IN SEARCH OF CO-CREATION EXPERTS IN TOURISM: A RESEARCH AGENDA

Laura Zizka\textsuperscript{a}, Marc Stierand\textsuperscript{b}, Dimitrios Buhalis\textsuperscript{c}, Hilary Murphy\textsuperscript{d} and Viktor Dörfler\textsuperscript{e}

ABSTRACT

Experience innovation through co-creation is crucial for the competitiveness of tourism businesses. Exploiting technology for enabling and managing experience within a space of co-creation can significantly increase value for consumers. Although this is becoming well documented in academic literature, a look at the tourism industry, however, often paints a quite different picture, with managers listing a plethora of reasons why academic views lack external validity. This knowledge exchange issue between academia and the industry may stem from academics’ often tenacious egalitarian view on expertise and the industry’s often obsessive cost controlling culture and occasionally outdated understanding of jobs as functions. In this paper, we argue that engaging and developing \textit{experience-space experts} and \textit{technology-for-service experts} can enable organizations to take advantage of great opportunities to co-create experience and value for all stakeholders. Building work and educational environments for these experts to develop is crucial for the competitiveness of tourism businesses.

\textbf{Keywords:} co-creation; experience innovation; value creation; experience space; technology for service

\textsuperscript{a}École hôtelière de Lausanne, HES-SO // University of Applied Sciences Western Switzerland, Route de Cojonnex 18, 1000 Lausanne 25, Switzerland, Email: laura.zizka@ehl.ch, Phone: +41 (0)21 785 1317
\textsuperscript{b}École hôtelière de Lausanne, HES-SO // University of Applied Sciences Western Switzerland, Route de Cojonnex 18, 1000 Lausanne 25, Switzerland, Email: marc.stierand@ehl.ch, Phone: +41 (0)21 785 1503,
\textsuperscript{c}University of Bournemouth, School of Service Management, Bournemouth BH12 5BB, United Kingdom, Email: dbuhalis@bournemouth.ac.uk, Phone: +44 (0)1202 961517
\textsuperscript{d}École hôtelière de Lausanne, HES-SO // University of Applied Sciences Western Switzerland, Route de Cojonnex 18, 1000 Lausanne 25, Switzerland, Email: hilary.murphy@ehl.ch, Phone: +41 (0)21 785 1496
\textsuperscript{e}University of Strathclyde, Department of Management Science, 130 Rottenrow, Glasgow G4 0GE, Scotland, United Kingdom, Email: viktor.dorfler@strath.ac.uk, Phone: +44 (0)41 548 4540
Introduction

The creation of technology-enabled experience-space communities of sharing and communication provides an opportunity for the tourism industry to create value for consumers through meaningful experiences (see Sørensen and Jensen, 2015). Such meaningful experiences are the result of co-creation, defined as the ‘joint creation of value by the company and customer’ and based on a shared definition and resolution of problems (see Prahalad and Ramaswamy, 2004, p. 8). In this paper, we argue for the development of two new profiles, namely experience-space experts who are able to foster such experience-space communities and technology-for-service experts who can enable such communities through technology that handles the necessary supporting structures. Since creating meaningful experiences requires contextualised understanding (see Özbilgin, 2011) and since the aforementioned expert profiles are currently non-existent within the tourism industry that continues to struggle attracting experts from other sectors (WTTC, 2015), developing these profiles requires significant upfront investment. In our view, however, this is essential for the success and even survival of tourism businesses.

Today, virtual experiences and augmented reality create a kind of ‘hyper-reality’ that allows a ‘test drive’ and, therefore, can reduce risk, improve the service experience, and set expectations (see Edvardsson, Enquist and Johnston, 2005). Thus, it is clear that there is ample potential for the co-creation of new experience spaces, but until the tourism industry is ready to invest, it will remain under-developed. Hotels, for example, only invest 1.3% of gross operating revenues (GOR) in technology, 70% of which is in operational expenses, with little left for technology investment in capital expenditure.
(Murphy and Rappaz, 2013). Therefore, tourism businesses should, in a sense, mirror technology companies like Microsoft or Google, but they must understand how to use the technology to add value, and then a unique application in context may become a core competence (Buhalis and Foerste, 2015). Newly developed expertise in experience innovation and fostering of communities can help to create and maintain core products that can be used to create a number of economically viable end-user experience innovations.

