DESIGNING ENHANCED TOURIST EXPERIENCES THROUGH TECHNOLOGY: BRIEF APPROACH TO VILNIUS CASE

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ABSTRACT

The present research investigates the notion of enhanced tourist experiences through technology shedding light on co-creation practices and empowerment of customers. Neuhofer and Buhalis (2013) introduced a novel concept of technology-enhanced tourist experiences by generating a joint comprehension of new era of experiences which conjoin the elements of experiences, co-creation and technology. Being one of rather promoting cities in online environment Vilnius represents an interesting case of successive adoption of smart technologies in order to enhance tourist experiences and facilitate customer empowerment in Vilnius tourism domain. This study aims to determine technology-enhanced tourist experiences in order to measure factors of customer empowerment on the example of international incoming tourists to Vilnius. The mix-methods approach (*qualitative* online content and functionality analysis and *quantitative* survey) was justified as being the most appropriate for the purpose of this research with intention to find a basis for applying of technology-enhanced tourist experiences in Vilnius tourism marketplace. The paper concludes with the definition of current level of ICTs application to enhance tourist experience co-creation and a discussion of practical implications of technology-enhanced tourist experiences development.

KEYWORDS

Destination, tourist experience, co-creation, customer empowerment, ICTs

1. INTRODUCTION

Contemporary tourists are in constant search of experiences; they are striving for them by means of consuming various products and services (Morgan et al., 2010). In distant 1990s Pine and Gilmore (1999) introduced the idea of the experience economy proposing that creating experiences is fundamental for any business (Neuhofer et al., 2013). As products and services have become interchangeable and replicated, the aspiration for unique and compelling experiences in the context of tourism has become a key notion (Neuhofer and Buhalis, 2013). Therefore, the idea of creating richer experiences for consumers represents a prevailing tourism concept.

Tourism as a service-intense domain has gone through many decades closer with Information and Communication Technologies (ICTs) (Buhalis and Law, 2008). Furthermore, technology has not only become an integral part of tourism but has also revolutionized the way travel is planned (Buhalis, 2003), business is conducted (Buhalis and Licata, 2002), tourism services are consumed and experiences are created (Stamboulis and Skayannis, 2003).

As long as tourism industry has always been in the forefront of ICTs (Sheldon, 1997), the advances in this field have consecutive implications by deeply modifying the nature of tourism experiences (Tussyadiah and Fesenmaier, 2007). Recent Internet-based technologies, social networking websites and mobile applications have provided companies and consumers with the possibilities to connect, interact and create experiences to an unprecedented scale (Neuhofer et al., 2015). Taking into account the collaborative facets of technologies, the tourism marketplace has met with radical changes towards consumers who gain power and control to co-create their experience alongside with tourism organizations (Alt and Klein 2011). Additionally, the process of co-creation experiences (Prahald and Ramaswamy, 2004) has become an important glance into tourism research and practice. From this viewpoint the empowered tourist has been considered as a central element in the process of creation experiences and generating value (Neuhofer et al., 2014).

Destinations are usually reviewed as the core of the travel and tourism industry (Leask and Fyall, 2007). Basically, destination is an amalgam of tourism products and services which collectively ensure a consolidated experience to tourist consumers (Buhalis, 2000). Since modern tourism industry is becoming highly competitive, destinations are actively seeking possibilities to advance their market position and sustainability (Ritchie & Crouch, 2003).

The paper first provides a theoretical review of tourist experiences, co-creation practices and ICTs development, followed by an outline of the research design of mix-methods approach and data collection process. It then goes on to present research findings, discuss practical implications, acknowledge limitations and provides an outlook on the further agenda.

2. THEORETICAL BACKGROUND

2.1. Tourist experience theory

The tourist experience theory is one of the most interesting cases in the entire tourism research. In the early representation of tourist experience, McCannell (1973) described tourists' sites as locations of the authenticity; therefore holidaymakers visit these places with intention to search for the reflection on their authentic selves. This aspect indicates tourism as "sightseeing" affirming destinations as packages of visual materials or signs (Tussyadiah and Zach, 2012). This is indeed a cognate to the concept of *tourist gaze* (Urry, 1990) which emphasizing the "signs" as the "objects of gaze", whereas highlighting the subjectivity of the gaze.

