Explaining travellers online information satisfaction: A complexity theory approach on information needs, barriers, sources and personal characteristics

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ABSTRACT

This study explores the online information-seeking behaviour of travellers aspiring to accumulate travel-related information during their vacation planning. A theoretical model comprising information needs, online information sources, information barriers and personal characteristics is proposed to explain high degrees of information satisfaction in the online information space. Our theoretical propositions are validated through a survey ($N = 764$). The results of a configurational analysis, based on fuzzy-set qualitative comparative analysis, pinpointed 13 behavioural paths that equally explain travellers' online information satisfaction. The paper includes a critical discussion on the theoretical and practical implication of the findings.

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1. Introduction

The research related to the impact of online information and of information-seeking preferences on tourist destination choices is rather extensive [1]. This area of knowledge is rich because of the internalized highly competitive and complicated nature of the tourism industry, which requires the extensive exploitation of online information technologies by individuals and tourism organizations [2]. Tourism is an information-intensive industry because of its intangible and experiential nature. Indeed, high uncertainties are involved as tourists' experience cannot be evaluated prior to the 'purchase' [3]. The information provided online through various websites [4] and the extensive information sharing among individuals [5] has become a decisive factor related to the tourists' destination choices [6]. Online resources have a number of noteworthy advantages when compared with the conventional offline and counterparts, and hence, their popularity increases [7].

In fact, online information seeking in the context of tourism products and services involves experience sharing and dissemination, and it becomes synonymous to individuals' tourism destination exploration. People generate and share information through a wide range of tourism web applications and online tourists' communities to make decisions for choices regarding places, experiencing and seeing the world [8]. Nowadays, more than ever, people can make informed decisions regarding their tourist product preferences. They are, however, faced with an unregulated information environment, which creates challenges but also offers many new alternatives.

Indeed, the wide portfolio of online information resources may act as both a facilitator and a barrier within a traveller's vacation decision-making process. For example, online social media have emerged as a primary information source that affects destination choice [9–11]. However, the abundance of information within social networks may lead to information overload [12] and often incorporate misleading or unreliable information [13]. In effect, the online information-seeking process of travellers is rather complex; travellers are motivated to select and use multiple online information sources based on inherent travel-related information needs that relate to the vacation planning decision-making [14]. In this process, several factors intervene, such as trust on the accumulated information from the online information source [15] and personal elements (e.g. age, gender and online information literacy capacities [16–18]), which impact the selection of information sources and the overall satisfaction of information needs. Extant tourism information-seeking studies have concluded that information search may be conceptualized as a series of interrelated activities (e.g. [14,19,20]); nevertheless, modelling the

interrelationships of these factors and exploring their combined effects on information satisfaction remains largely unexplored.

Especially for practitioners in the tourism industry, there is a growing need to understand how tourists interact in the online medium and receive travel-related information to explore ways to leverage it. Such efforts may serve the basis for the development of more effective online communication strategies. In effect, our study differentiates from extant literature by capturing the interrelations between travel-related information needs, online information sources and personal information barriers to explain satisfaction stemming from the online information search process of travellers. On the basis of the above, the paper addresses the following research question: *What configurations of information needs, information sources, information barriers and personal traits lead to satisfied travellers when they search for travel-related information online?*

We build on complexity theory and implement a fuzzy-set qualitative comparative analysis (fsQCA) [21] to identify pertinent configurations leading to increased information satisfaction of vacation-planning information needs. fsQCA has received increased attention during the last years in various fields, because it allows researchers to gain a deeper understanding of the phenomenon under scrutiny [22,23]. The contribution of the paper lies in identifying the level of agreement between information needs, information sources utilization, information barriers and overall information satisfaction and, therefore, assist tourism marketers to develop better strategies for providing information desired by potential travellers. To our knowledge, this is the first research that adopts this investigation stance in the context of online tourism. The outcomes of this effort are encapsulated in alternative traveller search profiles that equally lead to satisfied travel-related information needs.

