Conceptualizing the Knowledge Structure of Tourism Destinations

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ABSTRACT

The present study focuses on knowledge as an important strategic resource and examines the knowledge processing structure of tourism destinations. To achieve this goal, existing typologies of knowledge found in the knowledge management literature are synthesized. A three-dimensional model is proposed. Dimensions include the business unit (organization-based, region-based), the type of knowledge (tacit knowledge, codified knowledge), and processing of knowledge (creating, sharing, and accumulating). The proposed model not only shows how knowledge can be classified, but it also helps to track the transformation of tacit and codified knowledge from its creation to its accumulation stages at the organizational and regional levels.

Keywords: codified knowledge, destination competitiveness, knowledge management, knowledge processing, region, tacit knowledge.

INTRODUCTION

There have been extensive studies to track the organizational strategies that lead to sustained competitive advantage at the firm level (Bowman & Helfat, 2001; Porter, 1996). More important, a region recently has been examined as another unit in identifying innovativeness and competitiveness (Asheim & Coenen, 2005; Saxenian, 1996). The rationale is that there is localized knowledge that exists and evolves within a region. Among the factors that affect competitiveness, knowledge management—the ability to process, synthesize, and apply knowledge—has been considered crucial (Nonaka, 1994).

Studies in tourism have examined destination competitiveness and have had interests in knowledge management topics. However, there have been limited examinations of the typology of knowledge with consideration of destination-specific characteristics. More specifically,
delineation of organizational and regional levels of knowledge has not been seriously considered. To address such issues, the present study examines the knowledge processing structure of tourism destinations by integrating existing typologies of knowledge found in the knowledge management literature. A three-dimensional conceptual model is proposed as a result of the study.

LITERATURE REVIEW

There have been studies on the sources and effects of competitiveness at the firm and the regional levels. Strategies that lead to sustained competitive advantage have been identified at the firm level (Porter, 1996). Studies at the regional level are based on the notion that a firm’s innovative process cannot be separated from its environment. Such environment includes legislative background, relationship with other non-profit organizations such as universities and institutions, and the interaction among each of the firms within the region (Edquist, 1997). In this stream of research, innovation generated by knowledge exchange has been examined. The concepts of clusters, learning regions, and the knowledge network explain the innovative forces embedded within the regions (Cooke, 2004). Studies on sustained competitive advantage of tourism destinations have adopted both perspectives. Competitive advantage of a tourism destination has been conceptualized as the ability to guarantee the tourists’ superior experiences, which enables a destination to attract tourists and to sustain revenue (Dwyer, Mellor, Livaic, Edwards, & Kim, 2004; Murphy & Murphy, 2004).

The knowledge-based view is one of the main streams of studies which examine fundamental drivers of competitiveness. Knowledge, in this context, is defined as “justified true belief,” (Nonaka, 1994, p. 15) which is formed and developed by information processing. Knowledge-based strategic management research has examined issues such as the absorptive capacity of knowledge (Cohen & Levinthal, 1990) and its structure and management process (Nonaka, 1994). In recent years, dynamic knowledge processing has been gaining academic interest as it is influenced by more complex organizational and regional structures as well as technological development (Liang, You, & Liu, 2010).

In knowledge management studies in tourism settings, its uniqueness as differentiated from other types of businesses and regional structures has been addressed. Destination-oriented resources such as local knowledge and their role in clustering of tourism organizations and infrastructures (Dwyer et al., 2004) as well as the role of governmental activities (Saxena, 2005) have been emphasized. Community relationships, which contribute to social knowledge processing, have been the focus of regional-level destination studies. Yet, empirical studies of tourism destinations have failed to provide comprehensive and structured viewpoints in examining knowledge structures. Many studies continue to interpret a destination as a closed system and fail to see knowledge creating and sharing processes as the result of interaction with the outer environment.

CONCEPTUAL MODEL

A three-dimensional conceptual model is proposed in the present study to demonstrate the knowledge-processing structure of a destination (Figure 1). The three dimensions include the business unit (organization-based, region-based), the type of knowledge (tacit knowledge,
codified knowledge), and processing of knowledge (creating, sharing, and accumulating).

