ToSEE – Tourism in Southern and Eastern Europe, Vol. 4, pp. 349-363, 2017 D. Meštrović, N. Jakominić Marot: E-BOOK READING APPLICATIONS – INNOVATIVE ...

E-BOOK READING APPLICATIONS – INNOVATIVE TECHNOLOGY AS A RESPONSE TO GROWING CONSUMER PREFERENCES AND ITS IMPLICATIONS FOR TOURISM

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Abstract

Purpose – This paper aims to explore factors influencing users' attitudes and intention to use mobile e-book reading applications (Apps) on smartphones and tablets, as well as their perceptions of Apps' potential for enhancing tourists' experiences as an added value of Croatian tourist offer.

Design/methodology/approach – The study explores the relationships between respondents' digital devices ownership, their general information technology (IT) and e-books usage habits, the factors influencing their attitudes and intention to use a free mobile e-book reading Apps and to determine their perceptions on their potential added value. To achieve the aim of the study, authors extended the Technology Adoption Model with the Innovation Diffusion Theory, Theory of Planned Behaviour, convenience, availability and perception of mobile e-book reading Apps as a value-added service. The quantitative data is collected through a structured self-administered online questionnaire distributed by e-mail to undergraduate and graduate students.

Findings – The study confirms positive correlation between awareness, convenience, compatibility, interest, adoption intention and respondents' age, education level, digital devices ownership, their general IT and e-books usage habits and their perceptions of mobile e-book reading Apps that enhance tourists' experiences as a potential added value of Croatian tourist offer.

Originality/value – While the study is limited in its scope, it contributes to the growing literature on mobile Apps in tourism. Considering the lack of previous similar studies, it is intended to stimulate future research that could provide deeper understanding of the multiple contribution of mobile Apps, which could benefit Croatia as a tourist destination and all its stakeholders. **Keywords** e-book, mobile reading applications, mobile devices, tourism

INTRODUCTION

The wireless and mobile technology incorporated into mobile devices has an increasing impact on everyday life. Mobile technology enables the consumers to carry along their increasingly powerful mobile devices and use them to communicate, find information and organise their lives. Technological advances also change consumers' reading practice and experiences.

Mobile technology facilitates the new way of travelling for "digital tourists" (Palumbo et al., 2014, 35), whose travelling experience is "extended by the information and entertainment provided by their new "travel buddy" - the mobile technology device" (Palumbo et al., 2014, 35).

The purpose of this paper is to explore the factors influencing users' attitudes and intention to use mobile e-book reading applications (Apps) on smartphones and tablets, as well as their perceptions of Apps' potential for enhancing tourists' experiences as an added value of Croatian tourist offer. To achieve the aim of the study, authors extended the Technology Adoption Model with the Innovation Diffusion Theory, Theory of Planned Behaviour, convenience, availability and perception of mobile e-book reading App as a value-added service.

This paper is structured as follows: after the review of relevant literature and hypotheses suggesting the relationship between value dimensions and users' awareness, interest, intention to use and perception of free e-book reading Apps as a value-added service are proposed, a research approach is addressed, followed by the research results, discussion and conclusion.

1. LITERATURE REVIEW

With the growing emergence and adoption of mobile devices and continuous expansion of wireless and mobile connectivity, mobile services and applications have gained general acceptance (Palumbo et al., 2014, 34) and the use of mobile Apps on smartphones and tablets for reading e-books has become a new trend and a leading form of media consumption (Brown, 2001). This has been recognized and exploited by many industries, including tourism.

