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### **One-way Communication or Co-Creating Tourism Experience Already? Polish Perspective on the Use of ICT by DMOs**

Nowadays, ICT is used by Destination Management Organisations, not only to provide tourist information but also to co-create tourism experiences. The main purpose of the paper is to discuss the approach of Polish Destination Management Organisations co-creation of tourism experience with the use of ICT on the example of Małopolska Voivodeship, Poland. The approach of Destination Management Organisations to digital tourism marketing should be based on the awareness of both the potential of ICT-based tools and the context they operate in. ICT-related solutions implemented by Destination Management Organisations have to be matched to the ICT infrastructure that exists at the destination or region and the needs of tourists who visit the area. The co-creation of tourism experience is beneficial both for Destination Management Organisations and tourists, but this approach should only be applied when both sides are ready to cooperate.

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Key words: ICT, DMO, co-creation of tourism experience, Małopolska Voivodeship, Poland

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## Introduction

In recent years, tourists' interest in the use of information and communication technology (ICT) has increased, and therefore, Destination Management Organisations (DMOs) have to widen the channels of tourism marketing to provide consumers with the solutions they expect. This consequently leads to numerous and various digital tools for destination marketing being created. What is important is that these tools allow consumers to access tourist information, useful for their travel-related purposes, but what is more, to co-create the tourism experience.

Buhalis (2000: 97) described destinations as 'amalgams of tourism products, offering an integrated experience to consumers.' At the same time, the DMOs are the entities responsible for the realisation of objectives related to tourism development on the local, regional and national level (Buhalis, 2000; Crouch, 2007; Pike & Page, 2014). DMOs combine the destination's available resources into unique packages of products and services (Zehrer et al., 2005). Currently, the tasks of DMOs include tourism marketing, branding, and positioning of the destination and its image (Pike & Page, 2014; Lund et al., 2018; Luiz Real et al., 2020).

The basis of the operation for DMOs is their political, legislative, and financial power (Buhalis, 2000). However, in the changing environment, their role needs to be re-engineered to enhance tourism marketing with the use of ICT and expand the distribution channels and the value chain (Buhalis & Deimezi, 2004). The implementation of ICT is an example of innovation in tourism (Hjalager, 2010), also for destinations, and is related to e-tourism

(Buhalis & Deimezi, 2004) and smart tourism (Del Chiappa & Baggio, 2015; Gretzel et al., 2015; Ivars-Baidal et al., 2017; Kontogianni & Alepis, 2020). What is important, the implementation and development of innovations in a particular destination should be supported by tourism policy, so the role of DMOs is of crucial importance to initiate and coordinate these processes and tasks by the destination's stakeholders and tourism value-chain players (Pikkemaat et al., 2018).

Apart from the access to information during the decision-making process, the use of ICT creates the potential for tourism marketing based on personalisation, customisation, and market segmentation (Poon, 1994; Buhalis, 2000; Gretzel et al., 2000; Minghetti & Buhalis 2010; Buhalis & Inversini, 2014; Femenia-Serra & Neuhofer, 2018), and consequently for co-creating the tourism experience (Binkhorst, 2006; Binkhorst & Den Drekker, 2009; Payne et al., 2008; Neuhofer et al., 2012; Buhalis & Inversini, 2014; Neuhofer et al., 2014; Campos et al., 2015; Zhang et al., 2017). Nowadays, ICT can mediate the tourism experience because digital tools allow for improved access to tourist information, products, and services (Tussyadiah & Fesenmaier, 2009). Based on the use of ICT, as Femenia-Serra and Neuhofer (2018) pointed out, tourists and DMOs might co-create experiences and value, and the co-creation space includes both virtual and physical dimensions. The co-creation of tourism experience is also a factor of competitiveness, both for destinations and for businesses in the tourism market (Binkhorst & Den Drekker, 2009; Minghetti & Buhalis, 2010; Buhalis & Amaranggana, 2014; Campos et al., 2015; Buonincontri & Micera, 2016).

The main purpose of the paper was to discuss the approach of Polish DMOs to co-creation of tourism experience with the use of ICT on the example of Małopolska Voivodeship, Poland.