Experiences have always represented an important notion in search and practice (Uriely, 2005), specifically in the area of tourism research. The emphasis on experience in tourism marketing is relatively recent subject area (Jennings et al., 2009). Taking into consideration the specificity of the tourism context, experience represents a complex construct, which has been determined as distinct from everyday life experiences (Cohen, 1979). Accordingly, the tourist experience can be described as a sensation resulting from interaction (Gupta and Vajic, 2000); as an outcome of participation within a social context (Lewis & Chambers, 2000); or the moment of value creation when tourism production and consumption meet (Andersson, 2007).

In the area of marketing, Schmitt (2002) initiated five dimensions of experience: sensory, affective, cognitive, physical, and relational. Addressing these dimensions of experience into tourism area, Ye et al. (2009) specified different elements that construct the experience based on the tourists' interactions with places, people and artefacts. Accordingly, they the sensory experience, the cognitive and perceptive experience, the social experience, the other bodily experience, and the affective/emotional experience (Ye et al., 2009).

Indeed, the experience concept is a key to perceive the intended meaning of consumer behavior (Addis and Holbrook, 2001) and represents a fundamental notion in marketing (Holbrook and Hirschman, 1982) and the experience economy (Pine and Gilmore, 1999). Speaking about tourism case, up to now, tourism has principally been regarded with visiting, seeing, and living in a different mode of life. However, the new widely discussing element – experience – adds a comprehensive living adventure to the short time the tourist spends in a certain destination (Stamboulis and Skayannis, 2003).

For tourism marketing it is supreme to evaluate the key developments forming the theoretical and current practical understanding as well as to capture the latest changes, trends and challenges (Neuhofer et al., 2013). Furthermore, Tussyadiah and Fesenmaier (2007) claimed that due to the impact of ICTs on the tourist experience, it is possible to observe current explicit changes in the nature of tourist experiences. This statement was supported by Gretzel and Jamal (2009) who argued that a great variety of new experiences is available now because new types of technologies facilitate these new activities. Moreover, taking into consideration the dynamic nature of tourism industry, experiences are constantly evolving. The most significant advances in area of experiences constitute the increasing level of co-creation and integration of ICTs (Neuhofer et al., 2014).

2.2. Co-creation experience

It is an evident fact that contemporary consumers are gaining more power and they are actively involved in the creation process, thus the traditional one-directed approach of creation experiences has undergone a radical transformation (Prahalad and Ramaswamy, 2004). Until recently, tourist experiences were mainly designed and created as presented by the principles of the experience economy (Pine and Gilmore, 1999). As consumers currently are more empowered, particularly after the emergence of the Internet, they are recognized as active actors in the co-creation process of their experiences. Consequently, the notion of co-creation experience builds on these above mentioned principles (Neuhofer et al., 2014).

Prahalad and Ramaswamy (2004), first market researchers who establish the concept of co-creation, affirm that experience creation is mainly characterized by active consumers who play the primary role in co-creation of their experiences. This attitude has significantly changed the traditional assumed roles between companies and consumers. In co-creation process the consumer has become the central element in both the experience production and consumption process (Neuhofer and Buhalis, 2013). Hence, it has become an essential task for companies to recognize consumers and their needs as necessity to co-create experiences and value together (Neuhofer et al, 2014).

Generally, co-creation is a solution for creativity, innovation and involvement and basically, it covers an emerging body of knowledge about the way in which products, services and experiences are made jointly by producers and consumers. This concept involves using the consumer's knowledge of the product in order to improve it and to provide a closer fits with consumer needs (Minkiewicz et al., 2009). The basis for the co-creation leads in innovation with the consumer and in the new experience-centric view of innovation.

The impact of ICTs is recently recognized as a major change of tourism experiences. The emergence of the Internet has provided companies with unique opportunities to get value on consumers' innovative potential and knowledge. Consequently, this has resulted in various approaches to collaborate with consumers during the entire value chain. Most often co-creation occurs during the innovation process, referring to joint product development activities such as generating and evaluating new product ideas; elaborating, evaluating, or even challenging product concepts (Kohler et al, 2011).

