

KNOWLEDGE MAP AN IMPORTANT TOOL OF KNOWLEDGE MANAGEMENT IN TOURIST DESTINATIONS

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Abstract: *The purpose of this paper is to explore and compare the possible knowledge map structures by types of tourist destinations and discuss knowledge mapping processes in the destination knowledge management system. This will be possible by comparing knowledge maps of four destination types (city, mountain, historic and seaside resort) and suggest different mapping schemes. Each destination has unique knowledge needs, therefore, the knowledge map structure should be built to meet the needs and preferences of destination knowledge users.*

Key words: *knowledge map, city tourism, mountain tourism.*

1. Introduction

Knowledge management is an important tool to support destination management because it is connected with the ability to create values and to generate competitive advantage. The knowledge management process provides knowledge in a focused, relevant, cost-effective and timely manner for destination success with the highest level of professional knowledge. Capturing and subsequent dissemination of knowledge at an appropriate time to the individual who needs it with less search cost is the essence of knowledge management. In general, knowledge management of tourist destinations includes acquisition, explanation and communication of mission-specific professional expertise in a manner that is focused and relevant to tourist destination managers.

Knowledge maps differ on destinations due to the differences in knowledge requirement. Also, similar knowledge can

be organized uniquely to cater for the needs of destination managers of each destination. The map reflects experiences, methods, processes and judgments of the map creator. Since destination knowledge about the same object can be represented differently depending on the context, there is need to develop a common way of constructing and maintaining destination knowledge in a visual form.

Knowledge refers to meaning and understanding that results from processing information [1] in ways that are actionable. Knowledge is contextual, relevant, actionable and can be used to solve problems. This definition implies that knowledge in knowledge management perspectives has been defined in a pragmatic way. Knowledge can be classified as (a) declarative knowledge and (b) procedural knowledge [3]. Declarative knowledge is factual knowledge of the industry such as data about tourist markets, environment, tourist behavior, competition

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and details of a destination. Procedural knowledge includes the methodology used such as tourism planning models, communication tools, forecasting and quantitative methods.

Implementing a knowledge management methodology generally follows seven steps: identify the problem, prepare the change, create the team to work on the project, map the knowledge, create a feedback mechanism to report any difficulties, define the building block for a knowledge management system and integrate existing information systems.

In the practice of knowledge management, knowledge mapping provides a framework for visualizing knowledge that can be easily examined, refined and shared by non-expert knowledge users. A knowledge map can be used as an interactive tool that links different conceptualizations of the word [2].

Knowledge mapping assists to find key sources conveniently and helps define constraints of knowledge creation and flows. Since the map increases convenience in knowledge finding, knowledge reuse is encouraged. As a result, costs for knowledge reinvention, search time and acquisition are reduced. Important expertise is more visible in the map and knowledge sharing is induced and increased. Consequently, the burden on experts to help staff find critical knowledge is reduced and customer response, decision-making and problem-solving processes are improved by providing access to applicable knowledge.

There can be many criteria to consider when preparing a knowledge map. Examples of criteria may include knowledge identification in terms of origin, structure and usefulness of knowledge. More specifically, a

knowledge map should be considered in terms of location, ownership, validity, timeliness, domain, sensitivity, access rights, storage medium, use statistics, medium and channels used.

To build knowledge maps, extensive research and communication for various stakeholders should be performed in relation to issues, processes, organization culture, knowledge base and knowledge transferring and sharing procedures. The actual knowledge does not have a static structure but is dynamically constructed by identifying and indexing pieces of information or knowledge components depending on the contexts [2]. Knowledge mapping tasks should be an ongoing process and must be updated and maintained in order to be useful.

The knowledge mapping process can be organized using location, organization charts, job functions and/or task teams. The destination knowledge mapping process includes identifying knowledge requirements, conducting a knowledge audit, defining information sources to use, defining processes, mapping the process in detail and finding tasks by processes.