Wang et al. (2012) found that the use of mobile technology in everyday life extends to the travel context. Due to its capability to link people to remote information sources, exchange location-based data and social information, it became an irreplaceable and "powerful tool for tourists" (Dickinson et al., 2014). Owing to the usefulness and the rapid diffusion of mobile technology in the tourism context, a wide range of mobile Apps emerged: travel and transport related Apps, tourist-specific Apps, socialnetworking Apps and Apps extending social networking to the information tourists might find useful (Dickinson et al., 2014). Mobile devices enable their users to install and use the Apps based on their interests, needs and preferences. Accordingly, smartphones and mobile devices play an important role in mediating the tourist experience since tourists use mobile technology "before, during, and after travel" (Wang et al., 2012). In order to take the advantage and to attract this new kind of empowered tourist, tourism industry should develop a high-quality offer comprising of a modern and efficient infrastructure that facilitates mobility and accessibility (Ferri et al., 2014). Palumbo et al. (2014, 59) proposed a new model of "Smart Tourism" that should emerge as an innovative view of tourism, supported by the new digital technologies that can improve and simplify the whole tourist experience and therefore have a great potential for the tourism industry.

Tourism industry is among the most service-oriented industries in the world and amongst the most prospering industries. Due to the increasingly competitive tourism marketplace, customer oriented products and services are of greatest importance to achieve and obtain the competitive advantage (Zeithaml, 1988; Woodruf, 1997) and adding extra value to them is one of the key concepts of successful differentiation (Portolan, 2015). As a concept, marketing added value has a widespread acceptance among authors who argue that the basic products and services can be upgraded by extending them with differentiated forms of values (Gilmore et al., 1999) which have positive impact on the competitive advantage in the differentiation process (Portolan, 2015). The research of perceived value in tourism industry is of recent date, still not significantly present in scientific literature. Bojanić (1996) and Jayanti and Gosh (1996) are amongst pioneers in the research of perceived value in tourism and specifically in the hotel industry, who found that value plays a key role for customers in tourism industry.

According to Chen and Tsou (2007), information technology (IT) represents the key lever in the process of achieving competitive advantage and because of this, the usage of IT has accomplished an immense growth in recent decades. The empirical and theoretical literature concerning perceived value-added services and mobile Apps is growing in recent times. However, evidence of the willingness to accept and use e-book reading Apps and respondents' perspectives of their potential to enhance tourists' experiences as well as their potential as a value-added service of the tourism offer remains scarce. According to the authors' best knowledge, there is still only a limited understanding of factors influencing users' attitudes and willingness to use e-book reading Apps.

The most frequent marketers' questions relate to defining the value of products and services in order to satisfy the consumers and to conquer the competitors (Portolan, 2015). Berry, Parasuraman and Zeithaml (1988) and Sharma and Lambert (1994) underlined the importance of customer service and service quality. Value-added services, according to Lexhagen and Nysveen (2001) and Nysveen and Lexhagen (2001), can be defined as services providing added value to the main product desired. If customers perceive a high degree of value-added services they prefer, they will perceive high customer value (Nysveen, Methlie and Pedersen, 2003). Wood (1996) argues that added value can be considered as consumer's benefit, rather than a certain amount of money, while Reilly (2003) claims that the added value has both quantitative and qualitative characteristics that create customers' positive feelings about products and services. In relation to competitors, superiority can be achieved by maximizing the customers' perceived value and perceived added value, which Nilson (1992) refers as the added value marketing. Portolan (2015) defines the perceived added value as the positive difference between perceived benefits (i.e. material, non-material and quasi components of tourism products) and perceived sacrifices (i.e. total purchase cost). Added value contributes the process of achievement, retention and enhancement of tourist destination's competitive advantage observed in the context of an integrated tourism product (Meler, 1976; 2000; 2004; Meler, Cerović and Magaš, 2005). Valueadded services can offer superior value to customers and therefore should be highly relevant in tourism industry (Nysveen, Methlie and Pedersen, 2003). Thus, it is of great importance for tourism service providers to determine what kind of value-added services the customers desire and prefer and to implement them by extending the tourist offer, in order to provide their customers a greater value.

In marketing literature, during the last decades, various theories have been proposed to examine the factors impacting the adoption or intention to use of a new technology. The most acknowledged among them in scientific literature are the Innovation Diffusion Theory (Rogers, 1962), the Technology Acceptance Model (Davis, 1989) and the Theory of Planned Behaviour (Ajzen, 1991).