Our paper contributes a research agenda for developing co-creation experts in tourism. We first explore how technology has been used and is traditionally perceived by the tourism industry. We continue with emphasizing the need to build experience space communities and the importance of operationalizing the notion of DART. Then, before concluding, we conceptualise the profiles of the experience-space expert and the technology-for-service expert and outline our research agenda for the tourism industry.

**Tourism and Technology**

Whilst the tourism industry may laud itself for introducing new technology, it can be argued that their self-praise is undoubtedly overstated, because they are not creators but merely adopters of the new technology. One example is the introduction of e-Concierge, a platform which combines previous services and offers one tool for consumers to use. E-Concierge remains, though, a tool which facilitates information (re)search, but does not co-create with the consumers. Simply introducing more technology does not necessarily improve consumer engagement. Moreover, the type of technology that is adopted by tourism businesses typically serves time- and/or cost-saving purposes rather than technology that can help build support structures for
engaging experience spaces. In short, money is spent on technology to save more money, not to enhance the consumer experience.

We admit that this is a rather disappointing, but, unfortunately, realistic account of the technological maturity of an industry that is perceived as the foundation of the experience economy. As Neuhofer, Buhalis, and Ladkin (2015) posit, there is desperate need for tourism firms to take a proactive role in utilizing technology to co-create personalized experiences. Recently, we have seen changes as technology companies, such as Expedia, a spin-off of Microsoft, have propelled most of the significant technology-based innovation shifts in the tourism sector as they have been willing to invest in new technology and learn how to use it effectively for value creation. There has also been an increase in both augmented reality and location-based devices, such as Foursquare and Google Glass, which access data sources and customize offers simultaneously as consumers frequent hotels, restaurants, and destinations. Additionally, social media platforms such as TripAdvisor, Yelp, Facebook, Twitter, Snapchat, and Pinterest emerged to help people share experiences or even act as virtual ‘doggy-bags’ of memories which can be ‘reheated’ (relived or re-experienced) at home and perhaps shared again with those less tech-savvy relatives and friends.

Neuhofer et al. (2015) suggest that the integration of smart technologies for the creation of meaningful experience is critical for businesses to remain competitive in the marketplace. This is of particular interest to the tourism industry, as a number of market forces, including commoditization, fragmentation, competition, and high guest expectations drive the need for ever more personalization and competitiveness in the
future. Thus, smart technologies may prove critical in facilitating and co-creating personalized and meaningful experiences. For such experiences and value co-creation to occur, smart technologies including data collection, ubiquitous connectedness, and real time synchronization need to support the actual inter-personal co-creation process.

**Building Experience Space Communities**

In order to support the inter-personal co-creation process and co-create meaningful experiences, we need experience space communities (see Binkhorst and Den Dekker, 2009) that can provide consumers with the possibility to co-create the experience to fit their own ‘lifeworld’ (*Lebenswelt* in German), which is the phenomenological horizon that connects the consumer’s consciousness with the sensory signals of the experience (see Husserl, 1970). However, previous research on team cognition has shown that value created based on experiences is not simply ‘shared’ between consumer and provider, since the understanding and feeling of the experience reside in the individual (see Rentsch and Klimoski, 2001), making the experience of meaningfulness an individual phenomenon. Hence, co-creation is about propelling individual meaningfulness through a transformation in value generation from jointly designed, created, and staged tourism experiences (Pine and Gilmore, 1999).

Technology provides a range of tools to make this transformation happen, but the existing technology-competent partners often lack service competence and the ability to engage with consumers ‘at the moment of truth’, respond empathetically, or truly co-create a meaningful experience. At the same time, consumers have transformed dramatically from passive recipients of prepared and controlled information and products into active and connected prosumers (Neuhofer et al., 2015). They have access
to tools and support structures that help them in their decision-making towards creating value they are willing to pay for.

In utilizing these tools and support structures in the intersection of the co-creators’ lifeworlds, service providers can actively engage in the organic development of experience space communities. However, current research into communities of practice, for example, shows, that trying to control the organic development of communities is most likely harmful, whilst fostering it can make it flourish (Pyrko, Dörfler and Eden, forthcoming). In the case of co-creating technology-enabled experience space communities in the tourism industry, we therefore need to emphasize that such fostering requires experts who are experience, space, service, and technology literate, and can facilitate seamless co-creation of experiences and values.

