Exploring “Planned Serendipity” and On-site Information Behavior on Smartphones

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Abstract. The paper explores tourists’ smartphone-related information behavior on site in light of the concept of “planned serendipity”. The ability to gather information at anytime and anywhere can deeply influence tourists’ behavior, their information needs and the outcomes of their travel plans. In this study, the concept of planned serendipity is used to suggest that the outcome of travel information behavior on site is not entirely planned nor entirely serendipitous. The study employs the Experience Sampling Method (ESM) in combination with qualitative interviews, which allow the researcher to gather data both during the participants’ trip and afterwards. The thematic analysis resulted in four main themes related to information search connected to smartphone use: flexible plans; orientation in time and space; specificity of the query; aiming for optimization. Such conditions result in planned serendipity. The study thus contributes to the conceptualization of planned serendipity as an outcome of smartphone use during travel for information purposes.

Keywords: Smartphones · Planning · Serendipity · Experience sampling method

1 Introduction

With their portability and constant connectivity, smartphones have a great influence over tourists’ on-site information behavior. Mobile technologies have changed the way tourists plan their trips, highlighting the importance of research into unplanned behavior [1]. Gretzel, Zarezadeh, Li and Xiang [2] have called for theoretical advancements that can take into account new and emerging technologies. Mieli and Zillinger [3] suggested that tourists approach travel planning in a new way that goes beyond the juxtaposition between planning and serendipity, and called it “planned serendipity”.

The body of research about information behavior during the on-site stage of the trip is also much smaller than on pre-trip information behavior. In part, this is due to the lack of appropriate methods to investigate the on-site stage of the trip. A large amount of research on tourist information behavior is conducted with quantitative methods, and the use of qualitative methods is limited on the subject. The present study aims to fill these gaps in the literature by investigating how such planned serendipity occurs during the trip and how it is enabled by smartphones. The method employed is a combination of Experience Sampling Method and post-trip qualitative interviews.

2 Literature Review

The use of smartphones during travel has been a popular object of research in the past two decades. Tourists use smartphones during their trips for information search, mainly for transport, accommodation, food and activities, as well as for inspiration and ideas about their destination [4]. Information behavior during travel is particularly affected by the constant connectivity that smartphones afford: tourists can find information anywhere and at any time. Mieli and Zillinger [3] have noted the change in information needs throughout the different phases of travel and that several information needs have been postponed to the on-site phase and closer to the moment of consumption.

Some studies have suggested that different types of information are sought at different stages of the trip [4]; others that the information search process is hierarchical, and choices that are highest on the hierarchy are typically made before the trip while others, lower in the hierarchy, are made later [5]. Pre-trip and on-site decisions also have different characteristics: while the former are more reasoned and require more information processing, the latter are described as free-spirited and light-hearted [4]. On-site information search, however, is an important part of the tourist experience, increasingly so thanks to mobile technologies and the lowering of data roaming prices [6]. Kang, Jodice and Norman [4] have shown that tourists may prefer not making decisions beforehand to keep their plans flexible and decide based on what circumstances and new information they encounter during their trip.

In information studies, serendipity refers to the fortuitous encounter of relevant information while not specifically looking for it [7]. In tourism, the concept of serendipity has only been used in few instances, for example in relation to independent tourists' preference between structure and serendipity in their travels [8]. Mieli and Zillinger [3] used the term in the phrase “planned serendipity” to indicate the existence of degrees of serendipity even in structured plans and, vice-versa, the constant planning that is enabled by smartphones, which introduces some elements of planning and information search even in the most spontaneous decisions.

Research has called for the explicit inclusion of unplanned behavior in theories of tourist behavior [9] as well as new methods to explore tourists' interactions with technology [2].

3 Methodology

The study was conducted with a hybrid methodology, which combined questionnaire data collected using the Experience Sampling Method (ESM) with qualitative interviews. ESM is a method that consists of sending participants several mini-questionnaires throughout the day. In this case the method was applied to gather self-reports from tourists during their trip, as they went about their tourist activities. The Experience Sampling Method allows to capture people's experiences at a time as close as possible to when they actually happen, in order to ensure ecological validity and get access to the lived experience of events and everyday life [10].

15 people were selected to participate in the study. The criteria for selection of participants were the following: born in the 1980s and 1990s, have attended or are

attending higher education and planning to take a trip which included at least three nights away. Age and education level would ensure participants who had traveled both with and without smartphones and who would spend more time looking for travel information [11]. Participants were selected to include different types of travel, including: backpacking, visiting friends and family, city break, road trip, event travel, family vacation, seaside vacation.