## **Literature Review**

### *Role of ICT in co-creating the tourism experience*

As Poon (1994) noticed, at the beginning of the 1990s, a new kind of tourism gained considerably in importance, both for tourists and businesses or other entities in the tourism market. It emerged on the grounds of developing new information technologies and an expectation of more natural and authentic experiences. Also, as Vargo and Lusch (2004) noticed, the new marketing approaches had emerged since the beginning of the 1980s (see: Payne et al., 2008), based on relationships and networking, market orientation, value chain, and resource management. As a result, the focus is on both interactive marketing communication and the ongoing relationships to replace one-way and mass marketing communication (Vargo & Lusch, 2004). This approach also concerns tourism, for which building customer relationships has become more important than one-time sales. It is evaluated as influencing the decision-making process (Gretzel et al., 2000).

The consumer behaviour model includes an information-seeking stage to support the decision-making process and reduce risk (Kotler et al., 2006). Currently, more and more consumers are independent, self-reliant, and demanding when they search for information before making a purchase decision. The use of ICT can empower the customers in their decisions related to travel (Niininen et al., 2007), but it can also support the promotion and distribution channels of the entities operating in the tourism industry (Minghetti & Buhalis, 2010). The increasing ability of the society to use ICT, especially the Internet, is conducive to obtaining information that facilitates travel-related purchases, taking into account the value for money and value for time (Buhalis & O'Connor, 2005).

Co-creating experience requires an innovative approach to marketing based on relations between consumers and organisations (Prahalad & Ramaswamy, 2003), and it applies also to tourism (Payne et al., 2008; Binkhorst & Den Drekker, 2009; Neuhofer et al., 2012; 2014; Campos et al., 2015; Zhang et al., 2017; Sugathan & Ranjar, 2019). The supply

and demand sides are involved in the experience environment, defined by Prahalad and Ramaswamy (2003). According to the approach focused on experience innovation, the involvement, and – as a result – the interactive relationship between suppliers and customers are the basis for co-creating the experience, and then also for co-creating value (Prahalad & Ramaswamy, 2003; see: Vargo & Lusch, 2004; 2008). The reoriented approach implies that ‘marketing is a process of doing things in interaction with the customer’ (Vargo & Lusch, 2004: 7). Personalisation (Prahalad & Ramaswamy, 2003), customisation (Vargo & Lusch, 2004), and individualisation (Payne et al., 2008) are crucial for co-creating the experience, also in tourism. However, what is important, as many authors highlight, tourism experience is co-created not only during the on-site stage at the destination but also around the decision-making process and after the departure (Binkhorst & Den Drekker, 2009; Neuhofer et al., 2012; Buhalis & Inversini, 2014; Neuhofer et al., 2014; Buonincontri & Micera, 2016; Campos et al., 2015; Neuhofer, 2016).

As Buhalis and Inversini (2014: 24) noticed, modern tourists are prosumers who ‘have been transformed from passive receivers to active actors of the communication process.’ ‘Experience is the essence of tourism’ (Zhang et al., 2017: 10), ‘technology is significantly changing the tourism experience’ (Neuhofer et al., 2014: 348), and the role of stakeholders related to the tourism system is to ‘work with tourists rather than for tourists’ (Guimont et al., 2017: 63). ICT-based solutions allow suppliers to engage with customers and co-create innovative goods, services, and experiences (Payne et al., 2008). The examples are websites of destinations and businesses, social media, online booking systems, recommendation systems, mobile technology and mobile phones, virtual and augmented reality, or wearable devices (Binkhorst & Den Drekker, 2009; Tussydiah & Fesenmaier, 2009; Buonincontri & Micera, 2016; Femenia-Serra & Neuhofer, 2018).

Additionally, Buonincontri and Micera (2016) related the growing popularity of digital tools to the development of smart tourism destinations, i.e., the implementation of cloud computing services, the Internet of Things, and the end-user Internet service systems (see: Buhalis & Amaranggana, 2014) to provide access to tourist products and services. At smart destinations, the access to some components listed by Buhalis (2000) such as attractions, accessibility, amenities, available packages, activities, and ancillaries can be facilitated and supported with ICT-based solutions (Buhalis & Amaranggana, 2014). Digital solutions might influence and shape smart tourism experiences, which refers both to ‘basic’ solutions such as websites and mobile apps for destinations, social media, mobile technology, and to ‘smart’ beacons and other sensors, QR codes, smart cards, public Wi-Fi (Femenia-Serra & Neuhofer, 2018).

