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THE IMPORTANCE OF USING ICT IN THE RURAL TOURISM OF THE ZADAR COUNTY

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Abstract

Rural tourism, as a new way of tourism evolved from the combination of ecotourism and agro-tourism, has been considered as good way of economic and social revitalization in the world. We can say that ICTs are necessary components of doing business in rural tourism. This article shows the usage of basic ICTs in rural tourism of the Zadar County. It is therefore necessary to encourage stronger collaboration between all relevant institutions in order to implement ICT in rural tourism which can make Croatian tourism much more competitive. The aim of this article was to determine importance of ICTs in the future of rural tourism development in Zadar County.

Keywords: Rural tourism, Zadar County, ICT, challenges, implementation

1. INTRODUCTION

Tourism sector is one of the first services sectors to adapt and use information and communication technology (ICT) for promoting its services. Nowadays, ICT has deeply affected the way business is performed and organizations compete (Porter, 2001; referenced in Mavri and Angelis, 2009, p. 113). Rural tourism is a special form of tourism, which is characterized by natural environment and distance from urban areas (Clarke, Denmanb, Hickmanc & Slovak, 2001) reference in (Sedmak, Planinc, Kociper, & Planinc, 2016, p. 339). Rural Tourism has become an internationally recognised activity and has been considered by a greater portion of the world as a panacea for economic and social development of rural communities. It is also seen as real and sustainable support to the socio-economic problems in the rural areas and an important source of livelihood for the rural population (Tchetchik, Fleischer & Fleischer, 2008; Doohyun et al., 2014; Ezeuduji, 2013a, 2013b, 2014),

reference in (Musasa & Mago, 2014, p. 1.). Globally, international bodies and national governments, Non-Governmental Organizations (NGO's), policy makers and institutions in the field of development see tourism as a viable tool for the development of rural areas. As a result, tourism has become the key word in rural development initiatives, in projects to alleviate poverty and in the conservation of cultural diversity of indigenous communities (Doohyun et al., 2014). Roberts and Hall (2001) estimated that tourism in rural areas 15 years ago represented 10-20% of all tourism activity, but according to Ehrlich (2014) European rural tourism was accountable for 15% of total bed capacity (Sedmak, Planinc, Kociper, & Planinc, 2016, p. 339). Zadar County is predominantly rural. Of the total of 229 settlements in the Zadar County, 210 belong to the rural area (or 92%) (Udruga Ravni kotari (2017). Ruralna konferencija: Potencijali ruralnog razvoja Zadarske Županije, <http://udruga-ravni-kotari.hr/2017/02/23/ruralna-konferencija-potencijali-ruralnog-razvoja-zadarske-zupanije-umrezavanje-razmjena-iskustva/>, accessed: 30.6.2017.). Next figure shows the position and the area map of the Zadar County.

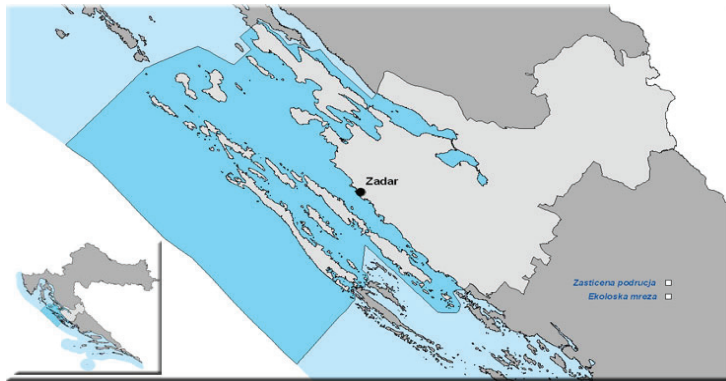


Figure 1. Area map of the Zadar County

Source: *Natura Jadra* (2017). *Karta područja Zadarske županije*, <http://natura-jadera.com/karte/karta.html>, (accessed: 4.7.2017.)

The research focuses on online analysis how rural householders in Zadar County use the basic ICTs. The research paper finds that we have low percentage of ICT use in rural tourism of the Zadar County and that Government, Ministry of tourism, County Tourist board, Rural Development Agency of Zadar County and Association for Rural Development “Ravni kotari” should help rural tourist householder with ICT education.

