Factors Influencing Mobile Search Engine Users’ Continuance Behavior Under the Context of Service Harm Crisis Event

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ABSTRACT

Post-adoption behavior has become one of the research hotspots in recent years. The purpose of this article is to research mobile search engine user’s usage behaviour under the context of service harm crisis. Hypotheses and theoretical model are proposed by integrating expectation confirmation model of IS continuance, technology acceptance model, perceived risk theory, attribution theory and habit theory. The results indicated that continuance intention along with satisfaction and habit are important determinants of continuance behaviour. Perceived usefulness, perceived risk and continuance attitude have significant effect on continuance intention while attitude has the strongest effect. Confirmation promotes perceived usefulness, satisfaction and perceived ease of use which has an indirectly significant influence on satisfaction via perceived usefulness. Attribution of responsibilities has been found to have positive effect on perceived risk. Implications and contributions are provided.

KEYWORDS

Attitude, Continuance Usage Behavior, Expectation-Confirmation Model, Harm Crisis Event, Mobile Search Engine

1. INTRODUCTION

With the thriving development of global Internet technology and the advent of information era, people are in urgent need of improving the efficiency of requiring information. Reading newspapers and books in the library, as traditional ways to get information, often took a lot of unnecessary time. The emergence of search engine just appeals to the trend of the epoch, which can provide people with a faster, more intelligent and efficient online way to get information. According to the 41th “Chinese Statistical Report on Internet Development” released by China Internet Network Information, by the end of the last quarter of 2017, the scale of China’s search engines users reached 772 million (CNNIC, 2017). Search engine plays a critical role in disseminating information and becomes the second largest Internet application.

The term search engine often refers to well-known commercial Web search engine such as Google, Yahoo, Bing, and Baidu (Marin et al., 2017). It’s essentially an information system which using certain strategies and specific programs to gather correlative information from innumerable data, and then organizing and processing them to provide users with retrieval service. In other word, it can automatically present the eligible relevant items on user s’ searching interface when they enter

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keywords for query. Search engines are dedicated to help people search for information quickly and accurately and are used by millions of people per second around the world nowadays. There is fierce competition in the market of mobile search engine, thus, users’ continuance usage has undoubted become a key factor for service providers to get success.

Product-harm crisis, which is considered to be one of the management problems that relatively difficult to solve, was defined as an occasional and well-known incident about a product as it is deficient or dangerous to customers. It was predicted that the product-harm cases would become a serious problem and its frequency would continue to accelerate (Dawar and Pillutla, 2000). Product-harm crisis may have serious effects on enterprises, such as reducing the customers’ perception, damaging the corporate reputation, destroying the corporate brand, leading to product recalls with high costs and ultimately losing the market shares (Van et al., 2007). We extend this concept to the Internet service area, regard service harm crisis as an occasionally incident that been wildly spread between users about an online application has done great harm to its users or has some defects which may put them in danger. Given to mobile search engines such as Google are among the most frequently visited Web sites, they have become attractive options for online advertising and target marketing (Ji et al., 2016). Therefore, we suspect that the biggest hidden risk that make mobile search engines may cause service harm crisis to users is the correctness and accuracy of online advertising information.

To the best of our knowledge, there are few articles on the continuance usage of mobile search engine users in the context of service harm crisis. We attempt to fill this research gap to analysis factors influencing mobile search engine user’s continuance behavior under the context of service harm crisis event. Building on the expectation-confirmation model of information system continuance (ECM-ISC) and technology acceptance model (TAM), we incorporated factors affected by the negative situation such as perceived risk and attribution of responsibility and habit into the research model that may influence user’s continuance behavior of search engine. Our research can not only help mobile search engine service providers to prevent and handle business crisis, but also provide other internet enterprises with practical and valuable comments and suggestions on warning, intervention and remediation to reduce their users’ loss.

2. LITERATURE REVIEW AND RESEARCH HYPOTHESES

2.1. Mobile Search Engine and China’s Markets

There were several competing search engines at the beginning of the Internet era, but the entrance of Google significantly altered the landscape of the search engine market and it is recognized as the world’s largest search engine nowadays. Another notable development in the global search engine market has been the advance of the Chinese search leader Baidu. Founded in 2000, Baidu started as a network information service provider and dedicated to offer users simple and reliable Internet search products. At present, it has researched and developed for many popular applications such as mobile Baidu Map, Baidu Finance, Baidu Tieba (a Chinese virtual community), Baidu Baike (an open and free online encyclopedia) and has morphed into a comprehensive platform for many activities such as navigation, communication, entertainment and e-commerce.

Baidu is considered the largest Chinese search engine and the biggest Chinese website all around the world. It is well known that China is a populous country and it now has more than 731 million netizens which equivalent to the population of Europe. According to the third-party authority, in China, the total market share of Baidu’s PC and mobile terminal was 73.5%, which covering 97.5% of all the netizen, with 600 million users daily average response searching 6 billion times. The recent comScore qSearch data reveals that Baidu has already surpassed Yahoo! and become the second largest search engine after Google (Kerr, 2013).

Furthermore, several popular mobile search engine brands such as 360, Sogou, SoSo and Youdao are developed in China and widely used both within and outside of the country. In a word, China’s
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