Binkhorst and Den Drekker (2009: 319) adapted the experience environment of Prahalad and Ramaswamy (2003) to the context of tourism and described it as ‘made up of all people and things that surround the human being.’ According to this approach, the co-creation theory is related to a tourism experience network, both in the home environment, during the travel decision-making process, and away from the home environment (Binkhorst & Den Drekker, 2009). Tourism experience network assumes that a human being, in this case, a tourist, is located in the centre and surrounded by ‘entities’ related to the tourism market that shape the conditions of the travel, such as attractions, landmarks, museums, events, heritage, and natural sites, governmental and non-governmental agencies, entrepreneurs, locals, etc. (Binkhorst, 2006). As Binkhorst (2006) emphasises, each stakeholder of the tourism experience network both offers and co-creates a part of the experience, and here, both real and virtual stakeholders can be listed. Nowadays, ICT is a part of the tourism experience network, and among these ‘entities,’ there are ICT-based solutions and their providers (Binkhorst & Den Drekker, 2009). Both demand and supply can co-create tourism

experience, so as a result, tourists and entities related to the tourism market, such as destinations and businesses, take part in this process (Binkhorst & Den Drekker, 2009; Neuhofer et al., 2012; Buhalis & Inversini, 2014; Neuhofer et al., 2014; Buonincontri & Micera, 2016; Femenia-Serra & Neuhofer, 2018).

The use of ICT extends the space of experience co-creation and then enables co-creating new types of tourism experiences, apart from conventional ones, such as technology-assisted, technology-enhanced, and technology-empowered experiences characterised by Neuhofer et al. (2014). Currently, the role of ICT-based solutions is crucial to support and facilitate co-creating tourism experience in virtual and physical realms (Binkhorst & Den Drekker, 2009; Neuhofer et al., 2012, 2014; Zhang et al., 2017; Femenia-Serra & Neuhofer, 2018). Neuhofer et al. (2012) described an extended experience co-creation space, and they noticed that ICT-based tools are used for physical and virtual co-creation of the destination experience. The first one concerns only the on-site-destination co-creation process, and the second one includes three phases: pre-travel, on-site-destination, and post-travel (Neuhofer et al., 2012).

According to Zhang et al. (2017), the offline behaviour intention and destination engagement can be directly influenced by the online platform experience and the destination emotional experience in the pre-travel phase, following the model of three components such as cognition, emotion, and behaviour (see: Mollen & Wilson, 2010; Claffey & Brady, 2014; Buhalis & Inversini, 2014). Nevertheless, what is really important, the access to the Internet has caused major changes in travel-planning because this stage is postponed by tourists, for example, until the arrival at a destination (Xiang et al., 2015).

## **Material and Research Methods**

The main purpose of the paper is to discuss the approach of Polish DMOs to co-creation of tourism experience with the use of ICT on the example of Małopolska Voivodeship, Poland (Figure 1). Does ICT mainly facilitate access to tourist information, or have digital tools co-created the tourism experience?

According to the Polish law, the Act of 8 March 1990 on Municipal Government indicates local government as responsible for tourism marketing of a destination. So, the role of a DMO is performed largely by the public sector and municipal government. To recognise the range and background and reasons for the use of ICT by DMOs, the desk and field research were conducted in two stages.

On the grounds of the desk research (content analysis), the range of ICT uses for tourism marketing was evaluated for all 182 municipalities, and then the obtained results were used for further analysis. The detailed numerical results and evaluation results were published as a quantitative analysis (Pawłowska-Legwand, 2019), and this paper presents the results of qualitative analysis (thematic analysis of interviews).

To learn more about the Polish DMOs' approach to using ICT, field research and semi-structured interviews were conducted with the employees of the selected DMOs. The 53 of DMOs were chosen based on evaluation research (desk research), and it is around a third of the entire number of DMOs (29%). The interviewees were mainly the employees of the departments responsible for tourist information and promotion (40), a press officer (1), municipality secretaries (4), employees of municipalities' organisation units, such as cultural centres, museums, and tourist information bureaus (8).

