

Web 2.0 and tourism

Gergely Ráthonyi¹, László Várallyai²

¹ University of Debrecen, Centre for Agricultural and Applied Economic Sciences, Faculty of Applied Economics and Rural Development, Institute of Economic Analytical Methodology and Applied Informatics
H-4032 Debrecen, Böszörményi út 138.
e-mail: rathonyi@agr.unideb.hu

² University of Debrecen, Centre for Agricultural and Applied Economic Sciences, Faculty of Applied Economics and Rural Development, Institute of Economic Analytical Methodology and Applied Informatics
H-4032 Debrecen, Böszörményi út 138.
e-mail: varal@agr.unideb.hu

Abstract. Development of ICTs and the expansion of the Internet have changed dramatically in the past few decades. Platform of tourism increasingly get to the Internet nowadays which is vitally important because tourism is an information-intense industry. The aim of this study is to show a brief summary of the significance of the Hungarian tourism with the help of important statistics. Due to an online survey this paper discusses the knowledge of the 18-25 age group students at our University in connection with Web 2.0 applications and also reveals which information sources are the most important during the travel decision-making process of the students. Future aim of the research is to examine the use and adoption of Web 2.0 by tourists and tourism related organisations in Hungary, because there are only a few researches dealing with Hungarian travellers' and tourism related companies' attitudes of using this new technology.

Keywords: Hungarian tourism, ICTs, Internet, Web 2.0

1 Introduction

Due to the industrial revolutions different inventions have appeared such as steam-engine (1769 Watt), steam-railway (1814 Stephenson), automobile (1885 Benz) and plane (1903 Wright brothers) which have contributed to the evolution of mass tourism. Undisputedly, tourism is one of the most dynamically and spectacularly developing economic sectors.

Tourism has developed into one of the world's most important industrial sectors, growing faster than the world's gross domestic product for the last 30 years. In the past years – except the drop caused by recession – tourism turned into one of the pulsive industry in Hungary. Thereto it maintains, we make our guests desire

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to come back to Hungary and make others to visit Hungary too, we – who live here – should provide for tourists appropriate level of services. Among the services one of the most important areas is the information service.

Development of Information and Communication Technologies (ICTs) and the expansion of the Internet penetration have changed dramatically in the past few decades. Platform of tourism increasingly get to the Internet nowadays. Internet has fundamentally altered the tourism-related information search and destination selection process. In consequence of these changes new technologies have been adopted into the tourism industry (Geographical Information Systems (GIS), Internet, web technology, mobile technology) and this trend is likely to continue into the future. In recent years social media websites and searching have become an increasingly dominant mode in travellers' use of Internet.

Because of the fact that tourism can be considered as one of the most profitable sectors of the Hungarian economy it is vitally important to make Hungary much more attractive with the help of developed ICTs.

2 Tourism of Hungary

A decisive index of successfulness in tourism is the number of tourists' arrivals. According to World Tourism Organization (UNWTO – specialized agency of United Nations) assessment the number of international arrivals increased from 534 million to 935 million arrivals during the period from 1995 to 2010. The incomes deriving from the commerce also increase as a result of the growing number of tourist arrivals, which is reflected best by the indicators of the GDP. According to World Travel and Tourism Councils' prediction (WTTC) that travel and tourism sector's contribution to the GDP will be 9.6% in 2011 and the contribution to the labour market will be 260 million people (8.4% of the whole employment) in the same year (WTTC, 2011). In Hungary this sector contribution to the GDP will 11% and the contribution to the labour market will 430 000 according to the WTTC's prediction for 2011. Forecasts say this tendency will continue in the future, together with the number of tourists, the volume of their spending, the number of people employed by the tourism industry and also the role of tourism in the economy.

Next table contains the most important statistics of Hungarian tourism in connection with the tourist's arrivals and the financial balance of this sector (KSH, 2010).