2. THE ROLE OF ICTs IN TOURISM

From the competitiveness point of view, ICTs play a critical role for tourism organizations and destinations (Buhalis 1998, 2003; O’Connor, 1999; Sheldon, 1997; Poon, 1993). Information and Communication Technologies (ICT) is umbrella term for technological developments for the Umbrella term

for technological developments for the Production, analysis, storage, search, distribution and use of information ICT includes a combination of hardware, software, telecommunications, Netware, groupware Human-ware (Waghmode and Jamsandekar, 2013). According to (Bethapudi, 2013, p. 67) information communication technologies (ICTs) have been transforming tourism globally. By maintaining their price leadership in the market or by differentiating their product and services, tourism companies can gain competitive advantage if ICT is managed properly. (Poon, 1993; Werthner & Klein, 1999; Xiaoqiu Ma, J. et. al., 2003). ICT enable travellers to access reliable and accurate information as well as to make reservations in a fraction of the time, cost and inconvenience required by conventional methods (O'Connor, 1999). Successful ICT deployment requires innovative management to constantly review developments and adopt suitable technological solutions in order to maximize organizational competitiveness (Buhalis & O'Connor, 2005). Information and Communications Technology, according to Connolly and Olson (2000) is the single greatest force affecting change in the hospitality industry. However, as in the case of other sectors, the rate of adoption of ICTs has been found to be quite uneven across the hotels (Hoontrakul & Sahadev, 2007, p. 535). Sedmak, Planinc, Kociper, & Planinc (2016, p. 342) research shows that the most important factor affecting the performance are perceived benefits from ICT use. According to (Leatherman, 2000; Milne, Mason, Roberts, Nodder, Ateljević & Cameron, 2005), it was expected that younger, more educated managers and those operating in more complex business systems tend to use ICT more efficiently (Sedmak, Planinc, Kociper, & Planinc 2016, p. 342). The deployment of information and communication technologies (ICT) is crucial for the competitiveness of rural tourism businesses (Polo Peña & Frías Jamilena, 2009), so rural tourism companies have embraced these technological advances that have made a positive contribution to their quick expansion in recent years (Ruiz-Molina, M.E., Gil-Saura, I., & Moliner-Velazquez, B., 2015). Despite the benefits that ICT brings for the promotion, communication and bussines of tourism firms located in rural areas, they tend to present lower levels of ICT adoption (De Noronha Vaz et al., 2006) so we have different levels of adopted technology between those businesses located in urban and rural locations (Reinoa, Frewa & Albacete-Sáezb, 2010). In order to better understand the situation of ICT implementation in rural tourism of the Zadar County the research question can be define as: What percentage of rural householders is using basic ICTs in the County of Zadar?

3. SOME STATISTICAL INDICATORS HOW TOURISTS USE ICT IN CROATIA

Tourism is usually defined as services for people travelling to and staying outside their usual environment for less than one consecutive year for leisure or for business purposes (Mavri & Angelis, 2009, p. 114). ICTs in this industry consist of various components that include computerized reservation systems, teleconferencing, video, video brochures, management information

systems, airline electronic information systems, electronic funds transfer, digital telephone networks, smart cards, mobile communication, e-mail, and Internet (Waghmode and Jamsandekar, 2013). The figure below shows the importance of internet use as a source of tourist information.

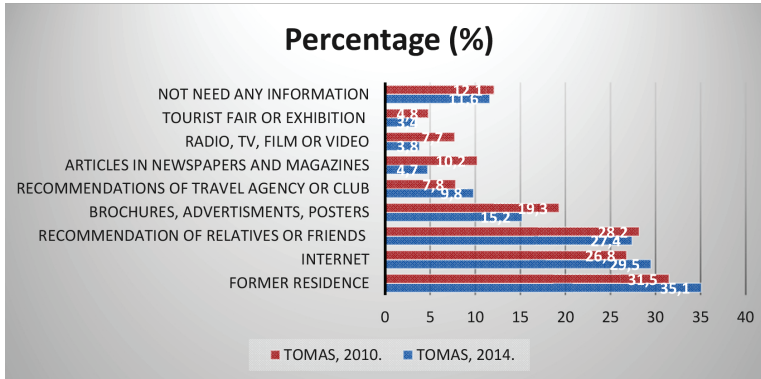


Figure 1. The source of information when tourists decide to come in Croatia
 Source: *Attitudes and Expenditures of Tourists in Croatia – TOMAS 2010. & 2014.*, Institute for Tourism, Zagreb, 2010., & 2014.