The interviews lasted for approx. 1–1.5 hours. The questionnaire contained 22 questions, including 18 open questions allowing the employees of DMOs to give detailed answers that consider their work experience and knowledge of the conditions of socio-



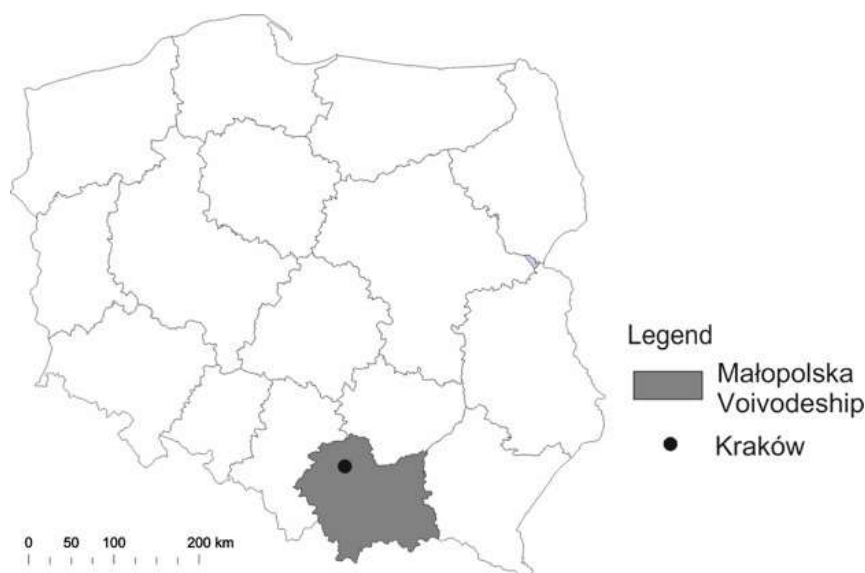
economic development present in a given municipality. Then the thematic analysis of collected material was conducted.

However, in light of desk research, one of the goals of the interviews was to clarify the reasons behind the implementation of mainly basic digital tools, despite a wider range of other opportunities. On this basis, a framework for research and intuition-based approach of DMOs to the co-creation of tourism experience using ICT is presented (Figure 2).

### *General Characteristics of Tourist Attractions in the Małopolska, Poland*

Due to its natural environment and cultural heritage, Małopolska (Figure 1) is one of Poland's most important destinations and the most frequently visited. Nearly 17 million tourists visited the region in 2018, including nearly 3.3 million foreign tourists. The following countries represent the largest international tourist segment: Germany (18.9%), France (11.2%), United Kingdom (8.2%) and Ukraine (8.2%), and Italy (7.8%) (Małopolska Tourist Organisation, 2019).

Fig. 1: Location of Małopolska Voivodeship, Poland



Source: own elaboration.

The capital of the voivodeship is Kraków, a historic city with a medieval old town. The International Airport in Kraków-Balice significantly increases the transport accessibility for foreign tourists. Twelve sites were entered on the UNESCO World Heritage List, such as the Historic Centre of Kraków, the Auschwitz Birkenau German Nazi Concentration and Extermination Camp, Bochnia and Wieliczka Royal Salt Mines, and Wooden Churches of Southern Małopolska. Since 2018, the Nativity Scene tradition from Kraków is part of the UNESCO Representative List of the Intangible Cultural Heritage of Humanity. Another important destination is Wadowice, the birthplace of Pope John Paul II and a pilgrimage center.

The region is dominated by mountainous and upland terrains, as the consequence of the geographical location in Western Carpathians and on Małopolska Upland. Mountain resorts are located in the Tatras and the Beskids in the Polish parts of Western Carpathians. These mountain ranges feature numerous hiking and bicycle trails. The particularly valuable areas of the natural environment are protected in six national parks, and the mineral waters and microclimate of mountainous areas resulted in the growth of spas.

Moreover, international artistic, cultural, and religious events take place here. An example of such an event is the Sacrum Profanum Festival, Kraków Film Music Festival or International Festival of Highland Folklore in Zakopane, and World Youth Day 2016 in Kraków.

## **Results**

### *DMOs in Małopolska & the Co-creation of Tourism Experience with the Use of ICT*

Although DMOs have implemented and then have maintained ICT-based tools dedicated to tourists, the vast majority of these digital solutions are based on Web 1.0 technology. Each of the DMOs provides an official website of the destination, and more than

half of them maintains mobile applications (80%), web portals (70%), and Facebook accounts (60%) with a wide range of tourist information but without, for example, a possibility to book tourist services such as accommodation, entrance tickets to museums or other attractions, such as guided tours (see more: Pawłowska-Legwand, 2019).

