Alpine Tourists' Willingness to Engage in Virtual Co-Creation of Experiences

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Abstract This paper explores tourists' willingness to engage in virtual co-creation of experiences on site. Theoretically, we build upon the concept of co-creation, its application to tourism, and distinguish between virtual and physical co-creation environments. We draw upon the conceptualization of the destination as a system of fragmented individual tourism suppliers that—together with the tourist herself—form a network of tourism stakeholders. Data were collected "in situ" in 26 in-depth interviews with international and domestic tourists in an alpine destination. Mainly younger tourists were found to be open to receive push-based personalized messages. Tourists' willingness to disclose private information was found to be contingent on the type of information, but seems also affected by the perceived added value, the ease of use of disclosing information, and trust in the service provider. Sharing of disclosed information across service providers appears to be no major obstacle to virtual co-creation.

Keywords Co-creation • Personalization • Privacy • Smartphone • Alpine destination • Smart tourism

1 Introduction

People's increasing use of mobile devices such as smartphones in everyday life and while travelling potentially transforms the travel experience (Wang & Fesenmaier, 2013; Wang, Xiang, & Fesenmaier, 2014a, 2014b). Among all phases of travel, mobile devices' biggest impact is regarded to be on site, i.e. while the tourist is in the destination (Neuhofer, Buhalis, & Ladkin, 2012; Wang & Fesenmaier, 2013). In light of increasing competition, destinations must provide unique experiences to sustainably attract visitors and to be able to charge premium prices (Buhalis, 2000). Moreover, simply staged experiences contradict tourists' wish for authentic and unique experiences (Buhalis, 2000; Prahalad & Ramaswamy, 2004). Thanks to mobile devices such as smartphones, destination experiences can reach new levels

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of interaction (Neuhofer et al., 2012). In fact, smartphones can be considered a rich and multi-way digital link to and from the tourist while being in a destination. As tourists are prosumers and co-creators of their experiences (Neuhofer et al., 2012), they constitute the key stakeholder in the co-creation of experiences. With regard to virtual co-creation environments on site, tourists' smartphones constitute an important technological element (Neuhofer et al., 2012). Further, together with sensors embedded in the environment, smartphones are considered the core technology of Smart Tourism (Gretzel, Sigala, Xiang, & Koo, 2015), a concept yet predominantly applied to city destinations (Boes, Buhalis, & Inversini, 2015). Enabled and mediated by such ICT, personalized and thus unique experiences can be co-created on site (Buhalis & Foerste, 2015; Gretzel et al., 2015; Neuhofer et al., 2012). SoLoMo and SoCoMo marketing are closely related concepts (Buhalis & Foerste, 2015). The common denominator of these concepts—namely virtual co-creation of experiences, Smart Tourism, and SoCoMo marketing—is the co-creation of unique value in the form of personalized experiences on site, based on a plethora of information about the tourist and her context. For putting this into practice, the involved stakeholders need to effectively address a wide array of challenges (Buhalis & Foerste, 2015; Gretzel et al., 2015). Focussing on the tourist herself as the central stakeholder in the co-creation of personalized experiences on site, key challenges concern privacy, attitude towards co-creation and mobile marketing, and the value or benefit generated (Buhalis & Foerste, 2015; Gretzel et al., 2015). Empirical evidence on these aspects is scarce (see e.g. Buhalis & Foerste, 2015; Gretzel et al., 2015). Thus, this paper explores tourists' willingness to engage in the virtual co-creation of experiences in the on-site travel phase. It focuses on alpine destinations, a type of destination yet insufficiently covered with regard virtual co-creation of experiences and Smart Tourism.