2. Research Question and Data Collection Method

Knowledge maps could be unique by destination types in terms of context and structure; therefore, the research question is “How do knowledge maps differ by destination types?” To answer this research problem, open-ended interview questions were analyzed in the current study as an application of knowledge mapping.

Data were collected from four distinct tourist destinations in Romania to compare the knowledge map scheme. Bucharest was chosen as a city tourism destination. Braşov was categorized as a mountain region, Sighişoara as a historical site and Constanţa as a seaside resort destination.

For each destination, two persons, who were majoring in tourism and familiar with the destination, were assigned for the survey. Potential respondents identified by the researchers from various sources were contacted in advance and surveys were conducted subsequently. Study samples were chosen from personnel currently employed in the hospitality, tourism and related fields (such as resorts, hotels, travel agencies, government and other entities related to tourism). Respondents resided in the study areas. During the data collection period, opened questionnaires were used to obtain clues of destination knowledge structure.

To initially generate structured knowledge maps based on knowledge requirements, questions included problems, causes, effects and related knowledge in the destination. More specifically, the research questionnaire included such questions as perceived problems in the destination, possible causes of the problem, what happened due to the problem and what knowledge will help to deal with the problem in the destination. In a one-page questionnaire, three problems could be identified and delineated by a respondent.

Most of the respondents were approached after their approval by phone to complete the questionnaire and the response rates were 96%. Contacting the 4% of the non-respondents in the time frame was not successful due to unexpected circumstances such as emergency meetings, family problems and customer relations issues.

3. Data Analysis and Results

To deal with the research question, knowledge maps of four destinations were built by considering relationships between concepts and frequencies of each concept

appearing in the data set (Figs. 1-4). Since the purpose of this study was to explore and compare the structures of knowledge maps of different destinations, relationships between concepts were the basis in structuring the map, rather than going into the further hierarchical structure of responses. Only concepts appearing more than three times in the open-ended interview questions were considered in the map. In addition to the author, two experts in tourism field verified the process and minor changes were made.

The research question was “How are knowledge maps different by destination type?” Although the maps can have different forms in structure, after reviewing responses from the data set, the major structure of the map was decided for comparative purposes.

The maps were segmented on the basis of destination management, (tourist) information, (tourist) products, transportation, (tourism) industry and support for tourism, although other segments (sub-titles) were allowed to appear on the map when uniqueness existed. Responses with frequencies of more than three were assigned in appropriate categories and appear on the map. As a result, four distinct destination knowledge maps were extracted (Figs. 1-4). The map figures reveal destinations eminent needs and important knowledge structure.

3.1 City Tourism, Bucharest

The knowledge map of Bucharest reveals the unique characteristics of city tourism (Fig.1) Respondents most frequently suggested that Bucharest should pay attention to traffic congestion, festivals and events and unique and creative tourist products.

For destination management, areas that need knowledge include promotion and information distribution, Internet pages

with correct and up to date information, visitor centers including booklets and facilities management including that of historical artifacts. Differentiation in image, language skills of guides and translation facilities were also the frequently mentioned knowledge that is needed in Bucharest.

Knowledge related to city tourism products with cultural and unique attractions including festivals and events, nightlife and performance facilities is needed so that tourists can see and experience the destination, including restaurants with diverse menus in different languages.

The knowledge to deal with traffic congestion, road signs with different languages, taxi and bus tours with different languages is also important to improve tourism in this type of destination. Additionally, knowing how to train employees is one of the important concerns for the tourism industry in Bucharest.

3.2. Mountain Tourism, Braşov

The mountain region knowledge map appears as (Fig.2), revealing the unique characteristics of mountain tourism. Respondents most frequently mentioned that the mountain region should pay more attention to knowledge related to accessibility to the mountainous region, promotion and information distribution, unique and interesting attractions and strategies for peak-and off-season periods.

Knowledge about destination promotion, information distribution including less-known or less-popular destinations and public transportation is also considered useful to manage mountain region tourism.