The content, e.g., text and photos or videos, is prepared in advance and then published. Most mobile applications, usually based on location-enabled software, provide users with tourist information and, as a result, a possibility to spend time more actively on bike paths or hiking trails. More interactive solutions are still not implemented on a larger scale, such as reservations and booking systems, recommendation systems, chats, and Skype bots or online forums. Although the DMOs have created and run their official accounts on Facebook, the main focus is to publish multimedia content related to the destination, and not communicate interactively and build relationships with users.

As Neuhofer et al. (2014) noticed, ICT-related tools can support the tourism experience or co-create the experience itself. For technology-assisted experience, the possibility of communicating interactively is limited because of the dominant role of Web 1.0 technology, and technology-enhanced experience should be supported by Web 2.0 technology. A fundamental feature of this type of tourism experience is social media activity, both on the supply and the demand side. As a result, communication is interactive, and tourists search and share information and experiences.

On the example of Małopolska, tourism experiences related to the destinations can be classified mainly as technology-assisted, just after the conventional tourism experience, and rarely as technology-enhanced, i.e., the second and third level according to the typology by Neuhofer et al. (2014). All digital solutions mentioned above create a basis for technology-assisted experience before the travel and even on-site at the destination. Users navigate between websites or use mobile applications to personalise their search for tourist

information, and then customise and match the travel to preferences. These digital tools facilitate access to tourist information but do not allow for the co-creation of the tourism experience in a broader sense.

The use of ICT for technology-enhanced experiences is at the initial stage, but the DMOs have taken the first steps to implement more advanced solutions. Examples include the first social media campaigns on Facebook and Instagram, actions related to influencer marketing, and more interactive and sophisticated mobile applications on-site at selected destinations. Mobile applications for outdoor games, such as questing or geocaching, can be quoted as examples. These applications are based on gamification and storytelling, and users have a chance to enhance their destination experience. Other examples include the use of virtual reality (VR goggles), QR codes, and beacon Bluetooth technology.

#### *Framework for Research and Intuition-based Approach of DMOs*

Undeniably, the overall situation related to digital services in Poland, namely increasing accessibility of broadband Internet, mobile network, and mobile devices and a rising interest of the society in the ICT-related activities and tools in the context of tourism, constitute a powerful foundation for digital tourism marketing. However, in the case of the Małopolska, there is a specific disparity between a general higher level of ICT infrastructure development in the region and the lower level of technological advancement in using ICT-based tools by DMOs.

This divergence was discussed during interviews with employees of DMOs, with particular attention to the background and reasons for using ICT. On this basis, a framework for research and intuition-based approach of DMOs to the co-creation of tourism experience using ICT is presented (Figure 2).

According to the Office of Electronic Communications of Poland (2019), the ICT infrastructure in Małopolska is well-developed, and the region provides relatively good physical access to broadband Internet and mobile network. This results from the realization of national and regional growth strategies in the last years, prioritizing the development of technical facilities and digitization. These investments have been co-financed by the European Union funds. The Polish market of digital services is rapidly growing, a saturation of the market is observable, and as a result, the costs of ICT use are relatively low, according to Social Diagnosis 2015 (Batorski, 2015). Another important issue related to the potential of the demand side is shown by Statistics Poland (2019), according to which 83.1% of households are equipped with access to a computer and, similarly, with access to the Internet at home (86.7%). Also, nearly 80% of individuals declare they use a computer and the Internet (Statistics Poland, 2019), and 64% of Poles use smartphones (Mobe Dick, 2018).

