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Hiking and digital innovation: Analysis strategies for tourist destinations management

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Introduction

Having become a full-fledged territorial marketing and destination management tool (Chamard, Rousset, Gayet, Alaux, Gollain, & Boisvert, 2014; Meyronin, Gayet, & Collomb, 2015), recreational and outdoor activities could experience significant growth in France and should play an increasing role for territorial attractiveness and development. Hiking, the most popular physical activity practiced in France (Mignon, 2015; Pôle ressources national sports de nature, 2016), takes different forms: urban walking or strolling (Mitic, 2008; Lavadinho, 2011), a spiritual walk (Gros, 2009), occasional leisure walking (Monnet, 2015), a long-distance hike (Den Breejen, 2007), an activity during a tourist stay (Lapompe-Paironne, 2008; Bouin, 2010), itinerancy walking (Barna, 2021; Boutroy & Vignal, 2018; Kirschner, 2017), a pilgrimage (Vincent, 2011; Vistad, Øian, Williams, & Stokowski, 2020), or a microadventure or walking trip (Boyes, 2013), hiking advocates a return to nature through this myriad of practices (De Baecque, 2016; De La Brosse, 2019; Le Breton, 2020). Furthermore, in addition to all these forms that hiking may take, the activity has also undergone diversification with the development of related practices, such as Nordic Walking (Pantzar & Shove, 2010) and sea-wading (Vieillard et Wallyn, 2019), which add to different forms of leisure-time hiking activities. The activity has become trendy and appealing to an increasing number of followers. It is reaching an extensive public in search of authenticity, revitalization, and a return to nature (Krieger, Deldrèvre, & Lewis, 2017), reinforced by a need to break with everyday life in connection with the unprecedented health crisis (and related restrictions) that has been experienced since March 2020. Moreover, this leisure activity is increasingly popular as part of destinations "product portfolios", enlisted to both "capture" visitors and "attach" them (Callon, 2017; Cochoy, 2016) to an area. However, few studies are dedicated to the role of hiking in destination marketing, especially in light of its recent evolution in relation to a growing associated digitalization. In fact, this digitalization has led to the emergence of new hiking behaviors, which are motivating heterogeneous actors (e.g., the public sector, non-profit organizations, the private commercial sector, tourist promotion organizations, etc.) to adapt and develop a digital offer around this activity. Many regions are seeking to innovate, by encouraging the development and the usage of a diversity of digital tools. These digital innovations have essential consequences both on the structuring of the offer (in terms of territorial layout and accessibility, definition and implementation of public policies, design and commercialization products, etc.) and on the redefinition of sports and tourism demand.

Literature Review

Digital innovation seems to be one of the strategies deployed by tourist destinations to cope and stand out from the competition (Hays, Page & Buhalis, 2013; Jammet & Linder, 2019; Nivala, Sarjakoski, Laakso, Itäranta & Kettunen, 2009; Posti, Schöning & Häkkilä, 2014; Shaker, Hermans, Cops, Vanrompay, Adnan, Maes, & Yasar, 2020; Trunfio & Della Lucia, 2019; Trunfio & Della Lucia, 2016), and recreational and outdoor sports (Hills & Thomas, 2019; Lindell, 2014; Valenzuela, 2020; Winter, Selin, Cerveny, & Bricker, 2019; Walmsley & Crowe, 2016) and in particular, hiking is often at the heart of those strategies. Many tourist destinations are seeking to innovate, for example by developing digital applications (e.g., Blaser, 2015; Hauthal & Burghardt. 2012), websites and digital platforms specifically dedicated to hiking (e.g., Kuby, Wentz, Vogt, & Virden, 2001; May, Ross, Bayer & Tarkiainen, 2003; Traunmüller, Schieck, Schöning & Brumby, 2013). This is the case of the Brittany region (Corson and Paget, 2015) but also of other French tourist destinations (Garcia Arjona & Paget, 2020). With the digital boom, this activity is a means of nurturing an image that is not only attractive but also innovative (Batzorig, Chen, Lin, Chiang, Tan, Davaasambuu & Bilgee, 2012; Caudron & Thomas, 2017; Halpenny & Priebe, 2014; Jang, Yoo, & Lee, 2019; Rogers & Leung, 2020) while at the same time addressing many contemporary concerns, be they environmental, social,

