SoCoMo marketing for travel and tourism: Empowering co-creation of value

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ABSTRACT

Advanced technology enables users to amalgamate information from various sources on their mobile devices, personalise their profile through applications and social networks, as well as interact dynamically with their context. Context-based marketing uses information and communication technologies (ICTs) that recognise the physical environment of their users. Tourism marketers are increasingly becoming aware of those cutting-edge ICTs that provide tools to respond more accurately to the context within and around their users. This paper connects the different concepts of context-based marketing, social media and personalisation, as well as mobile devices. It proposes social context mobile (SoCoMo) marketing as a new framework that enables marketers to increase value for all stakeholders at the destination. Contextual information is increasingly relevant, as big data collected by a wide range of sensors in a smart destination provide real-time information that can influence the tourist experience. SoCoMo marketing introduces a new paradigm for travel and tourism. It enables tourism organisations and destinations to revolutionise their offering and to co-create products and services dynamically with their consumers. The proposed SoCoMo conceptual model explores the emerging opportunities and challenges for all stakeholders.

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1. Introduction

Information and communication technologies (ICTs) revolutionise tourism and create opportunities for new levels of service and interaction with the environment (Buhalis, 2003). Context-based marketing dynamically engages the physical environment of users by co-creating their experiences based on the optimisation of external and internal conditions. Analysis of big data from various sources and sensors can enable users to aggregate information on their mobile devices and personalise their profile through applications and social networks, as well as to interact dynamically with their context. Cutting-edge ICTs can provide unprecedented tools to respond more accurately to the context within and around their users and to enable them to co-create their tourism experiences. Marketing that is based on social media and personalisation, that is context-based and uses mobile devices (SoCoMo marketing) emerges as a new concept that enables marketers to increase value for all stakeholders at the destination by revolutionising the market offering and co-creating products and services dynamically with consumers.

This conceptual paper brings together a range of social media, context-aware and mobile marketing strategies and combines them towards creating a comprehensive 'SoCoMo' marketing framework. It explores a wide range of advantages that emerge from the enhancement of marketing strategies with a combination of context-aware technologies and provides implications of its potential adoption in travel and tourism.

2. A day with Marta – SoCoMo assisted tourism scenario

Consider the following scenario: Marta, a female tourist, is on her way to the beach to destination X. Suddenly, it starts raining and her plan of lying on the beach all day seems to be ruined. However, Marta has recently downloaded on her mobile phone a social media context-based application developed for destination X. The application gathers certain types of contextual information that might affect Marta's tourist behaviour. For example, the weather forecast application identified a day before that heavy rain was expected. Weather channels also confirmed this forecast this morning. Sensors in Marta's mobile phone, which directly interact with the social media context-based application, spotted that the air temperature dropped five degrees and that sunlight dramatically decreased due to clouds. From Marta's social media

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profiles, the application also knows that Marta is a 24 years old cultural traveller from Norway. Apart from relaxing on the beach, she likes to spend her time visiting art galleries. Her favourite painters are Gauguin and Hopper. From usage patterns saved in her mobile phone data, the application knows that she enjoys drinking coffee as she frequently checks in at various coffee shops. All this contextual information is combined, sent and processed by the destination marketing organisation (DMO) of destination X, which is now able to design a comprehensive profile describing Marta's current context. The local DMO can now develop three to four items on a personalised itinerary that is focused on an art exhibition at museum Y featuring pictures from Gauguin or Hopper. Moreover, the museum, which only charges a small admission fee, offers free coffee to visitors. The destination application builds an alternative itinerary and crafts together a message to notify Marta about this museum with directions on how to get there. A voucher of 50% discount in the museum store is included, together with three recommendations for restaurants that are next to the museum, including her favourite pizza house brand as well as another Italian restaurant located within 30m. Marta receives the notification and she is happy about the alternatives that are offered to her. An indoor exhibition that conforms to her preferences and even serves hot drinks for a low admission fee seems to be a wonderful idea that could still provide her with a satisfying day and result in her not going home with a bad impression of destination X. During her visit to the art gallery she posts positive real-time updates about her experiences and connects them with pictures of the beautiful museum, which she tags generating live content. The application also identified that Anne, a friend of Marta on various social media channels, is also in the museum as they have both checked in on Foursquare. The mobile application notifies both and they meet for lunch at one of the recommended restaurants. Later in the day Marta documents her visit on her personal blog and on a review website, which impresses her friends and other potential visitors who consider destination X for their future travel plans. At the end of the day Marta is happy that she opted-in for receiving information from the DMO application and decides to continue using the application in the future. She also creates proactive and reactive itineraries and recommendations to friends. In return, the DMO captured valuable information about Marta's travel behaviour that will help to present her with even more personalised information during her next visit. It reproduces the positive user-generated content across its own social media with promotional and branding messages. It also saved the positive reviews and exposure to Marta's friends from her social media engagement.

