Exploring mobile application customer loyalty: The moderating effect of use contexts

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ABSTRACT

The purpose of this study is to develop and test a conceptual model that offer a value perspective in our understanding of free mobile applications. The study validates the moderating effect of use contexts on the relationship between value components and perceived value, and this is then utilized to determine perceived value, satisfaction and loyalty for the example of a free communication mobile application. The method of obtaining quantitative data was that of the instrument of a survey questionnaire. The empirical results pull from a sample of users and potential users that had previously visited several free mobile applications and suggest that there is a relationship among value, perceived value, satisfaction, and loyalty with regard to the value perspective. Findings also indicated that use contextual factors have a significant moderating effect on the relationship between value components and perceived value. The results of the study will help marketers to address the key factor which influences consumer free mobile application loyalty and to improve service provider performances to meet consumer needs. The value component perspective is novel and usable in explaining the intention of mobile application consumers to use, and these findings may be generally applicable to marketers and consumers.

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1. Introduction

Mobile commerce, also known as m-commerce, is basically any e-commerce conducted in a wireless environment, especially via the Internet (Turban & King, 2003). The idea of ubiquitous mobile commerce has been around for at least a decade ever since mobile phones began to be rapidly adopted by users all over the world, especially in developing countries where landline-based phone services were almost non-existent. Simultaneously, businesses have decided to provide mobile applications and web services over the Internet and have nurtured an increasing number of mobile application users. By the end of 2012, there will be one billion active mobile application users in the world (Learn Everywhere, 2012). In 2013, the global mobile app market was predicted to reach US$50 billion and to rise to $150 billion within two years (Ghose & Han, 2013). Also, according to research estimates, the global mobile application market is expected to be worth $24.4 billion in 2015 (Marketsandmarkets, 2015).

The major characteristics of m-commerce that differentiate it from other forms of e-commerce are use contexts such as mobility (Liang & Yeh, 2011). Indeed, use contexts in which an application is used is a potentially important factor that is

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worth further investigation. Mobile use context can be analyzed and described based on mobile use contextual factors such as spaces that describe the characteristics of the particular use context (Biel, Grill, & Gruhna, 2010).

Looking toward the future, there will be one billion active mobile users carrying around incredible opportunities with them almost everywhere (i.e., spaces) they go at any time (i.e., mobility). Customers, however, are rarely motivated in the first instance by the attributes of a service or product, but rather by the benefits those attributes bring with them (Liang, 2004). It is important to realize that different customers may attach different value components of perceived value to these benefits (Chen & Hu, 2010). Additionally, attracting new customers is considerably more expensive than retaining old customers (Reichheld & Schefter, 2000). Accordingly, the main purpose of this study is to explore various value component perspectives to help service marketers understand what factors impact user satisfaction and loyalty, and how best to take measures to retain their customers.

Amongst the most popular mobile applications in the setting of business-to-consumer mobile applications are in the category of communications and entertainment (Wei, 2008). As mobile services become more popular and people can use them virtually anywhere, research on the effect of use contexts is gaining more attention. Thus, this study attempts to discover the moderating of use contexts in understanding perceived value with its value components. This study measures use context as a construct representing the conditions that users encounter when they use mobile services in different places and times through various platforms (web vs. mobile).

2. Literature review

2.1. Web applications vs. mobile applications

Mobile applications are software or applications for the purpose of performing specific tasks for the user and are suited to run on mobile devices such as phones, smartphones, and electronic devices. The mobile web refers to access to the World Wide Web (i.e., use of browser-based Internet services) from a handheld mobile device, such as a smartphone or a feature phone, connected to a mobile network or other wireless network. Conventionally, access to the web has been via fixed-line services on laptops and desktop computers. However, the web is becoming more accessible by mobile and portable applications and wireless devices (Kumar & Gambhir, 2014).

Past research has demonstrated the role of use context; this element must be understood but cannot be changed or controlled in using applications. The contexts examined have included hardware affordances, platform capabilities, and the environment in which an application is used (Charland & Leroux, 2011). Then independent of mobile application type (web app or mobile app), a service is a set of operations to perform according to a certain set of inputs and a certain chronology (Maamar, 2006). Furthermore, since web technologies and widgets are good solutions for developing cross-platform applications for mobile users, it is more straightforward to execute web applications via mobile web browsers. In this manner, users do not have to install additional platform-dependent applications on their phones.

For example, similar to Yahoo! Go, Yahoo! Mobile users can install a platform on their phones for executing widgets. Moreover, they can also execute widgets directly on the Yahoo! Mobile website via web browsers (Kao, Lin, Yang, & Yuan, 2012). Some mobile applications have used web technologies to form a cross-platform mobile application via various mobile and PC platforms. Thus, users choose their platforms (web vs. mobile) to use mobile applications will determine perceived value, satisfaction, and loyalty.

2.2. Free apps and paid apps

Mass communication and entertainment are considered the most popular categories for downloading mobile applications (Wei, 2008). Mobile apps are available through application distribution platforms, which are typically operated by the owner of the mobile operating system, such as the Apple App Store, Google Play, Windows Phone Store and BlackBerry App World. On the other hand, past research has found that price is unquestionably one of the most important cues utilized during a consumer's decision-making process (e.g., Chiang & Dholakia, 2003). Lin, Wu, Chuang, and Kao (2007) also indicated that using price information as an indicator of quality or sacrifice may further influence how consumers choose products. In contrast to traditional microeconomic theory, demand-based pricing scientists see price as the equivalent of customers' perceived utility. However, setting prices to create customer value requires some insight into how a service or product can create additional value for the customer, especially when that additional value comes from something as intangible as mobile services. Most apps are free, while others have a price. For examples of free mobile application services, WeChat has 600 million registered users and 100 million active users. Line has a piece of Asia as well, mostly Japan, Thailand, and Taiwan. Thus, the big companies have gotten a serious taste of the instant messaging industry considering the user base and also the wide spread of users across the globe (Ignatescu, 2014). In addition to focusing on free mobile application loyalty; therefore, this study bases on popular free apps and draws on a use-and-gratification framework to examine the expanded use of hybrid platforms—web and mobile—for mass communication applications.

2.3. Loyalty

Oliver (1999) defined loyalty as "a deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same brand-set purchasing, despite situational