The following table shows the importance of constant improvement of the content of web pages, as a percentage of 41.5% from 2010 and 51.3% from 2014, shows exactly that the official website of the tourist boards extremely important in their use of information on the selection of destinations. This is another indication that the Internet is an essential medium in communicating and attracting tourists to Croatia.

Table 1
 The source of tourist information by type of website

Source of information	Percentage (%) TOMAS, 2010.	Percentage (%) TOMAS, 2014.
Web site of tourist board (national, regional, local)	42.0	36.7
Web site of accommodation	41.5	51.3
„Online“ tourist agency (OTA)	35.4	33.6
Social media (Facebook, TripAdvisor, Instagram, Twitter...)	30.1	38.6

Source: *Croatian tourism in numbers, Issue 1, 2015., p. 11. and Attitudes and Expenditures of Tourists in Croatia – TOMAS 2010.*, Institute for Tourism, Zagreb, 2010.

The table below shows the importance of online reservation from 2014. It shows exactly that the highest percentage of reservation make trough accommodation and transport and the lowest through renting services.

Table 2

Online reservation of services in summer 2014.

Service*	Percentage (%)
Accommodation	73,4
Transport	71,3
Excursions	50,0
Tickets for concerts, events, exhibitions etc.	39,8
Rent a car, rent a boat, rent a bicycle/motorcycle	40,4

Source: *Croatian tourism in numbers, Issue 1, 2015., p. 11.*

*Multiple response. Data for those who booked a service in advance.

The next table shows the accommodation facilities booking in destination from 2014. It shows that the highest percentage of booking accommodation was established direct with accommodation establishment.

Table 3

Accommodation facilities booking in destination

Booking channels	Percentage (%)
Directly with an accommodation establishment	42,5
Through a travel agency	26,1
No prior booking	27,7
Other	3,7
Total	100,0

Source: *Croatian tourism in numbers, Issue 1, 2015., p. 12.*

Globalization of tourism activities (Cooper & Wahab, 2001) and the wider application of ICT in tourism (Sigala 2007) commonly create new dynamic environment where innovation concept and its associated transformation in operative solutions applied in practice, has become of great importance (Garbin Praničević & Zovko, 2016, p. 41). All the data in all upper tables show the importance of using ICTs in tourism and that it will also have influence on the future development of the rural tourism in Zadar County, because nowadays modern tourists are well educated, informed and have accesses to global market to choose immediately what they want to search and then connect with the owner about details of accommodation, price, payment, etc. We can see from table nu. 2. that more than 70% of accommodation is booked online and that rural householders in Zadar County must implement more ICTs in their business in order to achieve better sales, better online visibility and better promotion.

4. SOME FACTS ON RURAL TOURISM IN CROATIA

The importance of rural tourism can be primarily seen in the very important interaction with agricultural production, the production of traditional products, presentation of heritage, traditional gastronomy and tourist services, i.e. in the utilisation of existing resources. In the Republic of Croatia, rural space takes up 91,6% of the total area, which makes an enormous potential for the development of rural tourism (Demonja, 2013). The development of rural tourism in Croatia intermittently started in the beginning of 1990s, when the Ministry of Tourism of the Republic of Croatia started the initiatives for its development, and the first activities included field surveys, gathering of information, training initiators and creating prerequisites for its development. The dynamics of stronger development of tourism in rural households and Croatian rural tourism in general started in 1998. During this year, 32 tourist rural households were registered in the Republic of Croatia (Mišćin & Mađer, 2008.), reference in (Demonja, 2014, p. 74-75). Tourist rural family households, besides tourism offer, also attract guests by design/ appearance, i.e. attractiveness of the households or buildings where guests are offered different catering and tourist services. In the case of the attractiveness of tourist rural family households, a crucial importance has traditional architecture and the manner of construction. Most of those surveyed classified their facilities in a group of traditional (indigenous) or partly traditional buildings (Demonja, 2014, p. 79).