Table 1. Main Data on Hungarian Tourism

Main Data on Hungarian Tourism			
	2009	2010	2010/2009
Arrivals and Guest Nights at Commercial Accommodation			
Domestic			
Arrivals (000s)	3923	3918	-0.5%
Guest nights (000s)	9490	9672	+1.6%
Avg length of stay (nights)	2.4	2.5	+2.1%

International			
Arrivals (000s)	3228	3386	+4.8%
Guest nights (000s)	9220	9358	+1.4%
Avg length of stay (nights)	2.9	2.8	-3.3%
Balance of Tourism (January–September)			
Receipts (million EUR)	3.162	3.170	+0.3%
Expenditure (million EUR)	2.060	1.738	-15.6%
Balance (million EUR)	1.102	1.432	+29.9%

Last time the satellite accounts of tourism (SAT) were made of 2007 in Hungary. According to them the education of typical sector in tourism correlated to that of national economy was 5.3%, their gross added value meant 5.9% contribution to the whole added value of national economy. (KSH, 2010) Tourism has been one of the most significantly developing sectors of economy since 2000-2001. In the globalizing world economy tourism is such a sector that can be competitive at international level as the facilities of our country suit to the products of tourism for example:

- One of Hungary's top tourist destinations is Lake Balaton, the largest freshwater lake in Central Europe, with a number of 1.2 million visitors in 2008.
- The most visited region is Budapest, the Hungarian capital attracted 3.61 million visitors in 2008.
- Hungary was the world's 26th most visited country in 2007. The Hungarian spa culture is world-famous, with thermal baths of all sorts and over 50 spa hotels located in many towns.

As we see tourism plays an important role in the country, so it is essential that developed ICTs (web 2.0) be used in tourism sector. Unfortunately these types of researches are not available in Hungary so it is hard to give an up-to-date example. Next I represent the Hungarian Internet penetration. Then we give examples some of the most popular social media and the concept of web 2.0 applications.

3 Usage of Internet

Come to a travelling decision and organise a trip tourists have to collect a lot of information to be able to make their best decision. Information may derive from the Internet or other conventional media – such as prospects, brochures, newspapers, guidebooks, radio, television or travel agencies. According to several Hungarian (Gyarmatiné and Rényi, 2009; Grotte Judit, 2010) and other foreign (Buhalis and Jun, 2011; Lo et al., 2010; Xiang and Gretzel, 2010) researches results clearly support the primary importance of Internet in organising a trip. Most important travel-related searching sources are the online search engines, official websites of the destinations and travel blogs and forums.

Currently, there are 2 billion Internet users in the world which is three times greater than in 2000. In Europe (EU-27) Internet access is about 60 % of the whole population that is naturally meant to be an average (Internet World Stats, 2009).

According to recent findings of the NRC Informationline Company, computer and Internet access at Hungarians' home have produced significant growth within the last five years – 55% of the households has computer and 51% of the households is connected to the Internet in Hungary in 2010. In Hungary the Internet penetration is 62% in 2010 (Internet World Stats, 2010). The Internet is still considered a 'youngish' medium which is supported by the fact that while 84% of people between 15 and 24 years of age uses the Internet regularly, in the 25-34 age group the proportion is merely 67% as we see in the following figure (Figure 1.). In the over-50 age group the ratio is significantly lower than the average – the penetration is only 21% (NRC, 2010).