1.1. Innovation Diffusion Theory

Everett Rogers (1962) proposed the Innovation Diffusion Theory (IDT) explaining how, why and at what rate the new technology and new ideas spread through societies and cultures, defining innovation as "an idea, practice or object that is perceived as new by an individual or another unit of adoption" (Rogers, 2003, 12), and diffusion as "the process by which an innovation is communicated through certain channels over time among the members of a social system" (Rogers, 2003, 35). Prior studies found certain demographic variables linked to innovation adoption, thus the first hypothesis of the study addresses the demographic variables of age, education and gender with respect to dependent variables:

H1: Younger, more educated, female respondents enrolled in the ICT study programme area show higher awareness, interest, intention to use and perception of free e-book reading App as a value-added service.

Since various prior studies on the adoption of innovations have found a positive relationship between new media adoption and the ownership of other media innovations (Atkin et al., 1998; Jeffres and Atkin, 1996; Reagan, 1989; Jung et al., 2011), the current study assumed that the ownership of digital devices and their usage during their owners' travel and vacation, along with past e-book experience (Chu, 2003) will play a role in e-book reading App awareness, interest, intention to use and perception of free e-book reading App as a value-added service. Accordingly, the following hypotheses were posited:

H2: Respondents, owners of more digital devices, show higher awareness, interest, intention to use and perception of free e-book reading App as a value-added service.

H3: Respondents who carry along more digital devices while travelling and on vacation, use a wider range of internet connection sources and express higher importance of availability of local free Wi-Fi show higher awareness, interest, intention to use and perception of free e-book reading App as a value-added service.

H4: Respondents' past e-books experience and usage habits (i.e. devices used for e-books and sources of e-books used) relate positively to awareness, interest, intention to use and perception of free e-book reading App as a value-added service.

Rogers (2003) also defined five characteristics of innovations that influence an individual's decision to adopt or to reject an innovation, which include relative advantage, compatibility, complexity, trialability and observability. Relative advantage, defined as the degree to which an innovation is considered to be more favourable than the existing practice (Rogers, 2003) is a concept found by researchers to be one of the best predictors of the adoption of an innovation. In some diffusion research, relative advantage and compatibility were viewed as similar, although they are conceptually different. Compatibility refers to the degree to which an innovation is perceived as being consistent with the potential users' existing values, prior experiences and needs (Rogers, 2003). Accordingly, a lack of compatibility in IT with individual's needs may negatively affect their IT use (McKenzie, 2001; Sherry, 1997). Complexity is defined as users' perceived level of difficulty in understanding innovations and their ease of use (Rogers, 2003). Opposite to the other attributes, complexity of an innovation is negatively correlated with the adoption rate, representing a limitation in its adoption. "Trialability refers to the degree to which innovations may be tested on a limited basis" (Lee, Hsieh and Hsu, 2011, 126) and it's positively correlated with the innovation adoption rate (Rogers, 2003). The last characteristic of innovations is observability, explained as the "degree to which the results of innovations can be visible by other people" (Lee, Hsieh and Hsu, 2011, 126). Like relative advantage, compatibility and trialability, but opposite to complexity, the observability is positively correlated with the innovation adoption rate (Rogers, 2003).

1.2. Technology Adoption Model

An alternative theory in the IT adoption literature, introduced as the Technology Adoption Model (TAM), also received a lot of theoretical and empirical support in scientific literature (Venkatesh and Davis, 2000; Tobbin, 2011; Lee, Hsieh and Hsu, 2011). Adapted from Fishbein's and Ajzen's (1975) and Ajzen's and Fishbein's (1980), Theory of Reasoned Action (TRA) by combining the components of perceived usefulness and easiness from Rogers' (1962) IDT and attitude, behavioural intention, and actual behaviours from Ajzen's (1991) Theory of Planned Behaviour (TPB), TAM is a widely accepted successful research model. It explains how the users accept and use IT (Davis, 1989), suggesting that perceived usefulness and perceived ease of use are two main factors influencing users' decision about how and when they will use a new technology presented to them. The perceived usefulness (PU) was defined by Davis as "the degree to which a person believes that using a particular system would enhance his or her job performance" (Davis, 1989, 320), and the perceived ease-of-use (PEOU) was defined as "the degree to which a person believes that using a particular system would be free from effort" (Davis, 1989, 320). Lederer et al. (2000) and Venkatesh and Davis (1996) confirmed that both PU and PEOU are useful in the process of prediction of the IT intention to use. Straub, Limayem and Karahanna-Evaristo (1995) found the relationship between attitude and intention to use not significant, so Szajna (1996) removed the attitude variable from TAM. Venkatesh (2000) found that omitting the attitude variable contributes to better understanding of the relationship between PU, PEOU and intention to use. Based upon the preceding research, the following hypotheses were proposed:

