

Re-visiting Tourism Information Search Process: From Smartphone Users' Perspective

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Abstract

This study proposes a more comprehensive model illustrating how smartphone users search for tourism information. To uncover important dimensions and relationships in TIS behavior, the technique of grounded theory was employed. In total, 21 subjects participated in the data collection process to supply the semi-structured in-depth interviewing data and their field observations. Ten tourism information search (TIS) characteristics have been identified and they are not performed in isolation. Further, 20 propositions have been developed for future testing. The results suggest that TIS appears to be an ongoing process with a diversity of search patterns; in addition, it is no longer individual but collaborative behaviour in the context of Web 2.0.

Keywords: Mobile Internet tourism information search, Tourism information search behaviour, Tourism information search process model, smartphone users.

1. Introduction

Smartphones are increasingly important in tourism information search and travel planning (Wang, Xiang and Fesenmaier 2014). As smartphone users gain more experience with the Web and the flow of information involves increasingly complex means, mobile search leads its users to different behavioral patterns with regard to how they seek information and how they make sense of various sources within different information environments (Gómez-Barroso et al. 2012). It is understandable that attention should be focused on where the current technology could have an impact, and people have new ways of retrieving tourism information. The reciprocal interaction existing user and technology (Yuan, Gretzel, & Fesenmaier, 2006). Thus, the use of mobile technology is likely to change TIS behavior, and the needs of user would also shape the features of the technology. Based on the rationale, revisiting the conceptual framework proposed by Ho, Lin and Chen (2012) for web users' TIS process, this study aims to articulate and delineate the searching attributes of smartphone users and to propose a new model with newly explored constructs. This article briefly reviews the web users' TIS model, and then illustrates the new model. The differences between the two models will be discussed.

2. The Web Users' TIS Process Model

Ho, Lin and Chen (2012) adopt a tourism information searcher's perspective to propose a Web users' TIS search process model (see Fig. 1). The conceptual framework presents the temporal order in a search process as consisting of four stages: the start of online searching, online searching, an end of searching, and offline searching. The information-seeking experiences are characterized as a process constituting some common elements: prior knowledge and searching experiences, online searching strategies, processing and recording information, barriers to online searching, reasons for ending an online search, summarizing information, exchanging information and searching for more information through other sources. Such behavior goes beyond the scope of TIS on the Internet and captures the

other offline activities, including processing, utilizing and disseminating information. However, applying this framework to depict smartphone users' TIS behavior of may not be sufficiently encompassing or adequate. The model focuses on individual information search and primarily reflects a single Web user's interactions with an information environment. With the advancement of Web 2.0 technology, TIS involves more social and collaborative aspects. In addition, the limited functionalities of smartphones in terms of information processing and storing may be the constraints for TIS. Due to the discrepancies in the characteristics and the interactions among specific search activities on the smartphone platform, there is a need to re-examine TIS itself as a whole and to distinguish the differences generated between Web users and smartphone users.

3. The Smartphone Users' TIS Process Model

The information search phenomenon of smartphone users under investigation is both complex and multi-faceted. In this study, two methods including semi-structured interviews and on-site observation were employed to collect data. In total, there were 21 participants to be interviewed in this study. The data collection continued until it reached theoretical saturation. The 150 pages of transcribed interviewing data and field notes were analyzed by using the technique of grounded theory. The thick descriptions of behavioral processes not only allow researchers to interpret the searchers' lived experiences within and in-between information environments, but also to identify new/different concepts and their properties from the data.

Ten major behavioral characteristics of smartphone users were identified. As shown in Figure 1, a relatively comprehensive search process model that TIS takes place internally, depending on memory, and also externally through the use of different sources. The model comprises two parts: the upper half indicates that TIS activities have been undertaken by using smartphones; the bottom half illustrates that the *mobile Internet* (MI), PC Internet and editorial communications have been interwoven into TIS. The properties of the model are briefly explained below.