economic, tourism, political, or health-related. Scientific studies have thus been conducted with the aim of identifying user profiles for hiking activities (Pomfret & Bramwell, 2015; Davies, 2016; Lepillé, 2017), and grasping their motivations (Alfonzo, 2005; Shove & Pantzar, 2005; Davies, Lumsdon & Weston, 2012; Ping Li, Chris Ryan & Zhou Bin, 2020), including the representations they have of certain forms of leisure-time hiking activities (Barna, 2021; Monnet, 2016). Further research has also aimed to determine the benefits being sought, particularly health and social ones (Hill, Goldenburg, & Freidt, 2009; Wolf & Wohlfart, 2014; Griez; 2019). It should be noted that while international research has been conducted on the socioeconomic impacts of this practice (e.g., Xiang, 2005; Raya, Martínez-Garcia, & Celma, 2018), we have observed a lack of socioeconomic analysis specific to hiking in France. This doctoral project focuses on the innovations, particularly digital, that are developing around hiking, and on the effects of these transformations on the structuring of the sports tourism market, as well as on the issues in terms of territorial attractiveness. In the context of this project, the research questions are expressed as follows: How is hiking changing and evolving faced with digital innovations? How does this "connected" leisure activity fit into territorial development strategies? The research issue relates to three lines of thought. Firstly, it questions the role of hiking in the management of tourist destinations, by identifying the devices at work in terms of territorial marketing. Secondly, it addresses the innovation processes that are developing around this recreational activity in relation to the digital boom. Third, it studies the effects of these digital transformations on the structuring of the outdoor recreation / sport tourism market, in order to understand how they contribute to tourism development and the economy of destinations in a context of strong territorial competition. In order to answer this problematic, the thesis adopts a sociology of innovation perspective by mobilizing the actor-network theory (Akrich, Callon, & Latour, 2006; Latour, 2005) applied to sport and tourism (Rech, Paget, & Dimanche, 2019; Van Der Duim, Ren, & Jóhannesson, 2012) as well as its extension to economic sociology (Callon, 2017; Cochoy, 2016), which allows us to grasp the marketing processes at work within territories.

Methodology

The qualitative methodology implemented in this research is part of an inductive approach. The methodological choices and tools that are selected are based on the current experience of a large-scope study lead by the research program (IMTERPED[1]) about the development of the recreational sports (including hiking) market on the Atlantic coast of France. An exploratory survey has already been carried out, allowing an exploration of the research object, contributing to defining the research problem, and strengthening the theoretical framework. This was a starting point for the exploratory investigation and for reflecting on and testing the necessary methodological tools for the main survey. This exploratory study has enabled a mapping of one hundred and five digital devices involved that were introduced and twenty some of them were described by twenty nine actors interviewed while twenty four semi directive interviews. Some of these digital tools have been the subject of participant observations. These observations take the shape of "guided" or "completely independently" field tests (i.e., with or without the attendance of a project manager responsible for the management and monitoring of the digital tool). On the one hand, these observations contributed to getting to grips with the digital tools identified, in the sense of better understanding the contents they cover, such as multiple and diverse functionalities and interfaces. On the other hand, these observations made it possible to use the tools in a mobile context by choosing one or more circuits available on a hiking mobile application in order to "put oneself in user's place" (hikers' community), as well as "put oneself in designer's place" in charge of the management and maintenance of the "back-office" of the digital tool (tourist destinations marketing/management community). Following this exploratory study, the main survey of this doctoral research is currently in preparation. It will use various investigative tools (semi-directive interviews, documentary collection, e.g. press kit, technical and

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[1] « Territorial impacts of pedestrian leisure activities on the coastline: innovations, changes and transformations of uses », Research program of Foundation of France (2016-2021), Laboratory VIPS², University Rennes 2.

functional specifications, user instructions, etc., some with statistics on the number of downloads, frequency of use, most used hiking trail, etc.) to collect empirical data.

Results

The exploratory study identified a diversity and a multiplicity of digital tools (e.g., responsive websites and mobile applications specifically dedicated to hiking, hybrid devices such as paper maps, hiking topo-guides and leaflets with QR codes, audio-guides, GPS, touch pads and digital signs located on hiking trails, etc.) and made it possible to identify a variety of actors (from the public sector, non-profit organizations, the commercial private sector, tourism promotion organizations, etc.) that are working towards the development and the deployment of these digital tools. It also provided elements of understanding about the various strategic purposes (e.g., promoting a territory and enhancing its hiking offer, standing out and facing competition between destinations, stimulating and developing the local economy, digitizing and listing the trails, responding to a political order aimed at taking charge of the development and management of hiking trails, federating actors of the tourist promotion of tourist destinations, "attracting" tourism and local customers that will be appreciate or receptive to use digital tools specifically dedicated to hiking, etc.) pursued by these actors who wish to receive and / or develop and / or promote and / or market these tools within a territory. This exploratory survey also made it possible to observe an interweaving of issues. The stakeholders interviewed mentioned and/or raised territorial attractiveness, socioeconomic, political, environmental, sustainable development and public health issues. Linked with the theoretical framework, some of hiking digital tools will be interlocked sociotechnical and socioeconomic processes that will be deciphered in depth at the time of the main survey.

Conclusion and perspectives

In addition to meet the stated objectives of the exploratory survey, results of the exploratory study will also provide two news research leads that will be considered and discussed while the main survey follows. For the first, it would be a question of deciphering on the same tourist destination undertaking digital conversion: one, two or three hiking digital tools. For the second, it would be a question of analyzing on three different tourist destinations undertaking digital conversion: one hiking digital tool implemented inside each of the three tourist destinations.
By way of conclusion, this doctoral project is original in that it stands out with its theoretical approach as well as with its socio-economic stakes. It also intends to provide facts and knowledge, keys to understanding, and reasons for action to political and socio-economic actors who are confronted to societal changes resulting from digital technology advancements. A desired outcome of the study is to identify and comprehend the mechanisms that promote territory development and attractiveness in order to develop sustainable economies for destinations.

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