H5: Respondents who perceive higher innovation attributes of e-book reading Apps in its relative advantage, compatibility, convenience and availability show higher level of awareness, interest, intention to use and perception of free e-book reading App as a value-added service.

H6: Respondents who perceive high level of e-book reading Apps' complexity and trialability show lower level of awareness, interest, intention to use free e-book reading Apps and perception of free e-book reading App as a value-added service.

Both the IDT and TAM have been studied, adapted, extended or upgraded with other constructs. Agarwal and Prasad (1998) and Venkatesh et al. (2003) found that PU and PEOU constructs closely relate to IDT's concepts of "relative advantage" and "complexity". Accordingly, Wu and Wang (2005) and Lee, Hsieh and Hsu (2011) argued that TAM and IDT are similar and complementary among some factors and that each of them on its own cannot adequately explain adoption or rejection of new technology, suggesting that the integration of these two theories provides a stronger model than each of them standing alone (Wu and Wang, 2005).

In this context, the question about factors influencing users' attitudes and willingness to use e-book reading Apps has emerged together with the question whether they perceive and cherish them as value-added service which extends the whole tourist experience.

2. METHODOLOGY

To achieve the aim of this paper, a framework was developed based on the extensive literature review, to explore respondents' digital devices ownership, their general IT and e-books usage habits, the factors influencing their attitudes and willingness to use free e-book reading Apps. The framework is also used to determine their perceptions of its potential benefits for tourists coming to Croatia. Hence, this study uses theories explaining technology acceptance that might be adapted to e-book reading Apps acceptance. Considering this approach, this study uses the TAM (Davis, 1989) as the starting point for the user acceptance of e-book reading Apps and expands it by including the IDT (Rogers, 2003), the TPB (Ajzen, 1991), convenience and availability proposed by Berry, Seiders and Grewal (2002) and perception of value-added service adapted from Portolan (2015), synthesised in the mobile e-book reading Apps context.

During the months of January and February 2017, data were collected through a pretested structured self-administered online questionnaire using Google Docs Forms distributed by e-mail to students of the University of Rijeka Departments. Convenience sampling was used to gather data because previous research suggested that university students are considered to be suitable samples for studies involving ICT use because they tend to be frequent users (Pornsakulvanich, Haridakis and Rubin, 2008) and a population with highest information literacy rate. Additionally, students as actual and potential tourists, belong to the young tourist segment which is recognized as an important and "increasingly growing segment of the global travel market" (Richards and Wilson, 2003, 6) that "represents the market of the future" (Vukić, Kuzmanović and Stanković, 2014, 1). Amongst 922 students currently enrolled and surveyed in this study, 279 usable questionnaires returned (a response rate of 30.26%), which can be considered as an adequate sample size according to scale developers in the marketing area (Parasuraman, Zeithaml and Berry, 1988; Marković, 2006) who used a sample size of 200 to analyse group data.

For the data analysis, the Statistical Package for Social Sciences (SPSS) was used. After confirming the reliability assessed by Cronbach's Alpha, descriptive statistics was used to examine the respondents' demographic profile.

2.1. Sampling

The current study examined the demographic variables of gender, age, study programme level and study programme area. From 279 respondents in this study, 203 (72.8%) are female and 76 (27.2%) are male. 205 respondents are students enrolled in undergraduate study programmes (73.5%) and 74 are enrolled in graduate study programmes (26.5%). The calculated mean age of the respondents is 22. Among the total number of respondents, 120 are students of ICT and majority of respondents (56.9%) are enrolled in other study programmes (i.e. biotechnology, mathematics and physics).