This scenario describes a potential way in which the identification of tourists' internal and external contexts could be used strategically by a DMO to provide them with alternative and highly personalised recommendations that are adjusted to their changing travel contexts. It represents a situation in which a combination of social media (So) and context-aware marketing strategy (Co) on mobile devices (Mo), abbreviated as SoCoMo marketing, is used to add value to the experience of tourists dynamically and allow them to leave a destination with a positive impression. Although the above scenario mighty seem to be set in the future, its basic concepts have already been discussed in numerous academic papers, suggesting that the realisation of such marketing strategies is already feasible.

3. Context-based marketing

Consumers demand highly personalised products and information that are related to their individual context and an effective way to communicate dynamically (Buhalis & Law, 2008). However, due to the growing amount of information available online, which often confronts consumers with too many options to choose from (Gao, Kecheng & Wu, 2010), it is becoming increasingly difficult for consumers to find information that is highly relevant to their current situation or context (Tanca, Bolchini & Orsi, 2011).

Context has been an important research topic by academics and tourism industry professionals for more than 20 years (Bouwman et al., 2012; Haekkilae, Maentyjaervi, Sahami, Akerman & Dey, 2009; Hoepken, Fuchs, Zanker & Beer, 2010; Lamsfus, Alzua-Sorzobal, Martin & Salvador, 2010; Lamsfus, Xiang, Alzua-Sorzabal, & Martin, 2013; Liu & Fan, 2013; Mehan, Lunney, Curran, & McCaughey, 2013; Mehra, 2012; Prekop & Burnett, 2003; Schilit, Adams, & Want, 1994; Tsang & Clarke, 2008). Context in tourism is described as 'any relevant information that characterises the situation of the user' (Lamsfus et al., 2010, p. 609) and influences, to some extent, the pattern of tourist behaviour (Liu & Fan, 2013). Thus, its understanding is critical for seeking and realising effective strategies to support tourists' decisions (Lamsfus, Wang, Alzua-Sorzabal, & Xiang, 2015).

Despite the growing importance of delivering context-related products and messages, the literature still lacks a universally accepted definition of context. The most frequentlycited definition was developed by Abowd and Dey (1999) who described context as: 'any information that can be used to characterise the situation of an entity. An entity is a person, place, or object that is considered relevant to the interaction between a user and an application, including the user and applications themselves'. The information that characterises context is referred as contextual information, which can be external or internal in nature (Prekop & Burnett, 2003). Examples of external contextual information or information from the physical environment are location, proximity to other objects, time, conditions, pressure, temperature and lighting levels (Prekop & Burnett, 2003; Schmidt, Beigl & Gellersen, 1998). Examples of internal contextual information or human factors include goals, personal events, tasks, social environment and emotional state (Prekop & Burnett, 2003; Schmidt et al., 1998) as illustrated in Table 1.

Some contextual factors, such as location or time, can be automatically derived from the environment, whereas other factors, such as topics of interests, may require a specification setting by the user (Tanca et al., 2011). Context factors such as location, time, season or temperature are highly dynamic (Schilit et al., 1994). A range of different sensors and information feeds can be used to update this information in real time. Hence, the contextual information needs to be viewed over a period of time and episodes of use. Some contextual factors are objective, whilst others are subjective and depend on the individual or the situation. The feeling of cold or warm is an example of subjective information whilst a temperature reading of, say, 24 °C would be an objective item of information. Some factors, such as the smell of the environment, are difficult to describe and depend on very personal tastes.

Table 1
External and Internal Contextual Information.

External contextual information	Internal contextual information
• Location	• Tasks (e.g. to look for a job)
• Season/time	• Likes
• Air pressure	• Preferences
• Light	• Emotional state (sad, happy etc.)
• Political situation	• Familiarity with area
• Traffic	• Goals
• Emergencies	• Disabilities
• Delays	• Topics of interest
• Weather	
• Social environment	