2 Literature Review

2.1 Technology-mediated Co-creation of Personalized Experiences On Site

Prahalad and Ramaswamy (2004) critizised the firm-centric view of staging experiences and challenged it by the concept of co-creation as the "*joint* creation of value by the company and the customer" (p. 8). In tourism, the co-creation of experiences involves a network of various stakeholders (Binkhorst & Den Dekker, 2009), including tourism suppliers, the destination marketing organization (DMO), and the individual tourist (Neuhofer et al., 2012). The co-creation of tourism experiences can take place in physical and virtual experience environments (Neuhofer et al., 2012). 'Virtual' refers to the mediation of the co-creation and resulting experiences through and their facilitation by ICT, first and foremost through and by the Internet, Web 2.0, and social media (Binkhorst & Den Dekker,

2009; Neuhofer et al., 2012; Tussyadiah & Fesenmaier, 2009). With regard to the temporal dimension, Neuhofer et al. (2012) consider "the on-site phase [. . .] as the most intriguing phase for DMOs, with multiple levels of engagement that allow destinations to co-create experiences with the tourist in the physical and virtual setting at the same time" (p. 41). Especially in the on-site phase, tourists' mobile devices (e.g. smartphones, tablet computers, and wearables) constitute a cornerstone for virtually linking the tourist to the network of tourism stakeholders, thereby enabling the virtual co-creation of experiences without spatiotemporal constraints. Moreover, tourists' mobile devices allow the constant interaction between the tourist and the network of other tourism stakeholders as the foundation for co-constructing personalized experiences of unique value (Prahalad & Ramaswamy, 2004).

An intriguing way in which the virtual co-creation on site can materialize is providing the tourist with personalized information and recommendations via her mobile device in real time (Neuhofer et al., 2012), based on the tourist's profile and context (Habegger et al., 2014). However, location and other types of information used for personalization can often be considered private and thus raise privacy issues (Habegger et al., 2014). This may inhibit the tourist's provision of such information. But because information on the tourist's profile and context is the basis for personalization (Habegger et al., 2014), the tourist's willingness *to explicitly or implicitly provide private information* is crucial for enabling personalization of information and recommendations as one kind of virtual co-creation. In addition, as the virtual co-creation of tourism experiences involves a network of stakeholders (Binkhorst & Den Dekker, 2009; Neuhofer et al., 2012), the tourist's willingness *to permit such sharing of private information across a network of various tourism stakeholders* is also crucial for personalizing information and recommendations as one form of virtually co-creating tourism experiences. Research on this matter is in its very infancy. A study by Buhalis and Amaranggana (2015) about personalization of services in so-called Smart Tourism Destinations found that most of their 13 interviewees welcome personalized services although privacy concerns exist and the majority of the interviewees would not allow sharing their data across different tourism service providers. In the mobile context, research outside the tourism domain has just recently started to explore this phenomenon also known as the personalization-privacy paradox (e.g. Sutanto, Palme, Tan, & Phang, 2013).

2.2 Smart Tourism Destinations in Alpine Regions

The use of ICT for enriching tourist experiences in order to enhance destinations' competitiveness is an integral part of Smart Tourism Destinations (Buhalis & Amaranggana, 2014). The concept of the Smart Tourism Destination has evolved from the Smart City concept (Buhalis & Amaranggana, 2014). A Smart Tourism Destination can be defined as "an innovative tourist destination, built on an infrastructure of state-of-the-art technology guaranteeing the sustainable development

of tourist areas, accessible to everyone, which facilitates the visitor's interaction with, and integration into, his or her surroundings, increases the quality of the experience at the destination, and improves residents' quality of life" (López de Ávila, 2015, n. p.). More specifically, in a Smart Tourism Destination, different types of stakeholders (including tourism organizations and tourists) are dynamically interconnected through a technological platform allowing the instant exchange of information related to tourism activities (Buhalis & Amaranggana, 2014). Thus, tourists can benefit from a variety of different applications (e.g. Augmented Reality for enhanced interpretation of attractions, real-time information on transport, POI information accessible through QR codes or NFC tags, and feedback systems for registering complaints or praise) (Buhalis & Amaranggana, 2014). Through such and other data sources (e.g. WLAN-based positioning), tourist organizations can learn about tourists' on-site behaviour in real time; respective knowledge is the basis for "recommending tourists most promising matches with the actual destination offer [via intelligent mobile end-user applications], thus, enhancing tourists' quality of experience" (Fuchs, Höpken, & Lexhagen, 2014). "Research in the area of smart tourism remains very limited and mostly provides case studies of existing initiatives" (Gretzel et al., 2015, p. 6). Regarding the consumption of smart experiences, open research topics are (1) privacy concerns, (2) attitudes towards co-creation, (3) value derived, (4) physiological consequences of ubiquitous connectivity, (5) the need or desire for escape from technology, and (6) technology access (Gretzel et al., 2015). Buhalis and Amaranggana (2015) provided indicative empirical evidence on a number of personalized services that could add value to tourists in different phases of travel. A recurring topic inherent to many of these services is the provision of relevant real-time information and personalized services based on user profiling (Buhalis & Amaranggana, 2015).