- A. *Internal searches*. Smartphone users rely on their recollections of previous searches and the previous traveling experiences to initiate TIS.
- B. *Searches using MI*. Seven MI search strategies have been identified to be most commonly used, namely, using search engines, using keywords, using bookmarks, browsing web pages, comparing search results, using e-WOMs, and other approaches.
- C. *Preliminary Collaborative TIS*. The collaborative activities on in the tourism context which can be achieved by synchronously and asynchronously focus on gathering, obtaining, sharing, updating and verifying information. These activities can be achieved by synchronously and asynchronously. The collaborators who may be co-located or remote include the acquaintances, strangers and travel companions.
- D. *Barriers to MI searches*. The disturbances may be classified to three parts: website content (connecting to and linking to the websites), MI connection and mobile appliance (the small screen size and limited battery usage on one charge).
- E. *Saving information in the smartphones*: The actions include written down the URLs, cloned the web pages, saved the links or web pages as bookmarks, or forwarded the storage/references directly to the collaborators by broadcasting the useful information.
- F. *End an MI search*. Smartphone users may stop their one-spot searching on the MI either because of the needed information obtained already, the wanted information unavailable, or simply because they want to quit or attend to other personal affairs. However, the small screen size of the smartphones and the limited battery usage also drive them to stop their searches.
- G. *Summarizing information by using smartphones*. While ending the MI searches, smartphone users may summarize the information that they have or save. A series of actions may be undertaken: reviewing the content as a whole, deleting the redundant or useless information, and preserving what they really want. This suggests that searchers make further reviews and evaluations.
- H. *PC Internet search*. Smartphone users may further utilize the PC Internet for advanced searches based on their previous search results. They may revisit the pages/search history for double-checking or making relevant judgments. In addition, the PCs have been used for compiling, editing, classifying and printing out the information.
- I. *Advanced Collaborative TIS*. This mainly refers to further communications and discussions with travel companions by evaluating and filtering the information. The activities also include seeking personal recommendations from acquaintances. Furthermore, the information sources have been expanded to travel intermediaries or travel-related service providers.
- J. *Searches involving editorial communications*. While the Internet (either mobile or wire-based) is

clearly becoming one of the most important sources of TIS, some smartphones users still rely on editorial communications, such as guidebooks/brochures, newspapers and magazines.

4. Comparisons Between Two TIS Process Models

The research results highlight a number of important TIS behavioral features of smartphone users. First, the TIS strategies adopted by using the MI were nearly identical to those involving the use of the PC Internet. However, the search actions differed slightly between the two. For example, it was less often the case that there were in-depth evaluations and comparisons of web pages on the smartphone interfaces. Limited by screen size, the browsing strategy tended to be exploratory and scanning web pages in nature rather than reviewing a document thoroughly. Secondly, the smartphone platforms served as the mechanism not only for individual TIS, but also supporting in *collaborative* TIS to perform tasks that included seeking, saving, sharing information, and communications/discussions. Finally, most smartphone users search for tourism information by utilizing multiple information channels with the Internet (mobile and wire-based) and editorial sources. Some participants utilized the PC Internet for advanced searches, which their navigation behavior was goal-directed rather than just consisting of exploratory browsing. The instrumental navigation strategies were more intentional and selective for specific information content. The search activities involved information multitasking by opening several web browser windows at the same time, which referred to the further reviews and evaluations of the information thereby found. The PCs were also used for compiling and editing the information obtained with the greatest convenience to print out the documents on paper.

