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# Are ICT Tools Recognized Enough as Management Support in Croatian Tourism?

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## Abstract

The Information and Communication Technology (ICT) have been implemented in tourism as a supporting tool for different related activities. The main research question the authors set as: Have different Croatian tourism subjects recognized the relevance of the new technical solutions and integrated it in their business models to support the management activities and related leadership trends? In the theoretical part the concept of tourism management based on leadership trends and supported by ICT solutions is elaborated. In the empirical part general level of few tourism stakeholders' ICT usage is investigated. The research was conducted in spring 2016 and was based on 354 tourism stakeholder guests' perceptions. The contribution is practical as well as theoretical. An overview of the main actual ICT solutions available to tourism sector presents a practical implication of this research while developing framework appropriate for assessing the ICT as tourism management support stands as academic contribution.

**Keywords:** ICT tools, leadership, management, tourism stakeholders, Croatia

**JEL classification:** A22, I30, M10, M14

## Introduction

Trend of Information and Communication Technology (ICT) implementation in numerous business activities with the aim to support the move to digital business is constantly rising (Cearley, 2107). Having in mind that ICT has already been improved core business performance in the tourism (Buhalis and Zoge, 2007; Garbin Praničević, Alfirević and Indihar Štemberger, 2011; Mihalič and Buhalis, 2013), it can be expected that stated trend will be continued. We argue that for all tourism stakeholder in any destination, is highly important to take an active approach to the implementation of new technologies in their business, and to make the most of them by using innovative tools, intending to achieve a better market position as well as to gather crucial information for professional leadership.

In that context our intention is to reveal if Croatian tourism supply side stakeholders have recognized the relevance of the technology solutions. Have they, properly, integrated ICT in their business models to support their management activities and main leadership trends?

In addition, regarding various travellers' trends influenced by ICT (Garbin Praničević and Zovko, 2016) we consider that the hotels' and other accommodation units 'visitors (guests) take potential to offer us relevant evidence of proper ICT recognition and ICT implementation on the offering side. To elucidate the stated research question, we distributed survey to visitors of few relevant tourism stakeholders namely hotels, hotel apartments, private accommodations, nautical marines and camping units, and thus collected 354 evidences. In accordance with

findings are additionally elaborated the relevance of tourism management concept supported by ICT. Due to the tourism demand side (visitors/guests)' experiences are enclosed the insight in the most frequently implemented ICT tools in the Croatian tourism.

### *Tourism management and leadership trends*

Bird et al. (2016, p. 123) state that global managers are called upon to exercise greater leadership. Steers et al. (in Bird et al., 2016, p. 123) state that the global leadership theoretical review reflects three conceptual approaches: 1) the universal approach, which focuses on the "leader as leader" (e.g., transformational leadership), 2) the contingency approach, which focuses on the "leader as local manager," and the 3) normative approach, which focuses on the leader as global manager – and the role that leadership style and values plays in multinational corporate culture and system outcomes.

International tourism is resilient to terrorism (Liu and Pratt, 2017, p. 404). Mikulić et al. (in press, p. 1-2) stress that risk management is crucial to the management of sustainable tourism development therefore they identified short-term risks for Croatian tourism as: bad weather, natural disasters, disease outbreaks and epidemics, terrorist attack, political and societal instability in the region, ecological incidents, bad tourist experience, generating market purchasing power, exchange rate, fuel price and more difficult border crossings. Merinero-Rodriguez and Pulido-Fernandez (2016, p. 133) expressed the need for a greater clarification regarding the effect of relationships on the tourism phenomenon analyzed, that is, the relational effect on the reality of tourism in clear terms of improvement or deterioration. In tourism, client engagement has been found to boost loyalty, trust and brand evaluations (Harrigan et al., 2017, p. 597). Quantitative benefits have to be found in order to stimulate tourism entrepreneurs investing time and money in local tourism networks (van der Zee and Vanneste, 2015, p. 46). Gamification of tourism can contribute to a more rewarding interactions and higher level of satisfaction, as well as increase brand awareness and loyalty to the destination (Xu et al., 2017, p. 244).

Smart tourism is defined by Li et al. (2017, p. 293) as an individual tourist support system within the context of information services and an all-encompassing technology. Sustainability of rural tourism has a wider application on a national and international scale (Guo and Sun, 2016, p. 52). Host communities' perceive responsible tourism in terms of four dimensions, such as community engagement, employment opportunities, skill development programs and public awareness (Mathew and Sreejesh, 2017, p. 86).