Today, and even more so in future, technology-enabled consumers play an increasingly active role in the creation of their experiences, changing dramatically the traditional roles between companies and consumers (Neuhofer, Buhalis, and Ladkin, 2014). Individuals, rather than companies, co-create experiences as they recognize consumer needs and co-create experiences and value together (Binkhorst and Den Dekker, 2009; Prebensen and Foss, 2011; Ramaswamy, 2011). Currently, companies and consumers can more easily interconnect their needs, requirements, resources, understandings and feelings, co-create experiences (see Lord and Maher, 1991), and help each other to organize and further develop value. Thus, the future main role of tourism destinations, for example, is to facilitate the space which enables tourists to co-create their own experiences and value (Neuhofer, Buhalis, and Ladkin, 2012).
Hence, Tung and Ritchie (2011, p. 1369) propose that practitioners should ‘facilitate the development of an environment (i.e., the destination) that enhances the likelihood that tourists can create their own memorable tourism experiences’. This experience space should constitute a forum which allows consumers to interact and co-create their experiences together with the destination, tourism suppliers, and other consumers to enhance each other’s experiences and create a community for experience building in the specific context of space and time of a destination (Neuhofer et al., 2012).

Yet, the tourism industry has traditionally depended on third parties to support the engagement and co-creation with the consumer. Even the sharing economy, with examples such as Airbnb and Uber, has learned how to do that, but has not yet learned to engage with a wider stakeholder audience. It is no coincidence, then, that third parties and a few specialized tourism businesses, such as Expedia or TripAdvisor, are the real innovators in the experience domain.

**The Importance of Operationalising DART**

The reason why Expedia and TripAdvisor have been successful in innovating the tourism experience is that they have understood and operationalized the pervasive interplay of the DART building blocks of co-creation which are dialogue, access, risk-benefits, and transparency (Prahalad and Ramaswamy, 2004). According to Prahalad and Ramaswamy (2004, p. 9), ‘dialogue, access, and transparency can lead to a clear assessment by the consumer of the risk-benefits of a course of action and decision.’ This is pertinent in co-creation and consumer engagement.
Dialogue is by nature bidirectional, and, for it to be meaningful, it is essential to assess how valuable the dialogue was in terms of the quality of exchanges through tone or words or its content. Offering dialogue options through the access to technology is relatively simple, but knowing how to foster and maintain these dialogues and establish meaningful engagement is a major challenge for tourism businesses. Effective dialogue provides the possibility for others to assess the risk-benefits of the firm’s offerings and organizational barriers. Many companies have traditionally avoided dialogue transparency if it can be potentially harmful to their reputation, but this option is rapidly disappearing with the dominant presence of social media as Fotis, Buhalis, and Rossides (2011) suggest by demonstrating that dialogue and consumer engagement are constant and influence all aspects of the decision making and value co-creation of travellers.

One way of coping with this new situation is through proactive transparency and transfer of responsibility from firm to consumer. Technology supports the engagement that offers consumers useful and risk reducing information such as the option of pre-selecting a preferred menu sequence in a restaurant, for example. In this way, the responsibility and the co-creation processes are shared with consumers, who can then take the final decision according to their own needs and requirements and thus co-create a more personalized and therefore more meaningful experience.

All this requires the development of two new expert profiles: Experience-space experts with a skill set that combines service, tourism, and technical skills, and technology-for-service experts with a skill set that combines technical, social, and tourism skills. Only these new experts would be able to respond meaningfully to consumers and, together
with consumers, could potentially co-create new exciting experience space communities in which experience innovation could thrive.

*Experience-Space Experts and Technology-For-Service Experts*

Whilst the notion of experience co-creation may sound straightforward and provides clear justification for the two suggested new profiles, the tourism industry has yet to fully embrace what developing experts in the realm of *experience-space* and *technology-for-service* really means. A consistent factor in the shift from a service economy to an experience economy continues to be innovation, but one that is focused on co-creating experiences and engaging in experience space communities. This enables tourism businesses to become involved in their consumers’ lives as co-creators of experiences together with others from their network of suppliers, consumers, partners, and possibly even competitors (Grönroos and Voima, 2013).

In turn, this implies that tourism businesses need to fulfil two distinct roles: Firstly, they have to be co-creators of experiences by understanding the needs of consumers and dynamically enabling them to benefit from the value they generate together. Secondly, they also have to build and facilitate experience space communities for experience innovation, for example through the implementation of technological solutions, as well as foster the communities emerging in these environments. The first type of role is generally recognized and adopted by businesses, but the second role is virtually non-existent in the tourism industry and does not feature prominently in academic studies thus far (Neuhofer et al., 2014). Hence, we suggest that there are three challenges the tourism industry must face: 1) understand and embrace the idea of co-creation; 2)
develop an environment and a sense of community conducive towards co-creation; and
3) use technology to enable co-creation.

