to explain how individuals adopt mobile services (Kim & Han, 2009).

The purpose of this study is to explore factors affecting service customization and its impact on mobile service adoption. Particularly, the study aims to examine the effects of information seeking and experience in mobile service on service customization and the effects of the customization on individuals’ intention to adopt mobile services through three perceived values–utilitarian value, hedonic value, and social value. A2P SMS (application-to-person short messaging service) was adopted as the domain of study as it’s widely used in many businesses (e.g., financial, ecommerce, and entertainment services) and explicitly generated significant amount of message traffics and revenues (Transparency Market Research, 2016). This study proposes a new framework to broaden knowledge in mobile service adoption associated with service customization. It also provides the guidance to mobile service providers for planning and developing the custom-made services to cope with user requirements and in turn increase the number of their services’ users.

The following sections discuss the theoretical perspectives of service customization, perceived values of mobile services, and application-to-person short messaging service (A2P SMS). The discussions of hypotheses development, research methodology, and analysis results are followed. The implications for theory and practices are then discussed followed by the discussion of the study limitations and the directions for future studies.

THEORETICAL BACKGROUND

This section discusses theoretical background of the study including customization attributes and methods, factors affecting customization, perceived values of mobile services, and overview of A2P SMS.

Customization Attributes and Methods

Customization is the use of a computer system to produce custom outputs. It consists of two main components, service configuration and custom outputs. For the service configuration, most service providers offer a configured standardization that allows a customer to choose his or her set of the service attributes which have already been prepared by the service providers. Customers can add or drop the service attributes to make the most preferable service. Two major customization methods are additive customization and subtractive customization (Liao, Tsou, & Shu, 2008; Park, Jun, & MacInnis, 2000). The additive customization allows consumers to include desirable service functions from the range of options to create the most desirable service. The subtractive customization permits consumers to exclude undesirable service functions from the predefined options (Wang, Kandampully, & He, 2013).
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