5. Conclusion

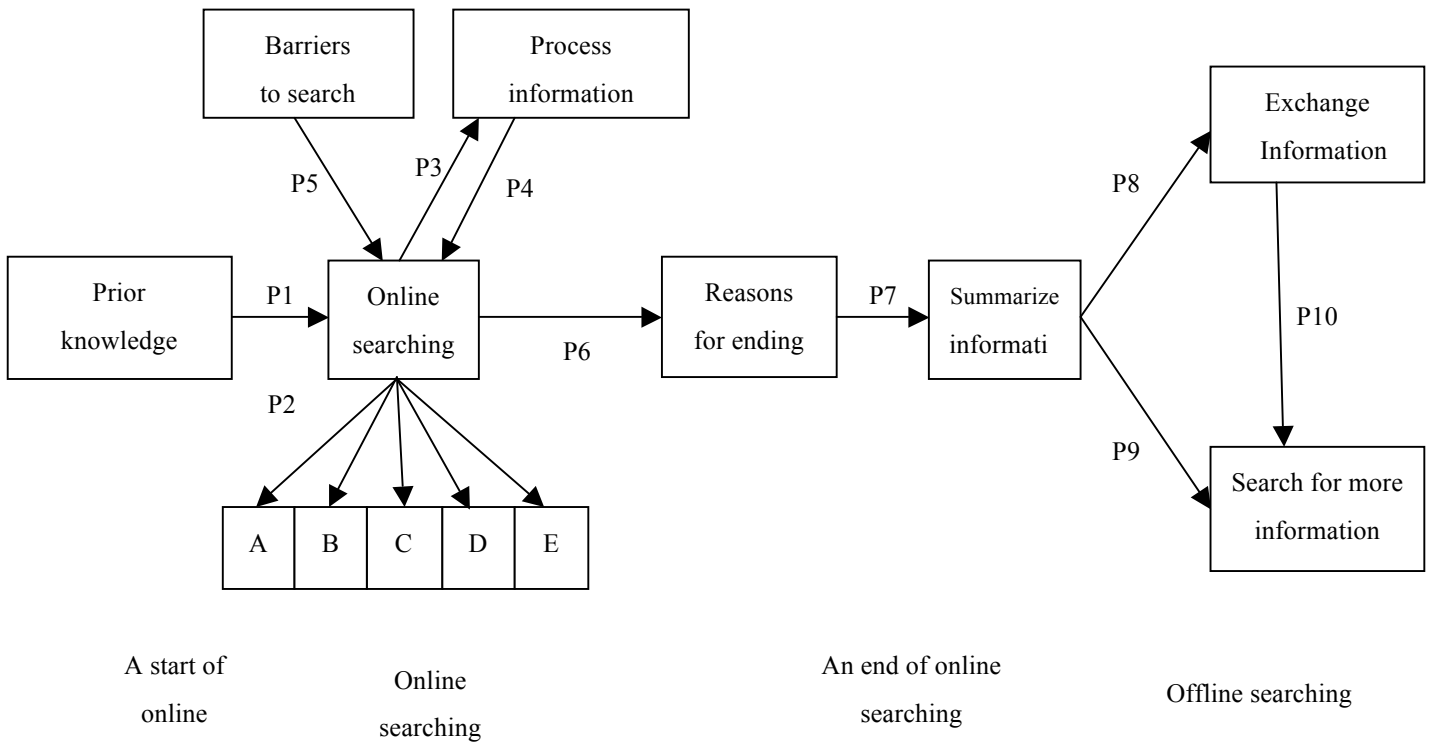
This study contributes to the literature by highlight the individuals' engagement in more complex search-related and collaborative tasks as a means of approaching their travel decision-making. However, it needs to be emphasized that the results have to be treated with caution given the small scale. The research findings would be more helpful in advancing the understanding of searcher behavior if they could be generalized to a wider population. We also seek to generalize the theory by testing the model with empirical data. The detailed tasks include deducing and testing null hypotheses for the propositions stated in this paper.

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Note: "A" denotes: using the search engine; "B": using keywords; "C": using a landmark Website; "D": comparing search results; "E": browsing Web pages.

Source: Ho, C., Lin, M., & Chen, H. (2012). Web users' behavioural patterns of tourism information search: From online to offline. *Tourism Management*, 33, 1468-1482.