**Business unit: organization-based knowledge and region-based knowledge**

Knowledge as a source of innovation, which leads to sustained competitive advantage, has been supported at the organizational level (Cohen & Levinthal, 1990) and the regional level (Cooke, 2004). These two levels need to be considered together in identifying the knowledge processing of destinations.

Knowledge learned within the organization, regardless of its spillover effects on the region where the organization is embedded, can be categorized as organization-based knowledge. It is based on the notion that knowledge within an organization stimulates change and innovation (Nonaka, 1994). A region also can be a unit of analysis. The knowledge embedded in the region includes not only the knowledge processed by the constituents of the regions (e.g., people, public and private organizations) but also the effectiveness of regional networks in generating innovation and in dealing with problems. Capacity to absorb external knowledge and to utilize the infrastructure and resources which have either systematic forms (e.g., legislation) or intrinsic forms (e.g., tacit knowledge) are all included in this category.

**Types of knowledge: tacit knowledge and codified knowledge**

A dichotomy of tacit knowledge and codified knowledge is the most popular method of classification of knowledge (Gertler, 2003). According to Nonaka (1994), tacit knowledge is created by experience. It is processed through informal, face-to-face interaction within a specific local context. Explicit knowledge, on the other hand, can be codified and shared formally. The importance of a regional innovation mechanism has been addressed based on the value of tacit knowledge. Tacit knowledge, as coined by Polanyi (1966), describes the imperfectly represented dimension of knowledge that even the individuals who have that knowledge are not consciously aware of it. As tacit knowledge is hard to duplicate or imitate, it is valued as a source of competitiveness of firms and regions (Buckley & Carter, 2004; Maskell & Malmberg, 1999).

In summary, this study proposes four types of knowledge based on the two dimensions suggested above: organizational-tacit, organizational-codified, regional-tacit, and regional-codified knowledge. This typology facilitates the clarification of the dynamics of knowledge, which is represented as the last dimension in the study.

**Processing of knowledge: knowledge creating, sharing, and accumulating**

Knowledge creating, sharing, and accumulating in the geographic subsystems are examined with the consideration of supra-systems such as global and national levels and in relation to other regional systems (Cooke, 2004). Knowledge creating is accomplished by the dynamic function of associative memories (Anderson, 1983). Knowledge sharing is accomplished by social interactions among members and it involves the conversion of knowledge (Nonaka, 1994). Knowledge is accumulated in the region and in the organization because such knowledge is imperfectly imitable (Barney, 1991).
While knowledge is an important strategic resource for tourism, its typology has not been established in tourism studies. To address the problem, this study proposes a conceptual model to understand knowledge structure and its processes. The three-dimensional model first classifies knowledge of tourism destinations into four categories according to the type (i.e., tacit vs. codified) and the business unit (i.e., firm-level vs. region-level) of knowledge. The model then provides a guideline to analyze how each type of knowledge is processed (i.e., created, shared, and accumulated) in tourism destinations. Three dimensions interact among each of them and show both dynamic processes as well as the static structure of knowledge. While the knowledge type identifies its characteristics, the processing dimension shows how knowledge evolves over time.

The suggested model not only facilitates the classification of knowledge, but it also helps to track the knowledge from its creation to its accumulation at the regional and organizational levels. For example, organizational-codified knowledge would be the most important strategic force in a destination at the knowledge-creating stage, but the knowledge may be embedded in the region as tacit knowledge at the accumulating stage through management experiences of the destinations. Empowerment of communities at local tourism destinations in developing countries by international organizations would fit into this dynamic of knowledge. The model also can be used to clarify innovative forces at the regional level. From the traditional learning region perspective, for example, tacit knowledge exists and is accumulated in the region, because it is not travelled easily. This example can be classified as regional-tacit knowledge at the accumulating stage.

Future research may empirically test the validity of the proposed model and propose a more valid theory based on such empirical findings. As other dimensions would still exist, the development and extension of the proposed model would involve the inclusion of such dimensions. Geographic levels (regional-national-international) would be one of the possible
dimensions that could be included (e.g., Bathelt, Malmberg, & Maskell, 2004). The existing notion that tacit knowledge is locally-based while codified or structural knowledge is more globally created and shared also can be challenged and clarified with the inclusion of such a dimension. Future studies of tourism destination competitiveness would benefit from the advance of knowledge management models which fit best with tourism settings.

REFERENCES