5. METHODOLOGY

The research was carried out between June 25th till June 30th 2017. According to data received from State Administration Office in Zadar County, online analysis was conducted on rural tourist householders in the County of Zadar. Research included some basic ICTs like: having official web page and e-mail, presence on social media, google maps location and review on Web or TripAdvisor. This research was conducted in order to understand the importance for implementing ICTs in rural tourism in Zadar County and to evaluate its positive and negative impact.

6. USAGE OF ICTs IN THE RURAL TOURISM OF THE ZADAR COUNTY

ICT is used as a general term for diverse set of technologies which enable users to create, access, disseminate, store, manage, and communicate information in a digital format. ICT include computer hardware and software applications, encompassing: mobile phones, computers, network hardware, internet, telecommunication systems and so on, as well as the various related services and applications. In recent years there has been a groundswell of interest in how computers and internet can best be harnessed to improve social communication at different levels, which has propelled research and innovation

in the area of ICT and social digital media (SDM), leading to the emergence of what has come to be known as participatory technologies such as Web 2.0. Overall, although ICT and social media are conceptually different, they are intertwined and inextricably connected. And they converge when mobilized as resources for or employed as means in social change, a process that entails altering social patterns of a society, which can involve economic development, political progress, cultural change, social revolution, etc. (<http://wpmu.mah.se> (2017). ICT and Social Media: Definitional Issues and the Relationship, <http://wpmu.mah.se/nmict11group1/2011/10/30/2-ict-and-social-media-definitional-issues-and-the-relationship/>, accessed: 28.6.2017.)

In the table below the basic use of ICTs by rural tourist households were analysed according to data from the State Administration Office in Zadar County. The following table 4 shows the number of TRFH¹ in Zadar County. From this table it is evident that not only we have small usage of ICTs but we don't have even enough basic usage of ICTs by tourist rural family householders in Zadar County.

Table 4

Online analysis of the basic use of ICTs by stakeholders in rural tourism of the Zadar County

Nu.	Location	Type of accommodation	Type of service	Official web page	Official E-mail	Social media	Google maps location	TripAdvisor or Web review
1.	Lepuri	Rural house	Accommodation/ F&B ²	No	No	No	No	No
2.	Nadin	Excursion place - Winery	F&B	Yes	Yes	Facebook & YouTube	Yes	Both
3.	Smilčić	Rural house	Accommodation/ F&B	No	No	No	No	No
4.	Radešinovci	Konoba/Taverns	F&B	No	Yes	Facebook & Instagram	Yes	Both
5.	Polača	Konoba/Taverns/ Wine and Oil domestic product	F&B	Yes	Yes	Facebook, Instagram & YouTube	Yes	Both
6.	Zemunik	Excursion place	F&B	No	No	No	No	No
7.	Galovac	Excursion place	F&B	No	Yes	Facebook	Yes	Web review
8.	Jasenice	Konoba/Taverns	F&B	No	No	No	No	No
9.	Kruševo	Excursion place	F&B	No	No	No	No	No
10.	Obrovac	Restaurant/Rooms/ Camping	Accommodation/ F&B	No	Yes	No	Yes	No
11.	Poličnik	Excursion place	F&B	No	No	No	No	No
12.	Rava	Excursion place	F&B	No	No	No	No	No
13.	Rtina	Excursion place/ Camping	F&B/ Accommodation	No	No	No	No	No
14.	Sali	Excursion place	F&B	No	No	No	No	No
15.	Tribanj	Camping/ Konoba/ Taverns	Accommodation/ F&B	Yes	Yes	Facebook	Yes	No
16.	Ždrilo	Excursion place	F&B	No	No	No	No	No
17.	Galovac	Rooms	Accommodation	No	No	No	No	No
18.	Murvica	Rooms	Accommodation	No	No	No	No	No
19.	Seline	Room/Apartment	Accommodation	No	No	No	No	No
20.	Starigrad-Paklenica	Rooms	Accommodation	Yes	Yes	No	Yes	No