2.2. Measurement and scale reliability

A quantitative approach was used in this research. A 29-item online self-administered questionnaire based on the extensive literature review was created to explore respondents' digital devices ownership, their general and on-travel mobile internet usage habits, e-books usage habits and attitudes, the factors influencing their attitudes and willingness to use free e-book reading Apps, as well as to determine their perceptions of potential benefits it could represent for tourists coming to Croatia. In order to confirm the content validity of the scales, it was decided to use and adapt selected items from previous inventories.

The measure of the degree of digital devices ownership was referenced and adapted from Jung et al. (2011), asking respondents whether they own any of the four digital devices relevant to e-books usage: smartphone, laptop or desktop computer, tablet computer and e-book reader. Accordingly, respondents' usage of digital devices and internet connectivity habits while travelling and on vacation were assessed by three items - one adapted from Jung et al. (2011) and two added by authors.

Digital devices ownership variables and digital devices carrying along when travelling were coded as dummies, with 0 for "no" and 1 for "yes", and the individual's aggregate score, between 0 and 4, was used to quantify respondent's degree of digital devices ownership. Internet connectivity habits while travelling and on vacation were assessed by three items added by authors, using a five-point Likert-type scale anchored by 1 (strongly disagree) and 5 (strongly agree). The attitude about the importance of availability of free Wi-Fi while travelling or on vacation was measured using a five-

point Likert-type scale ranged from not important (1) to very important (5), added by authors.

To assess respondents' e-books usage habits, three adapted items were taken from Chu (2003). Perceived relative e-book advantages adapted from Chu (2003), were to be ranked by respondents and were coded as dummies, with 0 for "no" and 1 for "yes", and the individual's aggregate score, between 0 and 11, was used to assess e-book advantages. Three items measuring compatibility were derived from prior research from Moore and Benbasat (1991) and four items measuring the dimension of convenience were adapted from Berry, Seiders and Grewal (2002), Mathwick, Malhotra and Rigdon (2001) and Srinivasan (2003). The dimension of complexity adapted from Chu (2003) was assessed by 8 items that were coded as dummies, with 0 for "no" and 1 for "yes", and the individual's aggregate score, between 0 and 8, was used to assess the dimension of complexity or perceived e-book disadvantages. Five items for measuring trialability were derived from Chu (2003) and availability was assessed by one item from previous inventories of Berry, Seiders and Grewal (2002), Mathwick, Malhotra and Rigdon (2001) and Srinivasan (2003).

Finally, the five-point Likert-type scale ranged from strongly disagree (1) to strongly agree (5) was used to score the adoption decision variables (i.e. awareness, interest and intention to use) adapted from Dupagne (1999), Ajzen and Fishbein (1980), Davis, Bagozzi and Warshaw (1989) and Hsu, Lu and Hsu (2007) and the respondents' perceptions of importance of the free e-book reading App as a value-added service of Croatian tourist offer were gathered by an item added by authors using a five-point Likert-type scale anchored by 1 (not important) and 5 (very important).

Cronbach's alpha value for the scale was 0.79 and demonstrated its very good reliability according to DeVellis (2001). All subscales achieved Cronbach's alpha values greater than 0.70, except the construct of relative advantage (i.e. 0.56), but it was decided to retain the item in the analysis since its item-to-total correlations exceeded the value of 0.50 and thus to interpret and use it considering its limitations (Hair et al., 2006).

3. RESULTS

The hypotheses were tested using bivariate zero-order correlations. Hierarchical multiple regression procedures were run to explore the relationship between dependent variables, adoption decision variables (i.e. awareness, interest and intention to use) and variable of perception of free e-book reading App as a value-added service. The results shown in Table 1 demonstrate that most of the hypotheses were either partially or fully supported.