Since modern customers are empowered by technologies to co-create and construct their experiences, this is certainly true while speaking about co-creating in destination case. Contemporary tourists have ability to choose from a wide range of destinations competing worldwide. However, this kind of destinations who applies new strategies allowing compelling experience is more preferable among customers. Thereby, tourism organisations should encourage tourists in destination experience co-creation process and should recognise their creative potential. While discussing co-creation experiences, it is essential to acknowledge the impacts of ICTs a catalyst of change of tourist experiences. The recent elaboration of ICTs in tourist experience is presented in subsequence.

2.2. The impact of Information and Communication Technologies

Information and Communication Technologies (ICTs) have been one of the main forces driving customer empowerment and enabling new multiple facets of co-creation (Neuhofer et al., 2012). There are plenty of ICTs which potentially influence and enhance tourist experiences. In accordance with Buhalis (2003), ICTs might be defined as "the entire range of electronic tools, which facilitate the operational and strategic management of organisations by enabling them to manage their information, functions and processes as well as to communicate interactively with their stakeholders for achieving their mission and objectives" (Buhalis, 2003: p. 7). The fast-growing tourism industry has gone with the progress of ICTs and has shown that ICTs are effective instruments for interacting and engaging with consumers. In particular, the emergence of social consumer-oriented technologies have revolutionised tourism (Neuhofer and Buhalis, 2013). The Internet and its successive advances in the Web 2.0 have represented one of the most critical technological developments over the past years by turning the Internet into an boundless space of networking and collaboration (Sigala, 2009).

Social media have become one of the most critical tools for tourism business to implicate with tourists to instantly re-create and share their experiences with others in a dynamic environment of tourism (McCarthy and Wright, 2004). Karplan and Haenlein (2010) define social media as "a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0, and that allow the creation and exchange of User Generated Content (UGC)" (Kaplan and Haenlein, 2010: p.61). Furthermore, as confirmed by Cantoni and Tardini (2010), in this innovative era of social media, the Internet has evolved from a broadcasting medium to a participatory platform, which allows people to become the "media themselves" for collaborating and sharing information. A wide range of social media, such as networking sites, blogs or wikis, have enabled consumers to interact, collaborate and share content, opinions and experiences to a larger scale.

Additionally, to the Web 2.0, a further development has implied one of the most significant changes to the tourism, namely mobile technologies (Neuhofer and Buhalis, 2013). Modern society can be characterised by a 'mobilities paradigm', reflecting the mobile nature of people, travel and tourism (Sheller and Urry, 2006). Therefore, the advances in the mobile market are highly relevant to tourism, since thus industry can advantage from the mobile information mostly (Brown and Chalmers, 2003). Furthermore, the integration of geographical technologies, including GPS, compass and maps has contributed to numerous services, such as location based services (LBS), context based services (CBS) and augmented reality (AR). There is a great variety of mobile services at the tourist's disposal and they are accessible almost anywhere and anytime; it means it is now becoming possible to connect with anyone at any stage of the travel, opening up new opportunities for multiplied levels of co-creation of experiences and value.

Given these advancements of the Internet, social media and mobile technologies, ICTs signify a key instrument of change by modifying the way travel experiences are created (Neuhofer and Buhalis, 2013). In current personalized, meaningful and co-creation experiences (Prahalad and Ramaswamy, 2004), the main tourism interest subsequently consist in investigating the potential of ICTs, and particularly social networking, as strategic implements to enhance tourism experiences (Neuhofer et al., 2013) in a positive way. Darmer and Sundbo (2008) acknowledged the role of ICTs in the tourist experience and argue that developing technologies will actually give rise to new types of tourist experiences.

3. RESEARCH DESIGN

The phenomenon of tourist experiences enhanced through ICTs is a recent one, which should be taken into deep investigation from customer and company viewpoints. Since the current research seeks to understand this new concept from both sides, the overall aim is to determine technology-enhanced tourist experiences in order to measure factors of customer empowerment on the example of international incoming tourists to Vilnius.

In order to address the above stated aim the following research questions are formulated:

- *RQ1: How technology can facilitate enhanced tourist experience in the context of Vilnius tourism domain?*

In order to respond the above stated RQ, the content and functionality analysis of the official website of Vilnius Tourism <http://www.vilnius-tourism.lt/> was performed in order to define the technological penetration of new type of tourist experiences enhanced by means of ICTs.