Birasnav (2014, p. 1627) states: "Implementing knowledge management process is an essential activity that organizations must execute to achieve competitive advantage through encouraging employees to contribute toward developing organizational knowledge. In this direction, it is transformational leaders who develop human capital (combination of employees' knowledge, skills, commitment, and capabilities) through encouraging employees to transfer their knowledge to other employees and applying their knowledge for completing projects and performing different critical jobs. It is found that these leaders acquire knowledge from external environment by involving in the activities of searching for experts and consultants who possess the missing knowledge and make them available for other employees either temporarily or permanently".

Prince and Ioannides (2017, p. 348) established that those behind the management of volunteers, students and other guests regularly struggle to coordinate these respective groups in a manner that balances economic objectives

with those relating to the environment and social equity. This is because limited human resources and strategic knowledge exist to fulfill all the host community's goals through alternative tourism management. The findings (Prince and Ioannides, 2017, p. 348) reveal the need to conceptualize alternative tourism as a forum for discussion between host and guest over the complexities of generating sustainable development. This highlights the need for knowledge transmission over matters such as conflict resolution, critical reflection and cultural communication associated with the tourist experience at the community (Prince and Ioannides, 2017, p. 348). Pritchard and Morgan (2017) found out the need for diversity management in tourism sector, especially in the academia.

There is no shortage of advice on how to lead, but unfortunately the validity of this advice varies widely and it is not clear how much of this advice might best be applied to address the current issues given the numerous compounding variables (Slavik et al., 2015, p. 1161). The existence transformational and transactional leadership features, along with elements of effective motivation and communication – is antecedent to the knowledge management practices of creation, transfer, storage, and application (Donate et al., 2015, 366).

### *ICT tools as support to tourism management and leadership trends*

In elaborating the concept of tourism management based on leadership trends and supported by ICT solutions, the insight in the most used tools developed to support management activities of different tourism stakeholders seems as useful start point.

ICT and tourism management are closely interrelated, and is often questionable if ICT generate or ICT facilitates the changes in tourism (Buhalis, 2008). Implemented ICT systematically transforms organizations in the digital economy (Turban and Volontino, 2010), incorporates information, management and technological systems to enable collecting, gathering and processing tourism related information within and outside tourism units (Tussyadiah and Inversini, 2015; Minazzi 2015). Moreover, ICT facilitates measurement of the organizational productivity which improved the quality of tourism management, and furthermore the value of their influence exerted to employees by acts of leadership (Alfirević et al., 2010).

In that context, each tourism stakeholder on the supply side can benefit and become closer to the demand side, reshape strategic direction (Cearley, 2107) and provide themselves leadership position by accessing up to date information from the entire environment including current tourism leadership trends and global threats alerts.

Although the relevant set of different ICT tools, either as open source or as commercial tools, are affordable on the market, tourism and travel industry still evidently online provided reservation systems and social networks as the basic ICT platform for its business (Buhalis and Amaranggana, 2015; Fitzpatrick, 2015).

Quite long period ago, Sigala et.al. (2001) elaborated the noticeable opportunities to gain competitive advantage from the hotel reservation process. Recently, Minazzi (2015) identified and categorized computer reservation systems, networking facilities developed mainly via Internet and social software as ICT applications that have been highly impacted tourism in last 40 years and onward. Regardless the reservation systems technical backgrounds variety (Šerić, et al., 2016), namely applications for the reservation with or without payment options, central reservation systems, global distribution systems, mobile bookings, online tourism intermediary systems, websites that enable comparing prices or virtual communities, the integration with guests is always provided and assured.

Furthermore, social networks provide wide spectrum of communication opportunities and enable tourism suppliers creating network of countless partners which results with crucial support to promoting strategy reinforcement (Berthon et al. 2012).

Generally, all information collected through the social media channels allows sending personalized advertising messages to guest/visitors. In that context instead of showing advertisement or distributing advertisement randomly, on the basis of previous interests, hotel created the highly customized content to suit individual user preferences. The demand side, particularly millennials who „were literally born to a world of media choice that places them firmly in control of their media environment“ (Gearcy and Nagy, 2004, p. 17) just start with search the right online, information firstly, than shift to other off line distribution channels.

## Methodology

In this research we carried out informative survey in spring 2016. The participants were guests and visitors of various tourism accommodation units located in Split-Dalmatian County. As is already mentioned, we collected 354 answers (Table 1). 70% of the participants were younger than 30 years; almost over 80% of them were medium and highly educated people traveling up to 2 times per year.