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raule r. correlations	Table	1:	Correlations
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		-	Intention to	Perception of value-added			
Variables	Awareness	Interest	use	service			
Demographics							
Gender ^a	0.176**	-0.258**	-0.182**	0.066			
Age	-0.056	0.131*	0.102	-0.080			
Study programme level ^b	-0.177**	-0.100	0.002	-0.046			
Study programme area ^c	-0.231**	-0.117	-0.244**	-0.390**			
Digital devices ownership	0.007	0.242**	0.139*	0.163**			
IT travel and vacation behaviour							
Digital devices carrying	0.024	0.106	0.108	-0.081			
along	0.024	0.100	0.108	-0.081			
Internet connection habits	-0.076	-0.039	-0.062	-0.110			
Importance of free local Wi-fi availability	0.057	0.026	0.119*	-0.047			
E-books usage habits							
E-books used	0.293**	0.335**	0.363**	0.444^{**}			
E-books used on devices	0.256**	0.349**	0.376**	0.289^{**}			
E-books sources	0.374**	0.416**	0.592**	0.418^{**}			
Perceived Innovation Attributes							
Relative advantage	0.178^{**}	0.433**	0.528**	0.418^{**}			
Compatibility	0.319**	0.296**	0.407**	0.498^{**}			
Convenience	0.340**	0.305**	0.550**	0.545^{**}			
Complexity	-0.302**	-0.179**	-0.363**	-0.375**			
Trialability	-0.275**	-0.171**	-0.264**	-0.340**			
Availability	0.155**	0.625**	0.719**	0.465^{**}			

^a Gender: 0 = male, 1 = female

^b Study programme level: 0 = undergraduate, 1 = graduate

^c Study programme area: 0 = other, 1 = ICT

*p < 0.05; **p < 0.01

Source: Authors

As shown in Table 1, the relationship between demographic variables, adoption variables and perception of value-added service, posited by first hypothesis (H1), was partially supported. Specifically, while gender did not relate to perception of value-added service, it did relate positively to awareness and negatively to both interest and intention to use. Age related positively only to the interest variable, but did not relate to awareness, intention to use and to perception of value-added service. Study programme level as a level of education related negatively only to the awareness variable and did not correlate to any other variables, while study programme area did not correlate to awareness, but did correlate to interest, intention to use and perception of value-added service.

Hypothesis 2 (H2) that concerns the relationship between the degree of digital devices ownership and e-book reading Apps was partially supported. Respondents who owned more digital devices showed a higher level of e-book reading Apps interest, intention to use and perception of its value-added service. On the other hand, digital devices ownership did not show correlation to awareness.

Regarding respondents' habits and behaviour during travel and vacation (i.e. digital devices carrying along, internet connection habits and importance of availability of local free Wi-Fi) addressed in hypothesis 3 (H3), only perception of the importance of the availability of free local Wi-Fi related positively to intention to use. There was no significant relationship between digital devices carrying along while travelling or on vacation and internet connection habits and awareness, interest, intention to use e-book reading Apps and perception of free e-book reading Apps as a value-added service. Thus, H3 was only partially supported.

Since respondents' past e-books experience and usage habits (i.e. devices used for ebooks and sources of e-books used) addressed in hypothesis 4 (H4) all relate positively to e-book reading App awareness, interest, intention to use and perception of free ebook reading App as a value-added service, the hypothesis H4 was fully supported.

The perceived innovation attributes of free e-book reading Apps concerned in fifth hypothesis (H5), namely: relative advantage, compatibility, convenience and availability were all found to relate significantly to e-book reading App awareness, interest, intention to use and perception of free e-book reading Apps as a value-added service. The respondents who perceive e-book reading Apps relatively advantageous, compatible, convenient and available, showed higher levels of e-book reading App awareness, interest, intention to use and perception of free e-book reading Apps as a value-added service. Accordingly, the respondents perceiving e-book reading App less advantageous, compatible, convenient and available, showed lower levels of e-book reading App sas a value-added service. On the other hand, perceived e-book reading Apps' complexity to use and their trialability concerned in sixth hypothesis (H6), resulted in negative correlation to respondents' e-book reading App awareness, interest, intention to use and perception of free e-book reading Apps' complexity to use and their trialability concerned in sixth hypothesis (H6), resulted in negative correlation to respondents' e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading Apps' complexity to use and their trialability concerned in sixth hypothesis (H6), resulted in negative correlation to respondents' e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and perception of free e-book reading App awareness, interest, intention to use and percepti

Overall, the variables relating to perceived innovation attributes resulted in higher correlations with the three adoption variables than any of the other variable blocks. Availability resulted in highest correlation both with intention to use and interest, variables of convenience with the variables of awareness and perception of e-book reading App as a value-added service. Meanwhile, e-books usage habits variables all positively correlated to the variables of awareness, interest, intention to use and perception of e-book reading App as a value-added service. Since the variance inflation factor values were significantly lower than 10.0, it was found that there were no multicollinearity issues (Hair et al., 2006).