- *RQ2: What is the level of tourist customer empowerment in Vilnius?*

The answer to RQ2 is obtained from the outcomes of the survey conducted among international incoming tourists to Vilnius in venues of the Vilnius Tourist Information Centre.

The set of addressed aim and stated research questions explain the scope of the research: the exploration of the fully complexity of the enhanced tourist experiences through technology, thus a comprehensive methodology has been designed. Mixed method research is the combination of both quantitative and qualitative techniques used in one single study.

3.1. Content and functionality analysis

The mixed methods approach of the research includes a certain benchmarking activity in the form of content and functionality. It was decided to assess the official website of Vilnius Tourism <http://www.vilnius-tourism.lt/> in order to examine the positive and negative sides by conducting a comprehensive study of content and functionality answering RQ1. The assessment of the website helps to deeply analyze the content and functionality of the website and to identify if there is the necessity to add new, improve existing or eliminate the outdated content of the website. This analysis has been used as a benchmark tool in the context of destination domain – in which the website of Vilnius Tourism is immersed.

Content and functionality analysis (CaF) has been extensively used by the researchers of Webatelier.net (www.webatelier.net – a laboratory of Università della Svizzera italiana (Lugano, Switzerland) within their communication projects (e.g. Cantoni et al., 2007). This analysis allows detecting and mapping the content and functionality of the website in order to investigate its level of completeness. The questionnaire outcomes helped to identify the key priorities and concern areas of the website. Explicitly, the research focus was narrowed down on examining users' path from the homepage starting to search information about Vilnius through all the pages with necessary details. In order to investigate the website's level of completeness was used a special content and functionality grid, featuring a list of indicators, each one representing a single type of content and functionality that are relevant for the given domain. The result of this study was in a descriptive grid with 112 indicators has been used. These indicators could be understood as types of contents and/or functionalities that compose the website.

The various methods used for data collection have been highlighted and justified as being the most appropriate for the purpose of this research. This comprehensive methodology was underpinned by the research paradigm with the goal to identify the notion of technology-enhanced tourist experience in Vilnius from two-fold company-consumer actor perspective. The next section presents findings gathered from different methods applied in this study.

3.1. Questionnaire method

The questionnaire method was utilized in order to map and explore RQ2, employing a self-completion questionnaire as the instrument of collecting data in the Vilnius Tourist Information Centre in order to conduct en-route survey. Furthermore, the questionnaire method allows visitors to evaluate their pre-visit stage of the destination as well as anticipate their post-stage in their home countries.

The exploratory en-route questionnaire has included 12 questions structured into 5 main categories: familiarity with destination area, technology literacy and usage, experience co-creation, and technology-enhanced tourist experience. This quantitative study was focused on the international incoming tourists, being central consumers of overall experiences, with the goal to explore the level of satisfaction of customer empowerment in the multiple travel stages. Due to the need to conduct en-route survey, geographical location was set up – the Vilnius Tourist Information Centre in the Old town. This location is mainly determined as first visited place by incoming tourists onsite the destination. Distributing data collection over a period of 3 days varying the days (weekdays and weekends) reduced the sampling error for this study.

The questionnaire comprised inquires about respondents' backgrounds in relation to socio-demographic variables such as country of residence, age and gender; and familiarity with the destination area. Other questions were related to technology literacy and technology use. The respondents were asked to evaluate their Internet skills, social media use and mobile applications utilization; followed by evaluation of customer activities performed online measuring them (i) before coming on the destination and (ii) on-site. The visitors were also invited to

highlight those online sources which they consulted prior the trip to Vilnius. In addition, the holidaymakers were requested to assess how often they participate in the online activities on-site in order to measure the level of co-creation experience in Vilnius. Subsequently, four different inquiries about customers' vision of technology-enhanced tourist experience were submitted. The respondents were asked to state their responses to questions on a Likert-type five-point scale (agree, partially agree, neither agree, neither disagree, partially disagree, disagree).

During the survey were collected 150 questionnaires from international incoming tourists. However, the answers from 46 respondents were eliminated due to missing values. Accordingly, 104 questionnaires were considered for examination. The data were analysed using IBM SPSS Statistics 22. Table 1 provides a number of key characteristics of the participants.