In addition, the concept of the Smart Tourism Destination has mainly been applied to city destinations as it emerges from the Smart City concept (e.g. Boes et al., 2015; Buhalis & Amaranggana, 2014; Gretzel et al., 2015). Del Chiappa and Baggio (2015) compare an alpine destination with two destinations in marine areas by basing their research on the Smart City concept. Their study confirms that "a strong structural cohesion between the real and the virtual components of a destination can and does exist [in all three destinations]" (Del Chiappa & Baggio, 2015, p. 4). Thus, applying the Smart City concept to alpine destinations can make sense. Alpine destinations are currently undergoing massive structural changes due to a decreasing demand of ski tourism, lack of natural snow due to global warming, or strong competition such as beach destinations that are easily reachable with low-cost airlines (Müller-Jentsch, 2015). Moreover, in most alpine tourism destinations, the majority of service providers are SMEs with various options to co-operate with each other (Pechlaner, 2003). Thus, one way how alpine destinations may address the challenges they face is the co-creation of unique experiences by several SME-sized service providers in the destination and the tourist, facilitated and mediated by ICT and so making the destination smarter and more competitive.

2.3 The Use of Mobile Technologies by Destinations and Tourists

Research interest in mobile technologies and systems in tourism has significantly grown (Pourfakhimi & Ying, 2015). This is most certainly due to the enormous advancement and wide penetration of mobile technologies. As smartphones have replaced traditional mobile phones to a large extent, they are constantly carried and used on a continuous basis in everyday life and increasingly while travelling (Shankar & Balasubramanian, 2009; Wang et al., 2014a). Considering the plethora of functionalities of today's smartphones paired with rich mobile applications for mobile platforms such as Apple iOS and Google Android (Abolfazli, Sanaei, Gani, Xia, & Yang, 2014), smartphones may well be considered as the Swiss Army knife of contemporary tourists (see also Dickinson et al., 2014). A study analyzing currently available apps in the domestic tourism travel domain found that (a) - two-way sharing capabilities involving location and social information and (b) context awareness predominantly based on location and time are among prevalent app functions (Dickinson et al., 2014). Both functions contribute to enabling the personalization of information or recommendations. Based on a benchmark of 30 international tourism destinations, Buhalis and Wagner (2013) found that most destinations do not yet leverage emerging technologies in order to facilitate the tourist's stay in the destination and that destinations should look into "mobile technologies in the form of destinations apps and location based services" (p. 126). As native apps typically allow accessing all of the various sensors integrated in today's smartphones (Abolfazli et al., 2014) and location is a primary type of context (Dey & Abowd, 2000), this hints at the personalization of information, recommendations, or services based on the specific situation of the tourist on site.

Demand-side studies have analyzed tourists' smartphone usage along different travel phases and subsequent effects on the tourist experience (Wang & Fesenmaier, 2013; Wang et al., 2014a), the role of smartphones in mediating the tourist experience (Wang, Park, & Fesenmaier, 2012), spill-over effects from smartphone usage in everyday life into travel (Wang et al., 2014b), the acceptance of mobile tourism services (Bader, Baldauf, Leinert, Fleck, & Liebrich, 2012), and the use of smartphones by millennials while travelling or being in a destination (Dewan & Benckendorff, 2013; Gotardi, Senn, Cholakova, Liebrich, & Wozniak, 2015). These studies form a distinct stream of research and have deepened the understanding of the smartphone's role and effects in the tourism and travel domain, but also indicate the need for further work. First, several studies focus on domestic travel (Bader et al., 2012; Wang et al., 2014a). Even though domestic travel has considerable relevance in many countries, international travel is widely spread and thus cannot be left out. In fact, extant research shows the smartphone's use and potential effects are different in an international context (Dewan & Benckendorff, 2013; Gotardi et al., 2015). Second, most of the studies either recruit respondents who have travelled at least once in a specific time frame (Wang &

