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Understanding communication types on travel information sharing in social media: A transactive memory systems perspective

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ABSTRACT

Transactive memory systems (TMS) is now an important factor in information sharing. This study adopted TMS to understand the intentions of tourists who share travel information in social media. Tourist's information is shared either by the formal or informal types of communication. To understand their intentions in using social media, this paper concerns the three measurements employed by TMS; that is, specialization, credibility, and coordination; and the potential tourists' perception of communication types and TMS are measured in this research model. This research employed empirical analysis using structural equation modeling upon 309 Korean users who shared travel information on social media to attain three findings. First, that the users' perception of formal communication has a positive influence on the specialization, credibility, and coordination of social media. Second, that the perception of informal communication has a positive effect on the credibility and coordination of social media. Third, that three sub-dimensions of TMS affect intentions to share travel information, which provides us with significant theoretical and practical implications.

1. Introduction

In Korea, municipal governments, tourism stakeholders, and the Korea National Tourism Organization, have adopted social media such as Facebook and Twitter for real-time communication with tourists. Kaplan and Haenlein (2010) define social media as "Internet-based applications complex that build on the ideological and technological foundations of the Web 2.0," which allows its users to generate contents such as articles, pictures, drawings, videos, etc. and build relationships via exchange material and ideas. Social media can be categorized into microblogs (e.g. personal blogs or Twitter), online communities or social networking sites (SNS) (e.g. Facebook or Tripadvisor.com), pictures or video sharing applications (e.g. Flickr, YouTube), and dictionary-type applications like Wikipedia (Leung et al., 2013; Parra-López et al., 2011).

The inherent characteristics of tourism products, being invisible and experience-oriented, make travel information essential in reducing the risk of purchasing tourism products (Kim et al., 2007; Tan and Chen, 2012). For potential tourists, travel information is crucial to decide where to go, how to go, where to stay, what to eat and what to do at the destination (Gursoy and McCleary, 2004). Furthermore, these potential tourists, when they acquire travel information, become self-advisors by

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referencing their own experience and knowledge, but when the internal source does not provide enough information, they use external sources of information such as the Internet, books, travel agencies, or acquaintances (Gursoy and McCleary, 2004; Kim et al., 2007; Xiang et al., 2008). The various social media, in particular, enables users to publically exchange information, opinions, and experiences, and is actively considered by potential tourists as external information sources (Kaplan and Haenlein, 2010; Xiang and Gretzel, 2010).

Social media harbors travel information provided by tourism-related government organizations, companies, and individuals, and it allows the users to search for or share travel information. In terms of travel information, social media becomes an external source of information where users combine what they know with what they have acquired. Therefore, social media is an information repository combining one's own knowledge and information shared online, and acts as a *transactive memory system* (TMS) in communication (Wegner, 1987). TMS refers to a meta-memory that develops collectively within a group, with a process of encoding, storage, and retrieval, and updates knowledge via communicative process (Wegner, 1987). Through TMS, members know who knows what and how to access expertise (Jarvenpaa and Majchrzak, 2008).

There are two forms of communication in social media: formal and informal (Dittrich and Giuffrida, 2011; Kim and Benbasat, 2012). Both forms affect constructing TMS (Akgün et al., 2005; Choi et al., 2010; Kanawattanachai and Yoo, 2007), and are key factors of information transfer in travel information sharing (Szulanski, 1996).

Despite growing recognition of TMS in social media, that is, the member's strong intention for knowledge-sharing and their increasing reliance on social media, prior studies are limited on the role of communication types and the development of TMS. Moreover, the precise roles of TMS and information sharing in social media have not been fully explored in the academic literature. Thus further empirical research on communication types amongst users in social media is essential for understanding TMS in travel information.

Generally, potential tourists are now interacting by using both formal and informal type of communication and developing group-knowledge in virtual worlds. The various social media are both information sharing channels and platforms for the ever-growing shared store of knowledge. In searching for or sharing travel information, potential tourists utilize both communication types in their endeavor to strengthen TMS. Understanding the intent of potential tourists' travel-information-sharing is necessary to understand their communication types, and to view social media from the TMS perspective; the recognition of communication types (the formal or the informal communication in social media) will affect TMS recognition, which will further affect travel-information-sharing behavior.

This research identifies the user's intention to share travel information on social media in terms of TMS. The objectives of this paper are as follows.

First, to identify how formal communication or informal communication affects TMS sub-dimensions (specialization, credibility, and coordination).

Second, to confirm the effect of TMS sub-dimensions (specialization, credibility, and coordination) on travel information sharing.

This research will improve the understanding of social media's role in travel information sharing via identifying the relationship between formal or informal communication and TMS (i.e., specialization, credibility, and coordination), and travel-information-sharing. It is further expected the research will have theoretical and practical implications.

2. Theoretical background

2.1. Transactive memory systems

TMS is a set of memory system that occurs in combination with communication between individuals (Wegner et al., 1985). In other words, TMS is a collection of individuals, their memory systems, and the communication occurring among them (Wegner, 1987), and was introduced to explain intimate couples' ability to negotiate knowledge when faced with disruptions in their group memory (Wegner, 1987; Zhong et al., 2012). Transactive memory exists as a collective system of knowledge, and it entails each individual's memory system as well as the details of the interactions during communication (Wegner, 1987). Therefore, individual's memory systems join to form the collective information processing systems, ultimately giving members access to a knowledge base more complex and potentially more effective than each individual constituent possesses (Wegner, 1987).

Previous researchers have chosen specialization, credibility, and coordination as criteria in gauging TMS (Li and Huang, 2013). *Specialization* is the degree of the users' expertise; *credibility* is the accuracy of the information and trust between users; *coordination* describes users' ability to cooperate in building their shared understanding (Akgün et al., 2005; Li and Huang, 2013). In short, TMS requires members' expertise, accurate information, and the users' collaborative efforts on the subject. TMS reinforces members' performance, and is built up by communication, feedback, and learning (Akgün et al., 2005; Choi et al., 2010; Kanawattanachai and Yoo, 2007).

TMS has drawn attention from researchers because it provides understanding of knowledge utilization and coordination among groups of people. TMS is also as an important antecedent variable for knowledge sharing (Choi et al., 2010). Individuals can strengthen their memory not only with their own knowledge but also with the knowledge of others (Li and Huang, 2013). In particular, researchers have emphasized the role of TMS from the perspective of team performance (Akgün et al., 2005; Choi et al., 2010; Li and Huang, 2013; Zhong et al., 2012). Akgün et al. (2005) suggested that TMS is