Table 1. Socio-demographic profile of respondents

Countries	Europe	88 (84%)
	Asia	8 (8%)
	America	7 (7%)
	Australia	1 (1%)
Age	< 20	3 (2%)
	20-29	54 (52%)
	30-39	23 (22%)
	40-49	7 (7%)
	50-59	8 (8%)
	> 60	9 (9%)
Gender	Male	48 (46%)
	Female	56 (54%)
Familiarity with Vilnius	Newbie	89 (85%)
	Second visit	4 (4%)
	Frequent visitor	11 (11%)
Total		104 (100%)

The majority of respondents were Europeans (84%), Asians accounted for 8% followed by Americans with 7%, and the rest of the sample – Australians (1%). Regarding the gender, there is a fairy equal distribution of male and female respondents with a division of 46% males and 54% females. In terms of age groups, the sample indicates that the age distribution is spread from the participants under 20s to the over 60s. The tendency towards holidaymakers representing the age group of 20-29 years (52%) was evident, since these years generation of respondents is mostly technology-friendly. The sample also reflects participants on their familiarity with Vilnius: the majority of participants (85%) were newbies (first time visitors); 4% of the tourists came to Vilnius second time, and 11% were frequent visitors. Furthermore, the survey revealed the following trends within Vilnius travel market: the majority of tourists were newbies.

4. FINDINGS AND DISCUSSION

This section provides a deep understating on how tourism companies and tourist consumers as actors co-create tourist experiences by means of ICTs. Firstly the outcomes from benchmarking research (company perspective) are introduced followed by findings from consumer perspective.

4.2. Outcomes from content and functionality analysis

The main goal of this qualitative technique led in assessing the current position of the "Vilnius Tourism" website < http://www.vilnius-tourism.lt/en/> in the online environment. The selected website was identified as one of the important online channels about tourism in Vilnius for international incoming tourists. Therefore, this method also aimed at investigating the online communication on the website in terms of contents and functionalities offered to facilitate users in the process of searching, examining and booking etc.

During the content and functionality analysis were discovered 73 (out of 112) indicators allocated among macro areas, areas and categories. The table 6 demonstrates the findings. It is worth to mention that total score per macro area corresponds to the number of categories per area, thus the overall number of indicators in each macro area may vary.

Table 6. Outcomes from the content and functionality analysis

Macro Area	Area	Area's score	Total score = 73
There is a place	Geography	3	**8** (out of 12)
	History	2	
	Culture	2	
	Practical information	1	
Where you can stay and go	Destination overview	3	**27** (out of 41)
	Getting there	6	
	Local transportation	8	
	Sightseeing	1	
	Places to stay	7	
	Organize a trip	2	
And enjoy doing something	Discovering and visiting	6	**15** (out of 20)
	Entertaining	4	
	Eating and drinking	3	
	Shopping	2	
In a given period of time	Events	4	**4** (out of 10)
	Seasonal tourism	0	
It is me who is suggesting you to come	Who we are	4	**11** (out of 15)
	Contacts	5	
	Services	2	
Here are online services I am offering you	Web 2.0	3	**8** (out of 14)
	Website personalisation	3	
	Accessibility	2	

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In general terms, the website "Vilnius Tourism" is well-designed and has fair numbers of indicators in terms of contents and functionalities. The only macro area "Where you can stay and go" is the "weakest" point of the website (27 out of 41 possible indicators). In this macro-area most of the scores are distributed between "local transportation" (8 points), "places to stay" (7 points) and "getting there" (6 points). However, the website does not have such function as "travel planner", which might assist tourists during their online visit of the website. The information about travel agencies dealing with incoming tourists was not found. Moreover, the website does not show any accommodation suggestions and reviews together with ratings.

Nevertheless, there is a possibility to make a direct booking on the website. Virtual tours around the city were not found on the website, but there is a virtual database of images of Vilnius. Accordingly, all the revealed and described above issues should be taken into account for further agenda and positioning online.