Experience innovation by co-creation is a strategic imperative and constitutes the
reengineering of a new value chain which must create value for all stakeholders
involved (Ramaswamy and Gouillart, 2010). Understanding both internal and external
contexts of the consumer and using technologies to coordinate this value creation is
critical (Buhalis and Foerste, 2015). The innovation process, however, is particularly
challenging in the context of experiences, because consumers are co-creators as well as
decision makers of experiences, but may not necessarily be ‘experts’, who are able to
judge the value of a new idea, let alone create one from the viewpoint of the profession,
or fully understand its importance in specific contexts. Yet, they decide what they buy
and, thus, are the final economic authority. This means that the experts we propose to
develop and evolve must be able to manage the open-endedness of this process and
make the experience innovation socially appropriate for non-expert consumers (see
Stierand, 2015).

Furthermore, in other and more particular cases, consumers are actually the experts in
creating long-term value-in-use and seek support from the service provider in form of
value-in-exchange (see Grönroos, 2008 on more of this discussion between value-in-use
and value-in-exchange). This is the case with consumers who have particular needs and
requirements, such as the accessibility requirement market. Here, consumers have
naturally more expertise than the service provider of the needs and value required
(Buhalis and Michopoulou, 2013). At present, there is a lack of the aforementioned
experts capable of engaging and co-creating with consumers and the extended network through technology. Thus, the creation of these new job profiles is important, if not indispensable, to the future success of the tourism industry.

The reason why ‘true’ experts are needed (see Dreyfus, 2004) is that the co-creation process of experience innovation requires the commercial co-creator to handle high-complexity situations at exceptional speed to be able to deliver meaningful solutions quickly or to subtly tweak the co-creation process into a desired direction. This requires both intuitive judgment and intuitive insight that is trustworthy (Dörfler and Ackermann, 2012; Stierand and Dörfler, 2015) and hence the result of high-level of expertise (Kahneman and Klein, 2009). Research has shown that experts dwell in and are one with the practice (Stierand, 2015), whereas lower skilled workers are much more detached from it, often following a linear process of rules and maxims (Dreyfus, 2004; Stierand, 2015). Truly meaningful experiences result from ‘indwelling’, as Polányi (1966) calls it, a tacit ‘knowing-in-action’ in which experts can engage others to co-create experience innovations (Stierand, 2015).

To identify these experts, we theorize using Holland’s (1959) vocational choice theory. Holland’s theory has been revisited and reworked over the past six decades and continues to provide the dominant framework for matching personalities with work environments. According to Holland, there are six personality types: realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C). Personality types are expressed as three letter codes, from strongest to weakest, describing the extent to which the individual possesses these traits (Ohler and Levinson,
Holland’s model has also been applied to tourism behaviour (Frew and Shaw, 2000), service occupations (Ohler and Levinson, 2012) and employee person-job fit (Song and Chon, 2012), yet there is scant research applying it to tourism professionals and their fit to specific positions. However, we see potential to apply these types of personalities to the new roles of experience-space experts and technology-for-service experts.

Based on Holland’s original theory, the types have been identified for technology, service, experience, and space experts to create new combination types for the new positions we are proposing. Technology experts have typically been identified as RIC; service experts as SCE, experience experts as RAE, and space experts as RCA. Consequently, we posit in Figure 1 that technology-for-service experts need to be dominantly RSC or realistic, social, and conventional; they have foremost the technical skills and knowledge to create and maintain the technology, strong social skills to communicate with consumers/users, and proficient conventional or organizational skills necessary to deal with details. Their dominant type would still be realistic, but one could argue that social is equally as important in this new job profile. We also propose that experience-space experts should be dominantly AER or artistic to imagine creative spaces, enterprising to try new ideas and concepts, and realistic to ensure that the overall experience is feasible for the consumers, employees, and company and actually becomes an experience innovation.
In this new territory of identifying personality types to fit with currently non-existent job profiles in the tourism industry, these are suppositions at best. The following table, however, attempts to outline an agenda of fundamental research questions that may provide useful starting points for researchers planning to conduct research in this area.
### Table 1: Research Agenda