Table 1

Distribution of guests/visitors according tourism unit

Tourism units	Number of participants (guest /visitors) who completed the survey
Hotel apartment	151
Private accommodation	86
Hotel	39
Nautical marine	28
Camp	50
<b>Total</b>	<b>354</b>

Source: Authors' research, N=354

Form the tourism unit's guests/visitors' perspective, we intended to provide, the overall insight in accommodation units' ICT usage solutions. In accordance with that, the descriptive statistics is used and findings enclosed below.

## Results

The processed results are presented in summary (Table 2) as follows.

Table 2

ICT usage in tourism units (tourism unit visitor's perspective)

Tourism accommodation unit	Findings (guests/visitors' perspective)
Hotel apartments	<ul style="list-style-type: none"> <li>•77% search online and find information about hotel apartments</li> <li>•25% search on mobile and find information about hotel apartments</li> <li>•51% book the accommodation using online reservation system</li> </ul>
Private accommodation units	<ul style="list-style-type: none"> <li>•70% search online and find information about private accommodation</li> <li>•30% search on mobile and find information about private accommodation</li> <li>•Booking.com is revealed as most frequently used portal for individual booking (71%), followed by Airbnb.com, Hotelworld.com and Hotels.com.</li> <li>•According to the collected data private accommodation managers recognized the ICT potential and over time more and more use ICT in managing accommodation properties and in better guest</li> </ul>
Hotels	<ul style="list-style-type: none"> <li>•89% search online for hotel in planning phase</li> <li>•70% approved the usage of online reservation systems in process of booking hotels</li> <li>•65% search on mobile and find information about hotel</li> <li>•80% consider that hotel presence on social networks altogether with hotel mobile applications encourage their decision to book particular hotel.</li> <li>•60% agreed that hotels have to invest more in new innovative technologies (particular virtual tours and new more innovative mobile apps) as well as integrating them in hotel business. It is also emphasized the necessity of linking hotel with reservation systems of other tourism stakeholders.</li> </ul>
Marine units	<ul style="list-style-type: none"> <li>•61% search for marine online in planning phase (Facebook, Twitter and Instagram)</li> <li>•40% used marine web pages for informative and reservation purpose.</li> <li>•54% consider marine web site content as just partially supplied with accurate information and interaction opportunities</li> </ul>
Camp units	<ul style="list-style-type: none"> <li>•92,5% search for camp information online in the planning phase</li> <li>•60% are informed due to the reviews and comments on web portals, others are focused on friends' recommendation and camp web site content</li> <li>•35 % use online reservation system in the booking process</li> <li>•68% approve the high importance of internet access points inside the camp.</li> </ul>

Source: Authors search, N=354

## Discussion

From the guest's perspective, enclosed findings indicate that hotels recognized in the vast part the potential of reservation systems and Web presence, and accordingly organize their business. In spite of this, the need to invest more in new

innovative technologies (particular in virtual tours and new more innovative mobile apps) as well as in better integrating system in all aspects of hotel business is revealed.

Hotel apartments and private accommodation are well recognized reservation systems and Internet as promoting platform, but are still less available through mobile search.

Social networks seem as *sine qua non* for marine business model. Marine units recognized the importance of social networks and accordingly create and maintain their web profiles. The same technology is used in *the right* way also in the camping area; due to it, camping units become closer to the potential visitors. However, certain room for improvement still exists regarding marine management. Although they are present on the web, more than half visitors consider marine web site content as just partially supplied with the accurate information and interaction opportunities.

Having in mind that web portals and mobile booking empowering millennials' authentic experience, we claim that they will use it more and more and accordingly in forthcoming period, maintain as the relevant source for verification the ICT usage and ICT implementation on the demand side.

## Conclusion

Our survey indicates that tourism stakeholders, namely hotels, hotel apartments, private accommodations, nautical marines and camping units, although not in the same proportion, mostly recognized the ICT potential as valuable tool to manage their accommodation properties and proper guest approach.

The most frequently used ICT tools are social networks, reservation systems and own web sites. Although the identified media is used primarily with promotion purposes, the Croatian tourism units recognized it as media for maintaining customer loyalty (social networks) and media for diversity of their offers.

Limitations of our study go in line with rather small sample size, if compared with whole number of guests/visitors per year (Poslovni turizam, 2016). Based on enclosed findings the authors' further intention is to extend the same survey on larger sample including tourism units themselves. In accordance with related findings, we intend to deeply analyse the gap between ICT usage, as research variable on the supply side, and the perception of the same variable on the demand side.

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