4.2. Outcomes from survey

This subsection presents the results from the consumer perspective collected through quantitative survey. First of all, the respondents' background of ICTs literacy and use within the tourist experience is discussed. The second part presents the results of the experience co-creation process, in which tourists engage with companies and other consumers by means of ICTs in the destination experience

In the questionnaire several questions were asked to identify the participants' level of e-literacy and use of ICTs for the current trip: Internet, social media, and mobile applications. In line with the sampling criteria, the majority of the participants (90%) used the Internet while planning their trip to Vilnius, whereas 10% of them – did not. Onwards the holidaymakers were asked to highlight those online sources which they have consulted before coming on destination. TripAdvisor was marked as a preferred online source by the largest quantity of the respondents (20%). The website of Vilnius Tourism was selected as a second option of a frequent occurrence with the amount of 16% among all participants. The third online source declared with the sufficiently high number of respondents (10%) was Facebook. Online travel guide "Lonely Planet" also influenced the decision of 8% respondents for travelling to Vilnius among holidaymakers. 8% of holidaymakers checked other sources: e.g. Like a local guide, Wikipedia, Wikitravel, The New York Times, Rough Guide.

In order to measure on-site online activity of the international incoming tourists, the questions regarding social media and mobile applications were addressed. As it was outlined in literature review, social media made an enormous impact on the tourism industry. Taking into consideration the case of Vilnius, most of the participants (31%) marked Facebook as frequently used social media platform during the trip. The 14% of the respondents chose image-sharing social media channel Instagram which they used on the destination. The third popular social media among the sample was Google (12%). It is an interesting fact that 14% of the respondents did not use any of social media platforms. Other social-networking sites: (4%)

In recent decade mobile technologies play an increasingly important role in tourism, giving tourists a constant access to obtain relevant information, specifically during the trip. The tourists were asked to select those travel-related mobile applications which they used during their stay in Vilnius. The majority of the respondents (27%) used Google Maps en-route. Booking.com was marked as the second popular mobile application on-site (21%). Within the sample, 20% of the holidaymakers used such mobile application as TripAdvisor. 5% of respondents used other mobile applications.

Experience co-creation is a process of mutual experience and value creation. The quantitative findings of the current research revealed a) the existence of co-creation process between companies and consumers as within the destination context (Vilnius) and confirmed b) the tourism experience co-creation by means of ICTs. The participants were asked three enquiries about the current experience co-creation process and level of customer empowerment.

4.1.1. Online activities

First of all, the respondents were offered to rate how often they performed the listed online activities during their stay in Vilnius on a five-point Likert scale (1 = very often to 5 = never). The Cronbach's alpha 0,813 indicated a high level of internal consistency among 10 items. With respect to overall ICTs use within travel, the table below shows the explicit data on the allocation of online activities within the sample.

Table 2. Participation in online activities on-site

Online activity	*Mean*	*SD*
Information search about destination	2,55	1,190
Booking hotels/restaurants	2,96	1,299
Using GPS technologies	3,01	1,567
Social networking with family/friends	2,78	1,455
Connecting with other travellers	3,90	1,153
Sharing pictures, videos, opinions	3,34	1,432
Writing reviews on places of stay and/or visit	4,03	1,153
Consulting mobile guides	3,70	1,253
Taking part in online competitions	4,44	0,993
Communicating with locals	3,44	1,291

According to table above, information search about destination was performed quite often during their trip. On the contrary, tourists almost never participated in the online competitions. Moreover, the respondents declared that sometimes they were social networking with friends/family, booked hotels, used GPS technologies, and shared pictures and opinions en-route. During their stay in Vilnius the holidaymakers were rarely connected with other travellers, wrote reviews on places of stay/visit, consulted mobile guides and communicated with locals in the online environment.

4.1.2. Relevant factors for technology-enhanced destination experience

The participants were asked to judge the relevance of the factors for their tourist experience enhanced by ICTs on a five-point Liker scale (1=agree, 5=disagree). The alpha coefficient for the eight items is 0,901, suggesting that the items have relatively high internal consistency. Table 3 provides an overview of the factors which were considered relevant for the technology-enhanced tourist experience. All the participants were partially agree that all the mentioned factors are relevant for travel experience with technologies. The average weight (mean) of the items varies from 1,78 to 2,31.

Table 3. Relevant factors for travel with ICTs

Factor	*Mean*	*SD*
Personalisation	2,13	0.967
Co-creation	2,31	1,12
Social interaction	2,17	1,213
Simplicity	1,87	0,997
Time consumption	2,09	1,086
Engagement	2,25	0,967
Accessibility	1,83	0,991
Cost efficiency	1,78	1,009

4.1.3. Perceptions on technology-enhanced destination experience

In order to clarify the international tourists' perceptions on technology-enhanced tourist experience, the respondents were proposed to describe their travel experience with technologies on five-point Likert scale (1=agree, 5=disagree). Pursuant to Cronbach's alpha 0,862, the level of internal consistency among 6 items is high.