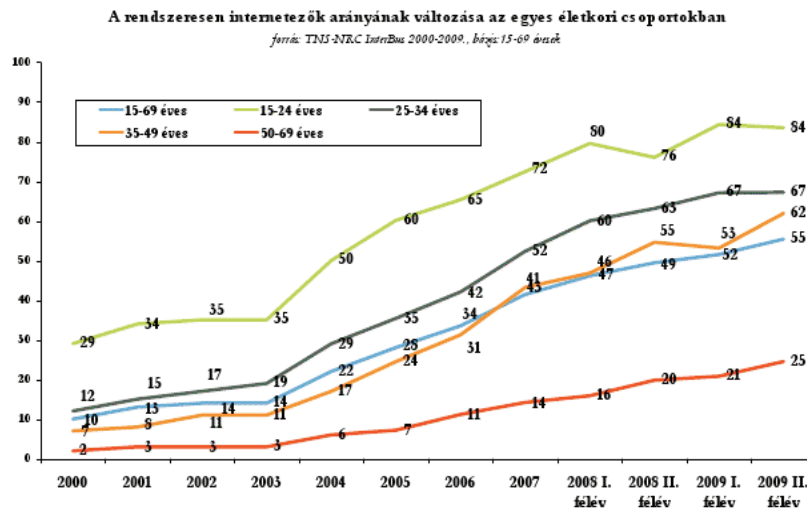


Figure 1. Proportion of regularly internet users in different age groups

4 The Web 2.0

Tourism (travel and holiday) is one of the most costly items purchased regularly by households around the world, and it signifies a remarkable proportion of households' annual budget. Internet has changed tourism consumer behaviour dramatically. Customers search travel-related information and make online purchases (online air-ticket bookings, online room reservations etc.) themselves instead of asking travel agencies to take on this process for them.

The evolution of the Internet, as well as the constant evolution of society has led to conceive new forms of communication, thus, new ways of media. Traditional forms of media are not anymore effective, because consumer has changed. The new

consumer is more sophisticated so he needs and requires more specialized media where he can take information from. This new type of media is called Social Media (Buhalis and Law, 2008; Shanker, 2008).

In my opinion, Kaplan and Haenlein (2010) give an excellent brief definition for this term: social media as a group of Internet-based applications that build on the concept of Web 2.0, which allows the creation and exchange of user-created content (video clips, photos, texts etc.). Web 2.0 is providing consumers with countless tools to find, and design, not just the cheapest trip, but the perfect trip. Before dealing with these media we should clarify the concept of Web 2.0. According to the Wikipedia, Web 2.0 allows users to interact and collaborate with each other in a social media dialogue as creators of user-generated content in a virtual community. Web 2.0 describes the second generation of web-based services which are interactive, context-rich, and easy to use (O'Really, T. 2007).

Travel 2.0 is a term that represents the concept of Web 2.0 that applies the world's largest industry: travel and tourism. Tourism related topics are among the most popular issues in this environment, for instance, travel plans, destinations and hotels reviews, tourist guides, and suggestions for restaurants or exhibitions.

The following figure shows the most important platforms of social media, which are encourage users and travellers to post and share their travel experiences, comments, opinions to serve as a source of information for other users (Xiang and Gretzel, 2009).



Figure 2. Key social media platforms

From this figure, we try to highlighted, described and analysed the main platforms (blogs, social networks, video sharing and photo sharing) which are the major sources of information for tourists.

4.1 Blogs and Forums

Web log, blog or blogging is a type of website/platform formed by entries or posts, which are made in journal style which often included photos or link and displayed in reverse chronological order. A typical blog combines text, images, links to other blogs, Web pages, and media related to its topic. For example, very well known blogging platforms for tourists are the web pages of Igougo and Tripadvisor (Wikipedia, Camilleri et al., 2007; Nagy, 2010).

Forums are those platforms where users can write short messages about a topic of interest and wait for other user's answers.

Gretzel and Yoo (2008) have shown that "reviews play an important role in the trip planning process for those who actively read them. They provide ideas, make decisions easier, add fun to the planning process and increase confidence by reducing risk making it easier to image what places will be like". Thereafter all the platforms where tourists can express themselves, they will be used by other tourists to collect information from in order to get ideas and reduce the complexity of the decisions making process (Xiang and Gretzel, 2009).