Fesenmaier, 2013), random consumers (Wang et al., 2014b), or students as a non-probability sample (Dewan & Benckendorff, 2013). However, except Gotardi et al. (2015), none of the aforementioned demand-side studies approached tourists "in situ", i.e. when tourists are on site and in the midst of the tourism experience. Such "in situ" sampling may be more appropriate to shed light on destination experiences. Third, most of the studies did not focus on a specific type of destination. However, destinations do vary in terms of size, geographical features, attractions, guest segments, and their legal organization (Freyer, 2015). Such specificities may well affect (a) the type of experience tourists seek, (b) how tourism suppliers and the DMO leverage technology to improve the tourist experience, and (c) to what extent tourists are willing to engage in the virtual co-creation of experiences.

3 Methodology

A qualitative approach was taken to explore tourists' willingness to engage in virtual co-creation of experiences. 26 semi-structured interviews were conducted in different locations within the alpine destination of Saas-Fee/Saastal, situated in the canton of Valais, Switzerland. Semi-structured interviews were chosen because the investigated topics are fairly specific, but the interviewees should have "a great deal of leeway in how to reply" (Bryman & Bell, 2015, p. 481). Screening criteria included staying in the destination for at least one night and having brought along one's smartphone. To match the typical visitor mix of the destination, quota sampling was applied. Quota sampling criteria included country of origin (50 % domestic and 50 % international), age, and socioeconomic group (see Table 1). The interviews were conducted in German, English, and French over a period of 10 days in February 2015 using a paper-based interview guide. The voice-recorded interviews were manually transcribed verbatim and then coded using MAXQDA. While pre-defined questions posed the overarching dimensions analyzed, open coding was employed to identify recurring topics and create categories (Corbin & Strauss, 1990). Due to the qualitative nature of the interviews, not all pre-defined questions could be addressed in all interviews. Thus, selected results concern less than 26 interviews.

Table 1 Sample characteristics

Socioeconomic group	Age group			
	18–24 ($n=4$)	25–35 ($n=5$)	36–49 ($n=7$)	50–65 ($n=10$)
Young Single ($n=4$)	YS#1—YS#4	–	–	–
Family ($n=8$)	–	FAM#1—FAM#3	FAM#4—FAM#8	–
DINK ($n=4$)	–	DINK#1, DINK#2	DINK#3, DINK#4	–
50+ ($n=10$)	–	–	–	50 + #1—50 + #10

4 Results

We have conceptualized the personalization of information and recommendations as a distinct form of virtual co-creation among a network of multiple tourism stakeholders, with mobile devices such as smartphones as the multi-way link to the tourist. Conceptually and empirically, this comprises (a) the willingness to receive relevant push-based information or recommendations, (b) the willingness to disclose different types of private information, and (c) the willingness to permit the sharing of such information between multiple stakeholders in a destination.

4.1 Receiving Relevant Push-Based Information and Recommendations

In the course of the interviews, respondents were asked whether they would want to receive push-based information, recommendations, or promotional offers on their smartphones while being on site. 14 out of 24 respondents stated to be open to receive such messages. These 14 respondents provided insights about the following aspects:

- Attitude: Statements like "Give me ideas, I am on vacation!" (FAM#1), to "I would look at it for sure." (FAM#8), to "Yeah, as long as I am not bombarded." (50 + #6) well demonstrate how the attitude ranges from almost demanding such messages to rather accepting them.
- Quantity: Some respondents do not want too many messages (50 + #6, 50 + #7, DINK#3) while another clearly stated to be willing to receive them daily (50 + #2).
- Quality mainly concerns relevance. Push messages are welcome if they are relevant, but not spam (50 + #6, FAM#4) or advertising-like messages (DINK#3).
- Where and when of delivery: Two respondents stressed that they would only want to receive messages while being on site and not at home (50 + #2, 50 + #6). The morning hours were pointed out as a suitable daytime (50 + #2, DINK#3).
- Contents: Promotional offers (DINK#4, YS#4), information on happy hours (DINK#3, YS#4) as well as on events and activities in the destination (DINK#3), and updates on skiing conditions (DINK#3).