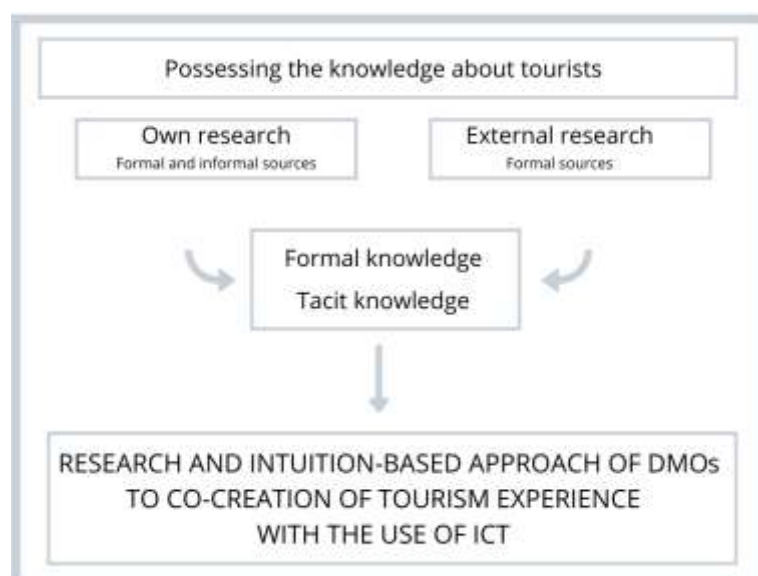
However, the level of overall digital skills of Polish society should be highlighted. Although 44% of individuals have basic or above basic overall digital skills, nearly 35% of individuals have low overall digital skills (Statistics Poland, 2019). For comparison, returning to countries listed as representing the largest international tourist segment in Małopolska, according to the Eurostat – the statistical office of the European Union (2019) – the indicators for Internet access of households and Internet use are higher in Germany (95%; 93%), United Kingdom (96%; 96%), and in France (90%; 89%), and lower in Italy (85%; 76%) than in Poland (87%; 80%). The overall digital skills are usually higher in these countries (Germany – 70%, United Kingdom – 74%, France – 57%, and Italy – 42%) than in Poland.

According to the DMOs' opinions, it can be said that Polish consumers are still learning to use ICT in the context of tourism and still discover opportunities. Consequently, the main task of DMOs is to provide them with user-friendly tools based on digital solutions

familiar to them. However, DMOs are aware of the changing environment as well as of improving the digital skills of Poles and expectations of foreign tourists who are perceived as more advanced ICT users. Małopolska is one of the most important Polish destinations, but a great majority of tourist traffic is related to domestic tourism. On the one hand, DMOs are focused on the needs of domestic tourists. On the other hand, more sophisticated digital tools are also implemented at major destinations. Examples are cities, such as Kraków, the capital of the region and the most important international destination there, selected mountain resorts, and historic towns with the monuments entered on the UNESCO List.

Possessing knowledge is the main conclusion related to research into the background and reasons behind using ICT by DMOs. Overall, it can be stated that, based on the own research into and the external analysis of consumer and tourist needs and behaviours, DMOs anticipate and assess the potential effectiveness of digital tools, and then attempt to choose solutions of the greatest marketing potential for the target group. All these elements can create a basis for formal and tacit knowledge and then for the use of ICT by DMOs (Figure 2).

Figure 2: Research and intuition-based approach of DMOs to the use of ICT



Source: own elaboration.

One of the employees described the DMOs' approach to using ICT as 'intuitive,' and it is worth emphasising in the context of DMOs' research, mentioned above. Apart from, for example, surveys and reports on the tourist traffic and tourism development by international, national, and regional tourism organisations, DMOs' research has own sources such as employees' knowledge and beliefs, observations, and professional experience, as well as talks or meetings with visitors at tourism fairs or in tourist information offices. Another respondent stressed that being a 'visionary' is essential in digital marketing. It enables effective linking of the tourist needs and behaviours in terms of use of ICT, with the financial and organisational capabilities of the DMO and the tourism potential of the destination.

#### *Selection of quotes from the interviewees*

*Obviously, we follow, read and apply for our marketing and promotion many official reports and experts' comments. This content can be evaluated as valuable and useful, and – what is important – access to many reports are free and the reports are priceless, I mean the knowledge is priceless, the details, for example, related to the use of social media to answer the needs of contemporary tourists. Who are the users? How to talk with them? There is a plethora of options related to ICT, ICT in promotion, but we need and selection suitable to the tourists we have here.*

*We have many social media but the question is – do we need all of them or only Facebook? Or Facebook and Instagram? Or maybe Facebook and Twitter? And the next question – what tourists need, in fact? There are also differences among domestic and foreign tourists. We observe it, ask the questions, google the answers, and discuss in the context of promotion plan for the future.*

*Conducting own research on tourist needs by the local authority, for example, surveys with tourists or potential tourists, is usually impossible because of financial limitations. But we, employees responsible for destination marketing are obliged to follow marketing trends, new solutions, new technology, and the prepare solutions and tools suitable for our area. We should know what people, tourists need. How we follow trends, how we know this? We read reports, for example, on tourism market or on marketing branch, discuss with others, observe actions of neighbouring municipalities or “giants of tourism” in the region, such as Kraków. We are also users of social media in private life, users of the Internet, and we meet promotional actions as recipients, the we can observe and try to implement similar solutions for our area, on this basis. Obviously, if the finances are available for the promotion.*