Fig.1. Web users' TIS model

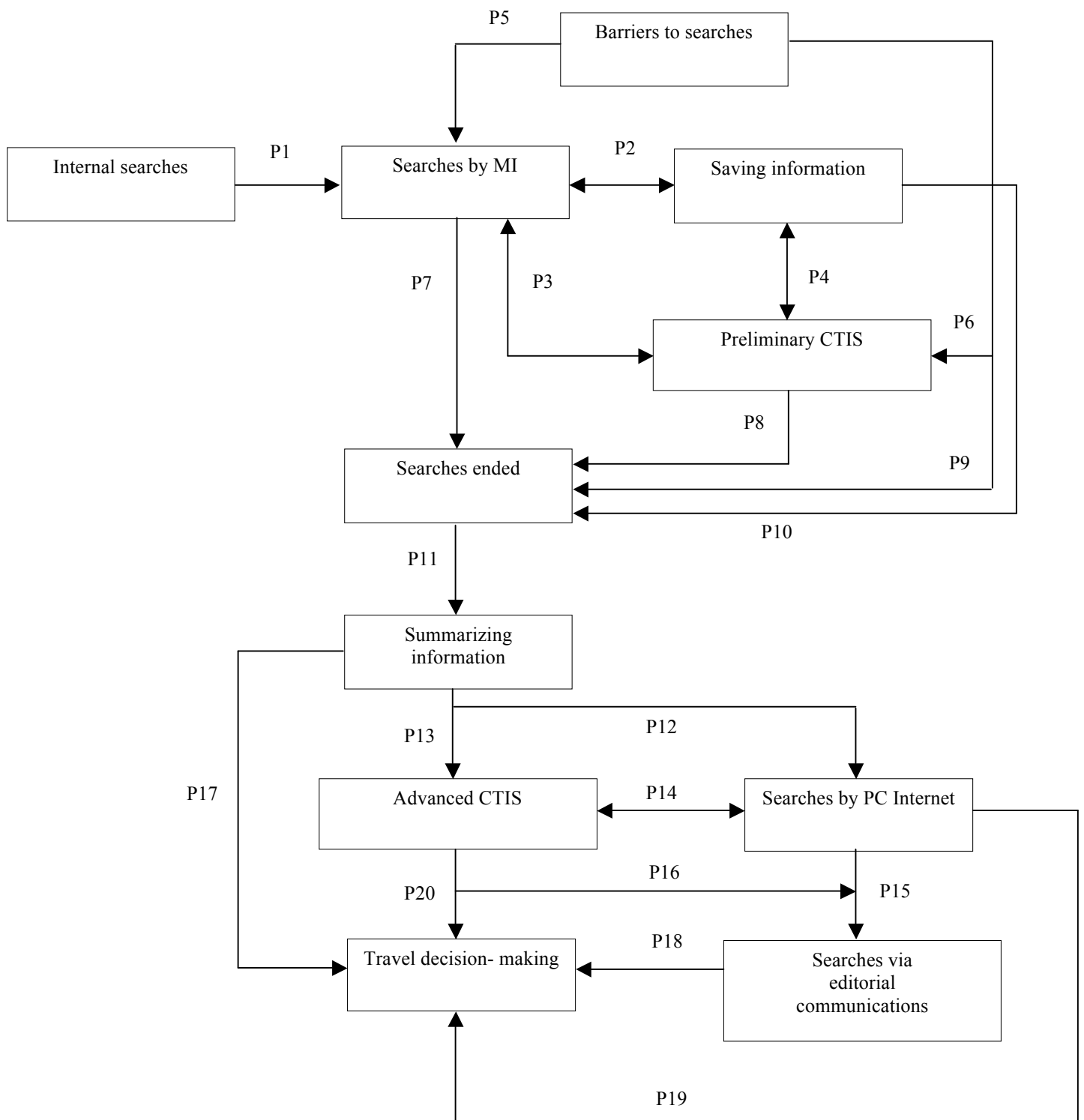


Fig. 2. Conceptual framework of smartphone users' TIS behavior