Major reasons mentioned for being **not** willing to receive push-based messages were preference for a pull approach and fear of receiving too many messages:

- Five respondents prefer a pull versus a push approach (50 + #1, 50 + #4, 50 + #5, 50 + #8, FAM#2). Specifically, they stated a well structured app (50 + #5) or an app with up-to-date information including ads on current events (50 + #4) would suffice, or preferring to simply go online when looking for up-to-date

information (50 + #1). On a more general level, preference for well presented and easy-to-find information (50 + #8) and a nonintrusive and discreet manner of how things are being offered (FAM#2) were highlighted.
- Two respondents are afraid of receiving too many messages (50 + #1, 50 + #5).

These results seem to be contingent on age. While the majority of 50+ people interviewed are not willing to receive push messages, most interviewees younger than 50 are open towards receiving promotional offers. Moreover, singles and DINKs have clear ideas about the content of push messages.

4.2 Disclosing Different Types of Private Information

Because the personalization of information and recommendations requires information about the tourist's profile and context (Habegger et al., 2014), respondents were asked whether they would be willing to provide different types of personal information to the hotel where they stayed to improve their experience.

Demographic Information The vast majority of the respondents (21 out of 26) would be willing to provide demographic information. Some of these respondents (mainly 50+) pointed out the following limitations:

- Two respondents highlighted they would not provide information on their income (50 + #5, 50 + #10) and one would only provide anonymized information (50 + #7).
- Respondent FAM#2 pointed out that the receiver of the information would need to be known and trusted.
- Respondent 50 + #6 complained about being "bombarded" with seemingly irrelevant emails from websites like booking.com or rental.com and would be much willing to provide information such as demographics if this enables tourism suppliers to target the respondent more precisely.

From those **not** willing to provide demographic information (50 + #2, 50 + #9, FAM#3, FAM#6, YS#4), respondent 50 + #9 would not be willing to provide age and for respondent 50 + #2 it was not clear what in particular would be improved.

Personal Preferences 15 out of 26 respondents would provide information on their personal preferences (e.g. their favourite dish). Three of the remaining respondents were somewhat ambiguous:

- Respondent 50 + #10, a vegetarian, stated: "Not really, again, if it would be a topic I am specifically interested in. Then maybe. Generally speaking no. There needs to be a reason. I need to know why you want to know. But if I see a reward or benefit, then yes."
- Respondent DINK#3 stated to be impressed by personalized service as a result of previously disclosed personal preferences, but—at the same time—would feel uncomfortable or even controlled if such information is inadequately used.

- Similarly, respondent YS#4 stated to be impressed by personalized service as the result of previously provided personal preferences, "but [actually] I wouldn't want to tell them. I want them to find out [my personal preferences]".

Taken together, these statements vividly hint at two issues: first, the specific added value or benefit of disclosing (any kind of) private information must be present and clear; and second; even if such benefit is present and clear, people may still be reluctant to disclose the private information required to make the personalization work. The reasons for this paradox can obviously be of different nature.

Personal Interests 10 (six representatives of FAMilies, three 50+, and one DINK) out of 17 respondents stated to be willing to disclose their personal interests. One of the remaining seven respondents was ambiguous stating he would not want to receive standard advertisements like one should cycle, but at the same time would only be willing to disclose personal interests if the effort required to do so is next to zero (e.g. just telling the hotelier during breakfast) (DINK#3). One of the respondents not willing to disclose personal interests raised privacy concerns (FAM#3).