The structure of the paper is organized as follows. Section 2 presents the related work on capturing the online information-seeking behaviour of travellers and articulates the research propositions. Section 3 outlines the research methodology and sampling process. Section 4 presents the research findings. Finally, Section 5 concludes the paper with a summary of the theoretical and practical implications of our research.

2. Related work

2.1. Capturing travellers' online information search process during travel planning

Travel planning reflects a specific type of information search and an important component of any trip experience since it involves all traveller activities pertaining to the collection of information in order to develop a travel plan [20]. Travellers and potential visitors always employ different information resources and/or channels as their search strategies, which often complement or even replace each other [20]. Such sources include the Internet, travel consultants or agents, their family and friends, and offline literature/media pertaining to the destination under consideration [3]. Specifically in the online domain, such individuals are seeking information in order to explore specific travel experiences and tourist destination attributes which suite their travel expectations, socioeconomic and cultural profiles [24], and certain lifestyle backgrounds [25]. In order to do that, a number of *information needs* are generated, different *information resources* are employed and certain *information barriers* are faced. The symmetric and/or asymmetric impact of the distinct information resources on tourism information choice is related to the individuals' information-seeking profiles and preferences [26].

The information needs and information-seeking preferences literature in the tourism context include numerous theoretical and empirical studies all striving to capture individuals' search

behaviour by identifying travellers' needs and sources' preferences (e.g. [14,16,27,28]). In these studies, emphasis is being paid to identify *why* travellers search online and *what* type of websites they frequently access in order to pinpoint prospective online traveller profiles accounting also for demographic information, such as age and gender (e.g. [14,29]). However, these efforts mostly reflect *partial snapshots* of the online information-seeking behaviour since they do not relate the information sources' usage with particular information needs, nor do they examine whether such relation led to satisfaction of travellers' information needs.

In effect, the different information-seeking profiles differentiate the way groups of people with distinct socioeconomic backgrounds search for information, evaluate and analyze it, manage tourism information, use it and reuse it for specific travel decisions and the way they effectively share and communicate it to others. Moreover, individuals' affective and cognitive state change during the information-seeking process while the existing information structures are constantly enriched due to the person's exposure to more information [20]. Depending on whether the information needs of individuals have been met by the information accumulated through the online resources used, the information search process will lead to a positive (or negative) perception of *information satisfaction*. Information satisfaction in the context of online tourism is a highly complex and multi-dimensional phenomenon and involves a large stream of literature emphasizing the central role of online resources utilization [30] ranging from the flow of interactions with the website [31,32] to the receipt of customized information to individuals' unique needs [33]. At the core of the information search process are information needs; they are the drivers that initiate the information search process [16,31] and forge expectations to travellers pertaining to the accumulation of sufficient information that will satisfy these needs. Scholars agree that information needs in the context of tourism are primarily functional: they serve the purpose of providing utility to decision-making before the actual trip and reducing the uncertainty of destination selection choices [34–36]. Online information search queries range from destination-specific inquiries (e.g. local attractions, restaurants and accommodation information) to transport options (e.g. flights to the destination), and other tourists' testimonials [9,27,37].

To satisfy information needs, individuals visit different online information sources that contribute to formulating the perceived image of a destination [38,39]. Online information sources in the context of tourism may be classified based on their formality [27]: Formal (or impersonal) online information sources include online travel agents, online travel guides and travel organizers to name but a few popular information sources; informal (or personal) online information sources include blogs and online social networks. In the remainder of this paper, we also follow this classification of online information sources.

The type and selection of a particular information source is dependent on the information needs of the traveller (e.g. the stage of the travel planning process and the element of the planned travel that is searched) and the inherent barriers that the information source and/or the individual entail. Moreover, they represent parts of travellers' online search strategies both actively and passively [40]. For example, travellers tend to primarily visit formal online information sources to get informed about renowned destinations [35]. However, to lower risk and uncertainty in ambiguous selection choices travellers make extensive use of informal information sources (i.e. blogs, online social networks and websites that include customer reviews) to collect other travellers' experiences as the tourism product is highly experiential in nature [27,37]. At the same time, online visitors rarely complete their travel-related search in one session nor do they devote the same time in each information source [41]. Likewise, travellers tend to use online information