During the trip one or two questionnaires per day were sent to participants' own smartphones through a dedicated application. Questions focused on what respondents were doing or feeling at the time of the notification. Since respondents answered several ESM questionnaires per day, the total number of questionnaires collected is 93. After the trip, the follow-up semi-structured interview departed from participant's ESM answers and aimed at broadening, deepening and clarifying them. The data was analyzed qualitatively. A thematic analysis was conducted following the general principles of grounded theory [12]. ESM answers were also organized in a spreadsheet to identify possible patterns that could be explored further in the interviews.

4 Findings

The preliminary analysis of the data resulted in four themes about smartphone-related on-site information behavior: flexible plans; orientation in time and space; specificity of the query; aiming for optimization.

4.1 Flexible Plans

Before the trip, 12 out of 14 participants had booked accommodation, while the other two were either backpacking or on a road trip and only booked a few of their stays in advance. As for activities, most respondents had a rough pre-trip plan, a general idea or a list of things to do. In most cases, detailed daily plans were made on site, either the night before or on the same morning. While most had a general idea of what to do, decisions on when to do it was left until later. These data show that on-site planning and information search are very important elements of the tourist experience and support the claim that information needs are postponed from the pre-trip stage until a later stage of the trip [3].

During the on-site stage of the trip participants were flexible: the ESM data showed that only 23% of the times they had made plans and they had not changed. Mostly, plans were flexible (43%), they had changed (18%) or there was no plan at all (16%).

4.2 Orientation in Time and Space

The search process on site often consists of orientation in time and space. Participants reported using their smartphones to find out what was around them and where they could go next. On the other hand, some respondents also complained that they do not learn how to orientate themselves in the destination, because they have constant access to location-based services. Participant 8, for example, compared her orientation skills to

previous trips when she did not have online maps on her phone and would need to use a paper map. While she used to be able to learn the general layout of a city by the second day, now she cannot do that anymore and blames the smartphone for it.

4.3 Specificity of the Query

A phone search for information differs from using other sources (guides, book, brochures, information centres) in that the person needs to look specifically for something, they need to know what they want and what to look for. This makes the information search more intentional and specific, narrowed to what the tourist already knows they should be looking for. Information is not encountered casually or serendipitously but specifically sought out. Such specificity of the information search has important consequences for the serendipitous element of information encounter: it reduces the possibility to find pertinent information by chance.

4.4 Aiming for Optimization

Optimizing a trip is possible thanks to constant access to information as well as location-based services. Several participants reported using their phones to find the most optimal routes, to make their use of their time most efficient but still keep flexible enough to enjoy the destination with some degree of spontaneity. Plans can be made on the same day based on weather conditions, food can be found nearby as soon as one gets hungry, and there is no need to get stuck in traffic when live information is available about road conditions. Getting lost can be avoided thanks to the possibility to consult one's own position on a map at any time, distances are estimated to make the most out of each day. The possibility to “spontaneously” double-check every piece of information encountered during the trip was seen as increasing spontaneity during the trip by some participants, while others believed it instead decreased spontaneity.

5 Discussion and Conclusions

This paper investigated how tourist information behavior on site can be better understood through the concept of planned serendipity. From the analysis emerged some of the conditions enabled by the smartphone, which can result in planned serendipity in the tourist experience. The use of an innovative method like the Experience Sampling Method allowed the researcher to get access to tourists' experiences during the trip, even the smaller and given-for-granted actions performed on smartphones, which would not be recalled in an interview after the trip. Through ESM, a more detailed and accurate account of behavior and perceptions on site could be gathered.

Planned serendipity was conceptualized here as the outcome of tourists' information behavior, when there is a strong element of serendipity in trip planning and, vice-versa, some level of planning even in spontaneous behavior. This is enabled by mobile phones and their constant connectivity, which allows tourists to collect information anywhere and at any time. This technology and the possibilities it affords in turn influence tourists' behavior, which becomes more and more reliant on mobile

technologies and constant information search. Four conditions connected to smart-phone use on-site were identified: flexible and iterative planning process; orientation in time and space; specificity of the query; aiming for optimization. The combination of these conditions results in a tourist experience that is not entirely planned nor entirely serendipitous, hence it creates planned serendipity.

The study also has managerial implications. DMOs and other tourist destination marketers can benefit greatly from gaining a better knowledge of tourist behavior on site, especially when it comes to the importance of on-site promotion: for example, the design of smart destinations, the creation of hubs of information, the use of the Internet of Things (IoT). Marketing strategies in the pre-trip stage can also benefit from knowledge on tourist behavior on site.

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