¹ Tourist rural family householders

² Food and Beverage

21.	Kolan	Konoba/Taverns/ Excursion place	F&B	No	No	Facebook	Yes	Both
22.	Povljana	Konoba/Taverns/ Excursion place	F&B	No	Yes	Facebook	No	Facebook review
23.	Gračac	Rooms/ Winery/ Konoba/Taverns	Accommodation/ F&B	No	No	Facebook	No	No
24.	Srb	Konoba/Taverns/ Excursion place	F&B	No	Yes	No	Yes	No
25.	Raštane Donje	Rooms/ Winery/ Konoba/Taverns	Accommodation/ F&B	No	No	Facebook	Yes	No
26.	Žižanj	Apartment	Accommodation	No	No	No	No	No
27.	Vrana	Rural house	Accommodation	No	No	No	No	No
28.	Banj	Camping	Accommodation	Yes	Yes	No	Yes	No

Source: State Administration Office in Zadar County, State data on June, 28th 2017., and research of the author.

From the table we can see that majority of rural households in Zadar County didn't implement even basics of ICTs in their business. Only 17.8% of rural households has official internet page, 35.7% of them has e-mail address and just 32% is present on social media like Facebook, Instagram or YouTube. If we take a look on google maps location category we can see that 39.2% has that useful help for tourists to find your place. Only 21.4% has TripAdvisor and/or other Google/Facebook review where tourists can write their impression about your place, service, accommodation and food. The results of this research paper implies a conclusion that tourist rural households need help of the relevant institutions. First of all institution such as Government and Ministry of Tourism need encourage with financial resources Tourist board of Zadar County, Rural Development Agency of Zadar County and Association for Rural Development "Ravnih kotari" founded in 2014., to create professional education courses and seminars about ICT use in rural tourism in order to increase and speed up low and slow implementation of ICTs among rural tourist householders in Zadar County. The good education start point was I.st Conference in Zadar County about rural tourism called: "Rural Development Potentials of the County of Zadar - Networking and Exchange of Experience" held in 2nd of March, 2017.. Secondly, all rural householders need to be part of new founded Association of Rural Tourism of Croatia in order to create a good perspective of common global market performance, implementing strategy, proposing and creating amendments to the law, collecting information on trends in rural tourism etc.

7. CONCLUSION

With the help of ICT rural areas can achieve better visibility, communication, integration into economic and tourism flows, marketing of products and services and finally better quality of life for the local population. Furthermore, ICTs allow reduction of the production costs, increased productivity, they boost efficiency and effectiveness and have positive impact on performance, growth, and development of new products (Barba-Sánchez, Martínez-Ruiz & Jiménez-Zarco, 2007; Consoli, 2012; Shanker, 2008) reference in (Sedmak, Planinc, Kociper, & Planinc, 2016, p. 340). Residents of rural areas are still not sufficiently affiliated to attend seminars and education and have little trust in their local self-government units leading to the lack of participation in projects

co-financed by the local, national and European levels. (Udruga Ravni Kotari (2017). Ruralna konferencija: Potencijali ruralnog razvoja Zadarske Županije, <http://udruga-ravni-kotari.hr/2017/02/23/ruralna-konferencija-potencijali-ruralnog-razvoja-zadarske-zupanije-umrezavanje-razmjena-iskustva> , accessed: 30.6.2017.). According to the results of the research we can say that majority of rural households in Zadar County didn't implement even basics of ICTs in their business. In this research despite the benefits of ICT for the promotion, sales, business and communication, householders located in rural areas have lower levels of ICT adoption like it was mentioned in the research (De Noronha Vaz, Morgan & Nijkamp, 2006). Also, different levels of technology have been adopted between those firms located in urban and rural locations like in the research (Reinoa, Frewa & Albacete-Sáezb, 2010). Unfortunately, this type of research paper was not found to compare it with the results of this research, but we can, regarding the results of the research, make partial conclusion, although this paper did not compare rural and urban area, that even in Zadar County householders in rural area tend not to use ICTs despite its numerous advantages.

Limitations of this study were only the basic elements of using ICT from one side, and from another that some data about names of the objects of the rural householders were missing in the table form State Administration Office in Zadar County, so one part of the analysis was carried out according to the name of the owner, street and place which maybe effected on the final result of the research, because of incomplete data. Future research can encompass a real level of ICT education among rural householder in Zadar County and suggestion how and where they want to learn it with special emphasis of their expectations.

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