*We can implement all available solutions, obviously, but the question is which ones are the most effective and the most expected by tourists who visit us, this area? International tourism in Kraków is one issue but local tourism here, in the mountains is other one.*

*First, we have to build, create our image on the Internet, [using] apps or other fancy solutions, I mean beacons are the next step, [to be done] later, if at all. We need to know our local tourism, local tourist and their needs, and they need good and decent website. How do I know it? Observations, conversations, experiences of similar and neighbouring municipalities, study tours, cooperation and simply helping [people].*

*First of all, employees should be professionals and be involved, and we have involved professionals here. People have knowledge, have professional experience and on this basis, they plan and conduct successfully activities related to promotion. Human capital is crucial, but it is impossible to indicate one source of knowledge and competences of our employees. There are rather many various sources – knowledge can be related to time of studies, later workshops or trainings, and self-education, discussions with other people, professional or casual conversations with younger nephews during grill party.*

Conducting effective activities with the use of ICT requires factual preparation and the engagement of the employee of DMO. Thus, the human capital is of significant importance, not only in terms of knowledge about tourist needs and behaviours but also openness to market trends and personal digital skills of the employee, certain ease in using ICT, for example, the social media, being the result of using them in private life.

Also, the social capital and professional relationships between employees provide an opportunity for a transfer of knowledge and good practices, especially among DMOs of adjacent destinations. One of the employees described this attitude as ‘cooperation without competition because we all have the same goals for tourism development.’

Another substantial issue transpiring from the employees’ knowledge and professional experience is related to particular digital tools. Digital solutions, understood as more advanced from the perspective of ICT development but less familiar to users, require marketing themselves to enhance and support tourists in their use of, e.g., virtual reality, QR codes, or beacon Bluetooth technology. For DMOs who applied this type of digital tools, the human factor is crucial to promote the new solutions, such as an employee in the tourist information office who informs, enhances, and helps getting started with the co-creation of tourism experience via digital tools.



## **Managerial Implications and Conclusions**

Nowadays, the prevalence, omnipresence, and popularity of digital tools are growing fast and gaining more significance for the co-creation of the tourism experience. Tourism marketing is an important task of DMOs, nowadays also in the context of co-creating experiences, both before and after the travel and on-site at the destination. ICT changes how consumers search for and use tourist information, products, and services, and implementing ICT allows the entities operating in the tourism industry and DMOs to react to this change.

The key to the implementation of ICT by DMOs is an understanding of the advantages and opportunities that digital solutions create for the management of a destination (Gretzel et al., 2000; Yuan et al. 2006; Petti et al. 2010), nowadays also to assist, enhance or empower the tourism experience (Neuhofer et al., 2014). So that is why, what is important, DMOs should be aware of tourists' perspectives and their level of digital skills, and on this basis, they should attempt to match tourism marketing optimally to their needs.

The framework for research and intuition-based approach of DMOs to the co-creation of tourism experience using ICT developed in the paper emphasised the role of knowledge and intuition (Figure 2). The DMOs' approach should consequently be based on the awareness of digital tools' marketing potential and the context they operate in. This means taking into account both the ICT infrastructure that exists at the destination and social conditions of ICT usage by tourists, their needs, expectations, and interests related to the co-creation of tourism experience using digital tools. However, these needs and behaviours are still changing based on socio-economic growth and technological progress, and marketing trends. DMOs should be ready to change their approach to tourism marketing and focus more on the co-creation of the tourism experience. In other words, both physical and cognitive access should be considered at the planning stage (see: Minghetti & Buhalis, 2010). Some

popular digital marketing trends and tools are more suitable for international destinations, and some of these solutions are better for smaller destinations focused on domestic tourism and one-day leisure offer.

The possibilities related to ICT-based tourism marketing in the long term seem to be interesting for future research, especially including planning, implementing, and maintenance of digital solutions provided by DMOs for tourists. Current consumer trends are important for tourism marketing, but the DMOs should focus on the demand side and strive to provide digital solutions suitable to real tourist needs and behaviours at a certain place and time. The approach of Destination Management Organisations to digital tourism marketing should be based on the awareness of the context they operate in. Therefore, another research area is the relationship between the development of overall digital skills in society and its influence on consumer behaviour in the context of tourism marketing by DMOs.

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