<table>
<thead>
<tr>
<th>Research Focus</th>
<th>Experience-Space Experts (AER)</th>
<th>Technology-for-Service Experts (RSC)</th>
<th>Tourism Businesses</th>
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<tr>
<td>How can we develop experience space experts who also understand the technological possibilities and limitations in context?</td>
<td>How can we develop technology-for-service experts who also understand the requirements for experience innovation and fostering experience space communities?</td>
<td>How can tourism businesses support experience space experts and technology-for-service experts in the creation and maintenance of core products that can be used to create economically viable end-user experience innovations?</td>
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<tr>
<td>What theoretical knowledge, task-related skills, and behavioral skills are required to developed experience-space experts?</td>
<td>What theoretical knowledge, task-related skills, and behavioral skills are required to developed technology-for-service experts?</td>
<td>What organizational support should ideally be provided in order to establish and maintain an ‘apprenticeship system’ in which the tacit knowing of how to manage the open-endedness and social appropriateness of experience innovation is developed?</td>
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<td>How can experience space experts tap into the consumer’s lifeworld to better understand the process between the consumer’s consciousness and the sensory signals of the experience?</td>
<td>How can technology-for-service experts support and positively influence the process between the consumer’s consciousness and the sensory signals of the experience through technology?</td>
<td>How can tourism businesses be convinced to make the development of these experts a strategic imperative and provide upfront investment?</td>
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<td>Can the AER-type be confirmed empirically as the best fit for the experience space expert profile or does the RIASEC type need to be revised?</td>
<td>Can the RSC-type be confirmed empirically as the best fit for the technology-for-service expert profile or does the RIASEC type need to be revised?</td>
<td>How can the performance of experience space experts and technology-for-service experts be evaluated individually and as a team?</td>
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Conclusion

If the tourism industry were willing to invest in these new expert profiles or invest in the development of those existing employees who could potentially fit these profiles, the benefits would abound: real-time data from all consumer touchpoints throughout the tourism experience could be tracked and mined to create ‘hyper-communities’ based on sentiments, preferences, and/or demographics (and potentially further ‘more web 2.0-3.0 characteristics, such as online behavioural patterns) to develop technology-enabled experience space communities in which meaningful experiences are co-created. Moreover, academia and the industry would have to improve the knowledge sharing both in the way they communicate with each other and how timely this communication is.

Building on the recent discussion about attracting more Science, Technology, Engineering, and Maths (STEM) graduates to the service sector due to their important contributions to continuous innovation (Spohrer and Maglio, 2010; UK-Royal-Society, 2009), it may be time now to design tourism curricula which focus on the development of new multi-, inter-, and transdisciplinary skills. Technology students, for example, could also learn social and communication skills necessary for tourism through collaborative teaching and innovative projects which encourage practical application of social and communication skills in a tourism technology context. Tourism students, in turn, could enhance their social and communication skills through the use of technological tools beyond Opera, Fidelio, and Excel to social media, virtual reality, and other forms of cutting-edge technology. It is through the application of both skill sets that students truly learn and become proficient experts for the tourism industry.
It should be academia’s and the industry’s number one priority to not only train, but also educate and develop the next generation of tourism employees who understand not only what people (consumers, colleagues, guests) want, but what can be done realistically with the technology which is currently available and, more importantly, will exist in the near future. It is only through the synthesis of technology and tourism skills that tools and platforms can be developed that have the strategic qualities that can increase competitiveness for tourism businesses. Technology alone cannot achieve anything as it requires people to empower themselves through the experience and effective use of it.

Based on the current use of technology in the tourism industry which is predominantly for cost-saving purposes, there is an urgent need for a radical change in not only the use, but also in the investment in technology, which means changing the mind-set about how technology and its role are viewed.

More of the same efficiency-increasing technology is impractical, and investing in the technology of yesterday is worthless. If the tourism industry wants to truly engage in co-creating and innovating meaningful experiences with consumers, they need to develop a strategic interest and expertise in tomorrow’s technology and take the initiative together with educators in the tourism field to develop experience-space experts, who are willing and able to foster experience-space communities, and technology-for-service experts, who can create and handle the necessary supporting structures and tools. The tourism industry’s tradition of waiting for their invitation to the change party is over; it’s time for the tourism industry to host the innovation party
and invite the key players to take the lead on innovative co-creation and authentic consumer engagement.

References


Edvardsson, B., Enquist, B., & Johnston, R. (2005), 'Co-creating customer value through hyperreality in the pre-purchase service experience', Journal of Service Research, 8:2, pp. 149-161.