DISCUSSION

The findings of the current study partially affirmed many technology and innovation adoption studies in regard to demographic variables, digital technology ownership and perceived innovation attributes. Almost all variables, except IT travel and vacation behaviour are related to e-book reading Apps awareness, interest, and intention to use. According to the respondents' demographic characteristics, older respondents showed higher interest in using mobile e-book reading Apps. Female respondents showed higher awareness and lower interest and intention to use than male respondents. Contrary to the expectations, ICT students did not show neither higher awareness, intention to use nor perception of e-book reading Apps as a value-added service than students in other study areas. Respondents who own more digital devices showed higher interest, intention to use and perception of mobile e-book reading Apps as a value-added service. Apps awareness did not relate to the degree of digital devices ownership, which leads to the question if the availability of the given App was appropriately advertised through adequate media sources. Respondents who find the availability of free local Wi-Fi rather important expressed higher intentions to use mobile e-book reading Apps. The results indicate that respondents' past e-books experience and usage habits and their perception of advantages and innovation attributes of e-book reading Apps relate to their awareness, interest, intention to use and perception of mobile e-book reading Apps as a value-added service.

The respondents perceiving e-book reading Apps less advantageous, compatible, convenient and available, showed lower levels of awareness, interest, intention to use and perception of e-book reading Apps as a value-added service. Thus, the respondents who use free Wi-Fi networks and used e-books on different devices and from a wider range of e-book sources in the past, who perceive e-book reading Apps advantageous, compatible, convenient and available, are more volatile to explore and take advantage of this innovation and have higher perceptions of mobile e-book reading Apps as a value-added service.

CONCLUSION

The importance of implementation of modern innovative technologies in tourism is undeniable since they facilitate and contribute to the process of achievement of competitive advantage. With the emergence and growing adoption of mobile devices, the use of mobile Apps on smartphones and tablets for reading e-books has become a new reading trend. Although the literature concerning mobile e-book reading Apps is growing in recent times, few empirical studies have examined the factors affecting their adoption and users' perspectives of e-book reading Apps as value-added services of the tourist offer. Expanding the framework of TAM with the IDT, TPB, convenience, availability and perception of mobile e-book reading Apps as a value-added service, the authors conducted an online survey among students of the Departments of the University of Rijeka to explore respondents' digital devices ownership, their general IT and e-books usage habits, the factors influencing their attitudes and willingness to use e-book reading Apps and to determine their perceptions of mobile e-book reading Apps that enhance tourists' experiences as a potential added value to Croatian tourist offer.

The study is limited in its scope, but is intended to stimulate future empirical research that could provide better understanding of attitudes toward mobile e-book reading Apps and their potential to extend the tourism offer by providing the tourists a more immersive experience, which could benefit Croatia as a tourist destination and all its stakeholders. Since the mobile devices usage and mobile advertising are expected to

grow in the future, this study is believed to be useful to tourism industry marketers and mobile Apps developers to take advantage of promotion of products and services by incorporating tourism-related ads in mobile Apps and reach customers in a more personal way in a mobile environment, as well as to researchers interested in testing the related theories.

The current study is limited in its scope in terms of applying the results to general populations, since convenience sampling of university students was used to gather the data. Thus, the interpretation of the results should be interpreted and used considering its limitations. Further research should include tourists and other respondents as well, and should study the impact of socio-demographic variables not considered in the current study, such as occupation, income, marital status as well as education level, and should investigate the cultural or market-development factors that might play a role in mobile Apps adoption.

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