Mountain areas eagerly seek knowledge about peak season overcrowding and congestion and off-season product development and promotion with information distribution. Interesting unique

tourist product development for four-season use, including diverse festivals and events, is also a major concern of the Braşov region.

Knowledge to improve accessibility and connections to other destinations and attractions is important to overcome barriers imposed by mountains. Knowledge related to industry employee training is considered helpful to improve the service level of the destination. Knowledge about obtaining not only residents' support but also central government investments for the infrastructure was also felt to be for destination improvement.

3.3. Historical Tourism, Sighişoara

Sighişoara knowledge map the revealed characteristics of a historic site. Frequencies indicate that Sighişoara should consider long-term policy, strategy and a master plan, diverse distinct souvenir design, promotion, event and festivals connecting attractions, distinctive tourist products and responsiveness to changes in the market. Respondents wanted to see a clear tourism policy, strategy and a master plan and diverse distinct souvenir design, promotion, event and festivals, connecting attractions, distinctive tourist products and responsiveness to changes in the market. Respondents wanted to see a clear tourism policy, strategy and long-term master plan with little or no fluctuations. Knowledge management in historic Sighişoara should be concerned about promotion responding to market change and to achieve a greater number of long-term stays.

Historic site promotion, monument protection, diverse unique useful souvenir design and tourist product development programs are the major areas in which Sighişoara should build knowledge.