Table 5. Description of technology-enhanced destination experience

Technology –enhanced destination experience is:	***Mean***	***SD***
New experience	2,77	1,374
Smart experience	2,26	1,115
Creative experience	2,43	1,068
Memorable experience	2,22	1,132
Additional experience	2,17	1,065
Rich experience	2,46	1,174

The outcomes of table 22 show that tourists would not describe their travel experience enabled by ICTs as a *new experience.* Nevertheless, technology-enhanced destination experience could be considered as well as a *smart*, *creative memorable*, *additional and rich experience.*

The performed quantitative study reveals the following: according to sample's socio-demographics characteristics, the majority of respondents (20-29 years old) can be considered as "early adopters of technology" (Rogers, 2010) – those who experience product among the first. Furthermore, this population can be described by their lifestyle that focuses much on technology and online environment. The quantitative data also identified the central role of the consumer in the co-creation process and emphasized their empowerment in the online activities performed during their stay in Vilnius.

5. CONCLUSIONS

The recent research aimed at providing an overview on technology-enhanced destination experience, with a special focus on co-creation practices and customer empowerment. An extensive literature review was conducted in order to understand the current knowledge on the specific topic of tourist experience enhanced through ICTs. In reviewing the theoretical development of tourist experiences, experience co-creation and ICTs, this research outlined two major shifts which significantly changed the nature of tourist experiences: 1) tourists are co-creating their experiences, and 2) ICTs are enhancing the process of experience co-creation.

The magnitude of ICTs, particularly social media and mobile technologies, allow tourism companies co-create destination experiences together with tourists in the physical environment as well as in the virtual space. This innovate approach enables destinations to operate on the multiple stages of travel. Therefore, the comprehension of co-creating experiences is becoming supreme for successful destination marketing (Neuhofer and Buhalis, 2012). Several academic researches outlined that competitiveness of destinations mostly depends on reducing the interchangeability and replicability of tourism products and services, and lies in increasing the creation of rich and memorable experiences (Pine and Gilmore, 1999; Neuhofer and Buhalis, 2012). In that case ICTs should be considered as the main source for innovation, product differentiation and competitive advantage for successfully applied experience co-creation practices.

The current study revealed that the phenomenon of technology-enhanced destination experience should be viewed from two-fold company-consumer perspective. Hence, in order to tackle the research aim, objectives and questions, the present research employed two different methods (mix of qualitative and quantitative), namely: (i) survey; (ii) content and functionality analysis.

In order to have a clear understanding of the empowerment of international incoming tourists in Vilnius, the questionnaire method was undertaken. First of all, the quantitative study helped to extract the majority of the respondents from the sample and allocated them to the group of *"early adopters"* of technology (Rogers, 2003). These groups of customers can be characterised with lifestyle largely empowered by technologies. Significant differences were observed in checking online sources before trip and using of social and mobile technologies according to socio-demographics. For example, one of the most powerful sources to come to Vilnius for international tourists was Lonely Planet, where Lithuania was shortlisted among 10 best in travel countries for 2015. The tendency towards youngsters to use social media and mobile applications was evident, because the young generation is more technologically-friendly, as it was outlined above. Furthermore, the quantitative data recognized the central role of customers in the co-creation process. The findings also emphasized the empowerment of international incoming tourists in several online activities they took part on-site.

The method of content and functionality analysis supported the outcomes previously revealed in survey, determining the penetration level of ICTs in Vilnius and the quality of tourist experience online. The analysis unfolded that the website "Vilnius Tourism" is well-designed in terms of content and functionalities. During the analysis 73 out 112 indicators were discovered. However, it was identified that the "weakest" point of the website concerns the information about activities which can be performed when tourist is on the destination. Therefore, this issue should be considered as a substantial one and be taken into consideration for further agenda.

The present research involves limitations, which should be taken into account while discussing the main findings. Therefore, taking into account biases of the findings, the current research can be replicated. The author is convinced that results of this study will be useful for holistic understanding of technology-enhanced destination experience and can be taken in to account for further agenda.

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