An interesting study has shown that 56% of American tourists seeking for opinions of travellers who has visited the destination before, during the booking process of their accommodation. In 2008 another survey claims that user created content is used by 40% of online travel researchers to determine whether they visit a destination. Within this 40% ratings were the most popular (used by 58%), followed by reviews and recommendations (49%). Next come user created photo content (18%) and friend's social networking websites (18%). Other travellers' blogs were consulted by 12% and user generated video by 5% (Highland business research, 2008)

Universal McCann, 2010 latest "The Socialisation of Brands" survey has revealed changes in the way that people are using the Internet to create and share information. In the next figure we can see the usage of different blogs from 2008 to 2010. Almost every examined area – especially tourism – has increased steadily as we can see on the third figure. Nowadays approximately every third of the people read travel related blogs for getting trustworthy information from fellow travellers.

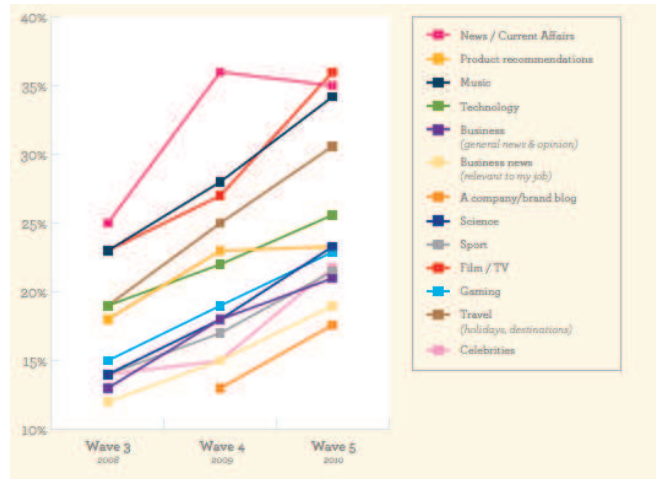


Figure 3. Usage of different blogs (2008-2010)

4.2 Social Network Site

According to Boyd and Ellison (2007) drafting, social network sites (SNSs) are those platforms which provide the users to construct a public or semi public profile within a community system. These platforms allow users to articulate a list of users to whom they share any connection and establish or maintain connections with others. Another interpretation of social networking sites according to Buhalis and Jun (2011): a virtual area where Internet users can establish their own profile, or home page, on which they can write blogs, post pictures, videos and share their ideas.

One of the most important social networking sites in Hungary is Facebook. This site has over 500 million active users worldwide and more than 3 million users in Hungary where almost half of the members of the community are in the age between 13 and 25 (<http://www.socialbakers.com>).

4.3 Video and Photo Sharing

Video or photo sharing platforms allow users to upload video or photo files, store them and share them with other users. Examples of video sharing platforms are the worldwide known Youtube; and photo sharing: Picasa, Fotolog, Flickr.

According to an interesting study which revealed that 90% of pleasure travellers take photographs and that 45% of them posted their photographs online.

Király (2011) refers to a study made by Skyscannar which examined that how social network sites impact travelling attitudes. The result was interesting which claims that half of the participants select their next holiday destination by their

friends' shared photographs. Furthermore, this study also reveals that 88% of the users always look at their friend's holiday pictures.

Murphy et al. (2010) examined the online sharing attitudes in general (video, text, photo etc.). 40-50% of the respondents frequently share texts and pictures while only 3% post videos. Respondents are more likely to share content on their own social media website than on a media sharing or review site.

All of these Social Media platforms offer opportunities for users to express themselves upload, interact and share information with other users. They constitute an immense source of information where users can gather information or even participate. Thereafter all the platforms where tourists can express themselves, they will be used by other tourists to gather for information from in order to take ideas, reduce the complexity of decisions and make the process less tedious.