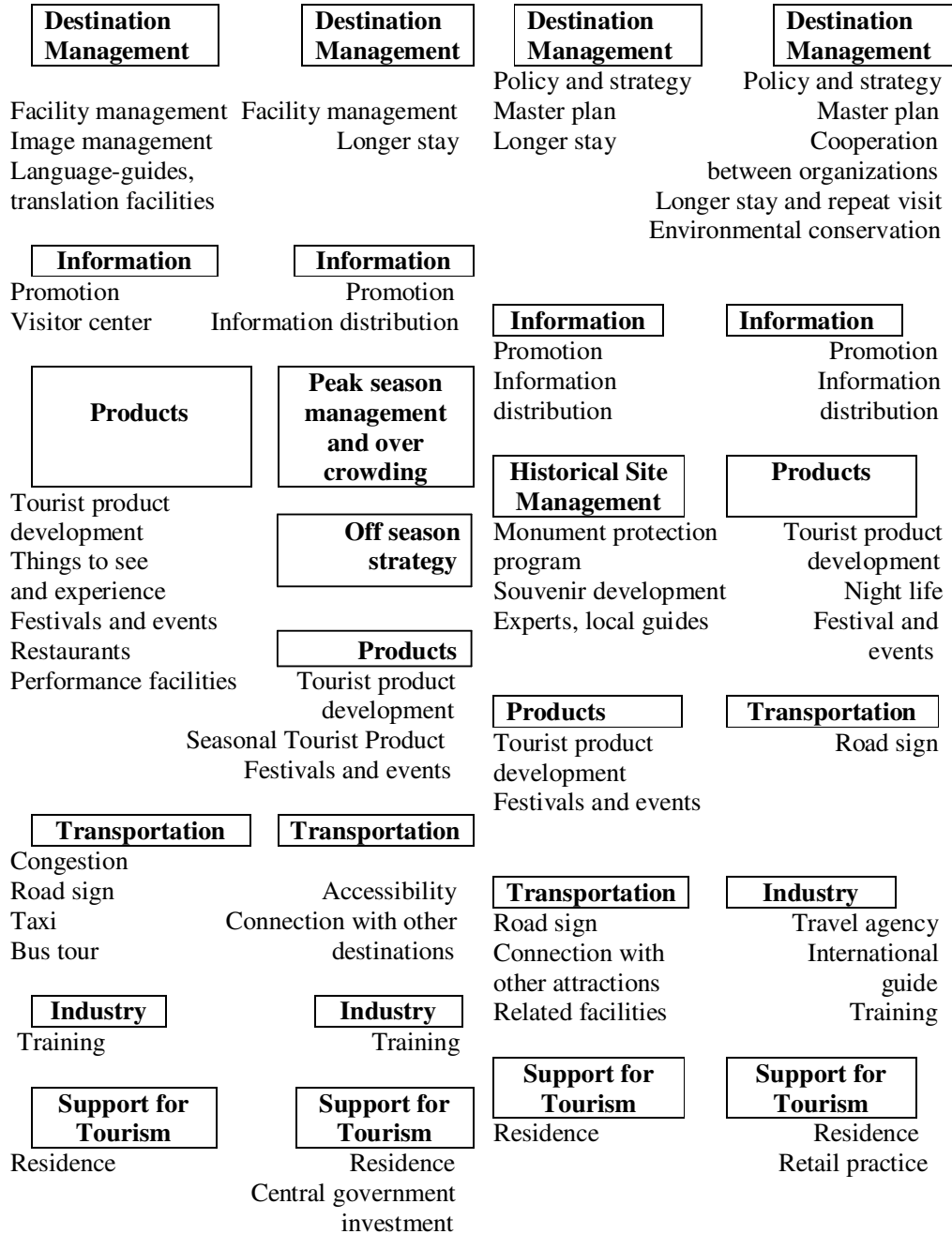


Fig.1. Knowledge map of city tourism , Bucharest

Fig.2. Knowledge map of mountain tourism, Braşov

Fig.3. Knowledge map of historical area, Sighisoara

Fig.4. Knowledge map of seaside tourism, Constanta

Knowledge for diverse unique tourist product development, including festivals and events, should be built and practiced. Road signs, public transportation connecting attractions and transportation-related facilities are a major concern to improve tourists' movement in Sighişoara. Resident's support is critical for tourism success in this region.

3.4. Resort seaside Constanţa

The knowledge map of Constanţa appears in Fig.4. New product and attraction development to provide positive experiences to tourists, responsiveness to tourists, responsiveness to market change, citizen support, travel agency operations, repeat visits, employee training, organizational cooperation and retail practices were the most frequently mentioned knowledge that is required to advance tourism in Constanţa.

Respondents suggested long-term commitment on policy, strategy and to a master plan. Also, they indicated that knowledge is needed in the area of cooperation between organizations so as not to cause waste due to duplication, promotion responding to the market change, current and accurate information distribution, achieving longer stays and environmental conservation and protection.

It was also felt that further knowledge should be sought in Constanţa so that tourist products can be further developed to provide interesting and unique experiences to tourists, including nightlife, diverse festivals and events. Respondents recommended road signs in more than one language. Industry knowledge for many small travel agencies, foreign language-speaking guides and Constanţa. Resident's support including those pertaining to retail practices is one important area in which destination knowledge should be accumulated.

4. Conclusion

This study contributes to the tourism field by exploring and comparing knowledge map structures by destination types. It was found that each destination has unique knowledge needs and, therefore, the knowledge map structure should be built to meet the needs and preferences of destination knowledge users. Various perspectives should be integrated in the knowledge map.

A knowledge map is a useful tool to define destination knowledge needs during the initial stage of knowledge management and assist knowledge user to find the desired knowledge with a low search cost. Destination knowledge management contributes in building competitive destinations by supporting timely decision-making and eliminating duplicate efforts to find the same knowledge. Shared knowledge grows exponentially and contributes to industry productivity. Therefore, knowledge in and about destinations should be shared.

References

1. Alavi, M., Halley, B.: *Knowledge management systems: Implications and opportunities for data warehousing*. Journal of Data Warehousing, 4(1),2-6.
2. Kim, H.-G., Fillies, C., Smith, B., Wikarski, D.: *Visualizing a dynamic knowledge map using semantic web technology*. EDCIS 2002 Lecture Note in Computer Science, pp. 130-140. Berlin: Springer.
3. Markman, A. B.: *Knowledge representation*. Mahwah, NJ: Lawrence Erlbaum.
4. Turban, E., Aronson, J. E.: *Decision support systems and intelligent systems* (6th ed.). Englewood Cliffs, NJ: Prentice-Hall.