Location 7 out of 20 respondents (50 + #3, 50 + #6, 50 + #8, 50 + #10, DINK#3, FAM#6, FAM#8) stated to be willing to disclose their current location in the destination in order to improve their experience on site. Respondent FAM#8 noted that most of the time, one's location is known anyway and simply accepts this. Three of out of the seven respondents pointed out the following limitations and conditions:

- Time: Respondent 50 + #6 would only share the current location until 8 pm.
- Adequate use: Respondent 50 + #8 said that sharing the current location is fine as long as this information is used the right way. Misuse such as receiving "messages all the time" would be annoying and prevent 50 + #8 from sharing current location.
- Preference for pull approach: Respondent FAM#6 rather referred to a pull approach, i.e. sharing of location is acceptable if an app shows surrounding attractions or POIs whereas general location sharing would not be permitted.

From the remaining 13 respondents, certain young-single (YS#1, YS#3) and DINK respondents (DINK#1, DINK#2) would provide their location history (e.g. where they have skied already) to improve their experience on site. A further respondent would provide the current location in case of an emergency situation (YS50 + #3).

Overall, around half of the respondents would share their location to improve their experience on site—seven respondents their current location and four respondents only their location history. Interestingly, young-single respondents seem not be willing to share their current location.

Social Contacts Compared to the previously covered types of information, information about one's social contacts (e.g. Facebook friends or WhatsApp contacts) is clearly most critically viewed. Only 3 out of 21 respondents (50 + #8, DINK#3,

FAM#7) would be willing to share such information with the hotel, all of these in the context of word of mouth (WOM) or referrals.

General Observations Generally and independent of specific types of information, the results hint at four recurring issues. First, a lack of perceived benefit or added value can prevent information disclosure (e.g. 50 + #2, 50 + #10). Second, among those willing to disclose certain types of information, the effort needed to do so can be critical. Four respondents stated they would not be willing to fill in a questionnaire (50 + #8, DINK#3, FAM#3, FAM#4) or that disclosing information should involve no effort (DINK#3). In addition, respondent YS + #4 stated certain information can be disclosed or known, but would be reluctant to actually provide it ("They should find out themselves.", paraphrased from interview). Third, trust in the entity receiving the information can facilitate the willingness to disclose information. Respondent DINK#3 noted that frequent stays and trust in the hotel would lead to disclose more information, plus that trust in the hotelier would determine the provision of information on social contacts. Respondent FAM#1 noted that especially for hotels, it would be important to well know returning visitors and that this would develop with the relationship with the hotel. Fourth, both those willing to disclose certain types of private information and those not willing are sensitive towards the quantity of messages. While for the former, the limited number of messages is important, for the latter, fear of receiving too many may prevent them from information disclosure.

4.3 Permitting Sharing of Private Information Across Multiple Stakeholders

Because private information about the tourist may need to be shared across different stakeholders to most effectively personalize information and recommendations for the tourist, respondents were asked whether they would permit the sharing of private information between the hotel and the local DMO.

Half of the 26 respondents would be willing to permit the sharing of information disclosed to the hotel with local DMO. Two of these respondents declared they would only permit the sharing of anonymized information (FAM#1, DINK#3). While one respondent would allow sharing only under the condition that it is (a) optional and (b) the information stays within the boundaries of the destination (50 + #6), another respondent pointed out that the shared information should be transferrable to other destinations so that it would not need to be provided again when visiting other destinations (FAM#4). Further conditions mentioned for permitting the sharing were receiving only a limited amount of messages (DINK#3) and that personalization should actually work (FAM#4). In addition, respondent FAM#2 highlighted the wish for information from official authorities and would therefore also permit the sharing of private information with such official authorities such as a DMO.

Reasons for not permitting the sharing of information between hotel and DMO were perceived lack of control (50 + #6, FAM#8), being afraid of misuse (50 + #8) or receiving too many messages (50 + #4), and uncertainty about the benefit or added value (50 + #2). A further respondent highlighted that one would need to know the specific reason for permitting the sharing, that trust in the hotelier plays a role, and that it would be contingent on whether one revisits the destination (50 + #7).