5 Methods

In this study I represent the main advance conclusion from my questionnaire. Data were collected through online questionnaire using LimeSurvey which is an open source programme. One of the main advantages of online questionnaire is that with selection of the appropriate question type the filling is much more controlled and contains less logical contradiction so the evaluating of questionnaire is developed. In addition to this it is a more cost efficient solution. The questionnaire was filled by students from different faculties of the Centre for Agricultural and Applied Economic Sciences of the University of Debrecen (male 40%, female 60%). The filling is based on voluntariness and the sample size is 235. Due to the attributes narrow scope of the sample, the survey is not representative, but probably a good starting point of our future research and it can attract the attention of destination managers and tourist experts. We use descriptive analyses to show the basic characteristics of the responses.

6 Results

This section is divided into two parts; first we examine the knowledge of students in connection with web 2.0 applications and secondly we examine students who travelled alone or helped their friends or relatives during the travel-related information search in connection with the same topic.

6.1 Usage of Web 2.0 Applications Among Students

Figure 4. represents those web 2.0 applications which are used by students on their PC. SNSs (Facebook etc.) are the most popular medium with it's almost 90% and online video (Youtube etc.) watching (76%) comes to second.

We can see that students use applications according to their age-group like participant at a SNS, using applications of SNS, watching videos on different video sharing size or the conventional media (reading news, listening radio).

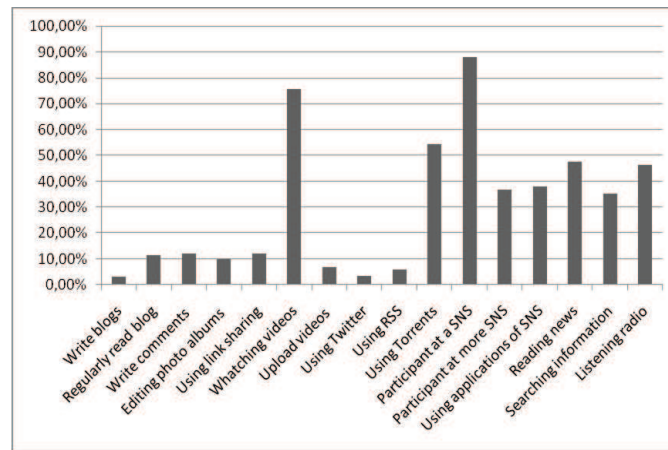


Figure 4. Usage of web 2.0 applications among students (18-25 years)

This age-group less use different blogs (<12%) like Twitter. In addition to this they are less active as regards configuration of social content (<12%) (write blogs, editing photo, upload videos). During the survey it turned out that every 4th student use internet by the help of mobile phone.

Figure 5. shows the usage of web 2.0 applications on mobile phones among students (20% of the respondents). As regards the applications the ratio is the similar like by computers. Nowadays mobile penetration is 120% in Hungary and every tenth of mobiles are smart phones. This development allows users to access internet on their phones and it will expand the opportunities in the tourism sector as well.

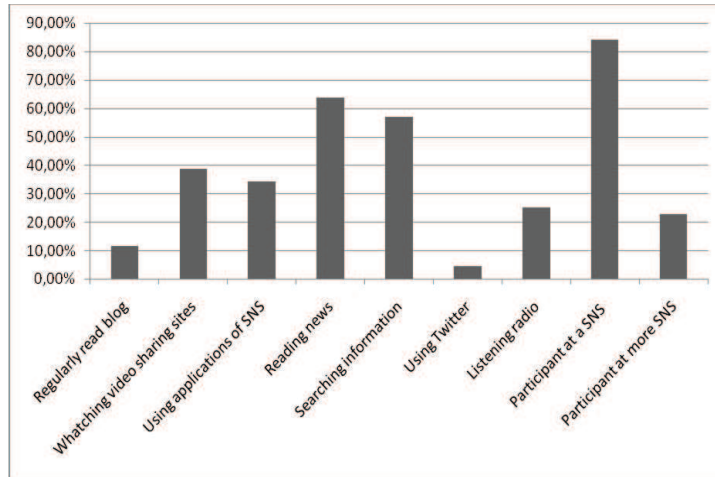


Figure 5. Usage of web 2.0 applications on mobile phones among students (18-25 age)

Figure 6. demonstrates that 75% of students who use internet on their mobile phones access internet several times a day. Approximately 7% of students use their phones regularly for editing or watching their personal social network site, or searching information on the internet.