5 Conclusions

This paper has set out to explore alpine tourists' willingness to engage in virtual co-creation of experiences on site and expands the body of knowledge by adding to the very few empirical contributions in this area. When experiences are co-created, the interaction between all stakeholders is regarded as the 'locus of value creation' (Binkhorst & Den Dekker, 2009; Prahalad & Ramaswamy, 2004). In virtual co-creation environments (Neuhofer et al., 2012), the interaction concerns the exchange of information, which marks a cornerstone of the virtual co-creation of experiences. Specifically, this paper has addressed tourists' willingness to (a) receive personalized messages from tourism suppliers while being on site, (b) disclose private and thus sensitive information to improve their experience on site, and (c) permit the sharing of such information across multiple stakeholders in the destination. Regarding the reception of push-based personalized messages, we found that around half of respondents—mainly the young ones—would be willing or open to receive them. However, the limited quantity and a high quality of messages are crucial for all respondents willing to receive these messages. In addition, we identified the preference for a pull versus a push approach as a seemingly major reason for not wanting to receive push messages. Both the fear of receiving too many messages and the preference for a pull approach may be explained by the conception of privacy as non-intrusion or as accessibility privacy (Tavani, 2007). This may be particularly relevant for tourism experiences on site that are pursued for escapism as both experiential element and motive (Mehmetoglu & Engen, 2011).

We found that the willingness to disclose private information strongly varies by type of information. While demographics would almost unanimously be disclosed, around half of respondents would disclose their personal preferences and interests. Regarding location, it seems to make a difference whether the current location is constantly disclosed or one's whereabouts are retrospectively made available. Only few respondents would disclose social information. Generally, the interviews made clear four aspects independent of the type of disclosed information. These are relevant for academics and practitioners alike. First, a lack of perceived benefit or added value can prevent information disclosure. Put differently, the added value of disclosing any kind of private information must exist and needs to be well communicated to the tourist. Second, even if the added value is clear to the tourists, they may still be reluctant to disclose the private information required to make the

personalization work. The perceived ease of use and/or effort of disclosing information may partially explain this paradox. Thus, DMOs or tourism suppliers need to ensure an easy-to-use disclosure process that requires only minimum effort for the tourist. The motivation to disclose information may further be enhanced by employing gamification elements. In addition, this reminds DMOs or tourism suppliers aiming to employ personalization to strongly focus on inferring tourists' needs from mining data not explicitly given (e.g. from turnstiles and RFID-based access solutions). Third, trust in the entity receiving the information can facilitate the willingness to disclose information. Because trust can develop over time and especially when a destination and/or hotel is—repeatedly—revisited, this seems especially challenging for first-time visitors or at least in the early phase of tourists' stay in the destination. Fourth, the worry or fear of receiving too many messages needs to be taken seriously. Thus, tourists must not be sent too many messages and those sent must be relevant. In addition, the option to opt out of receiving messages must be present anytime. DMOs and tourism suppliers would also be well advised to employ mechanisms that allow them to learn why tourists opt out. Contrary to the findings of Buhalis and Amaranggana (2015), we found that half of the respondents would be willing to permit the sharing of private information across different stakeholders in a destination. This may be due to the smaller size of alpine destinations as compared to city destinations and to the "in situ" data collection. Both aspects increase the probability that the tourist actually knows the involved stakeholders.

Finally, there seem to be different types of tourists when it comes to their overall engagement in the virtual co-creation of experiences. Age does not seem to explain differences across all analyzed elements. Further qualitative research is needed to deepen the understanding of the concept of virtual co-creation of experiences. This could set the ground for quantitative research, e.g. to segment tourists according to their willingness to engage in virtual co-creation. Such segmentation would help practitioners to use the promising technology more effectively. The willingness of guests to co-create is only one prerequisite to be successful in co-creation within a destination. Options for the users to choose levels of privacy or disclosing information (Buhalis & Foerste, 2015), interoperability between ICT infrastructures of the service providers, and a good strategic fit between the co-operating service providers are imperative for success (Cabiddu, Lui, & Piccoli, 2013).

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