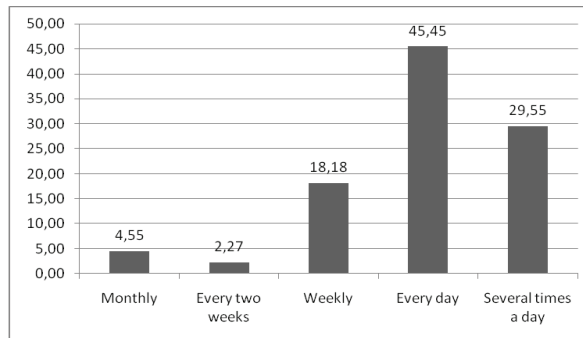


Figure 6. How often students use web 2.0 applications on their mobile phones

6.2 Web 2.0 Applications in Travel-related Information Search

Next we analyzed what kind of applications influence students by their decision making in connection with travel. 75% of students have travelled alone or helped their friends or relatives during the travel-related information search. As regards destination, 50% of respondent travelled in order to have a rest and 20% of students visited friends or relatives.

Figure 7. represents what kind of sources are used to select the destination. We can see that almost everybody use internet by travel-related information search. The other huge information source is the family's or friend's report. The use of conventional media (newspaper, prospectus, travel agency) was decreased these days.

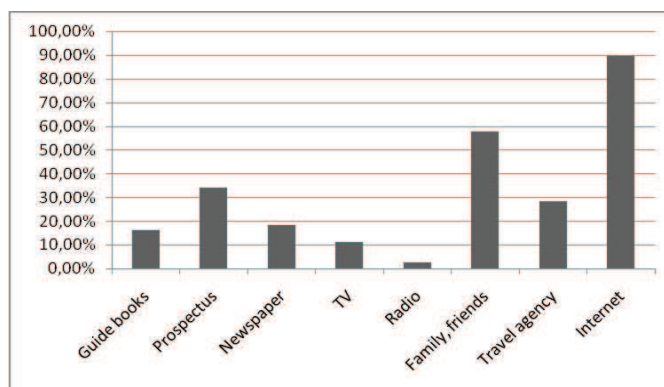


Figure 7. Sources of destination selection process

Students who collect information from the internet to the selection of destination numbers of time use 2-10 web pages (83%). 11% of respondent use more than 10 pages and 6% of students use only 1 page.

Next we analyzed how measure user generated contents influence students by the selection of destination. They had to grade on a 5-grade scale, 1: it is not determining, 5: it is absolutely determining.

1. 80% of respondents are influenced by photos, videos which they search on different social web pages;
2. 45% of students read others' experience and criticism on different blogs;
3. 48% of them read publication of online media;
4. 58% of them allow for experiences of acquaintance;
5. 64% of students search information on the own web sites of suppliers (travel agency, hotel).

Finally we analyzed that according to gender is there a significant difference by statements above (Chi-square test). It turned out that 1, 2, 5 statements were typical of female but by other cases the difference was not significant.

7 Summary

Web 2.0 and Travel 2.0 may have a huge impact on the travel and tourism industry. Social media platforms are the new media. They offer tourists the opportunity to express themselves, share contents, ideas and experiences which other tourists may

use as a reference in their travel planning and which is greatly appreciated among tourists due to the high needs of information which they require. Online communities have a strong influence on consumer behaviour.

Our survey demonstrates that students (18-25 age) use internet increasingly in order to get travel-related information. 90% of respondents use internet by destination-select process. Less than 30% of them get information from guide books, travel agency and newspaper. 80% of students are influenced by photos, videos which they search on different social web pages. After the travel 64% of them share their photos or write on different media about their experience. This result clearly shows that web 2.0 applications have impact on travel decision making process.

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