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## Differences in Online Travel Planning: A Rural vs. Urban Perspective

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### ABSTRACT

*The digital divide has been mostly studied with respect to access issues. This paper argues that differences in use have to be considered as well. It specifically looks at digital inequality issues with respect to rural versus urban Internet users in the context of online travel planning. A study of US online travelers was used as the data source and urban and rural respondents were identified based on whether they resided in a metropolitan statistical area or not. The analysis of the data indicates interesting digital inequalities with respect to Internet use as well as benefits derived. Implications for tourism marketers are discussed.*

**Keywords:** *online travel planning, Internet use, digital divide, urban vs. rural.*

### INTRODUCTION

Generally, the digital divide is simply defined as the difference between those who have access to ICTs (Information and Communication Technologies) and those who do not (U.S. Department of Commerce, 2002; Warf, 2001), with access defined solely as technical access. Recently, many articles focus on digital inequality instead of digital divide. Digital inequality deals with inequality among individuals who have formal access to the Internet (DiMaggio et al., 2001; Mossberger et al., 2003). One of the most prominent digital divide/inequality issues is the suffering of rural communities from supply- and demand-side disadvantages (Whitacre, 2010; Downes & Greenstein, 2002). However, with increases in mobile Internet technology availability, it is not clear whether rural disadvantages still exist. Indeed, one study found that there was no urban-rural difference in Internet access after controlling for demographic variables (Government Accountability Office., 2006).

Lots of tourism online marketing studies show that websites are an important source of information throughout all stages of the travel planning process (Choi et al., 2007). Therefore, tourism marketers increasingly rely on online communication channels to market their products, especially in rural regions where offline advertising approaches would be too costly due to the geographical spread of the population. This study investigates if digital inequalities exist so that tourism marketing practices can be informed.

### LITERATURE REVIEW

#### Reconsidering the digital divide

There has been much argument and debate about the definition of the digital divide and of the empirical analyses of its components (Chen & Wellman, 2003; Compaine, 2001; Cooper, 2002; Dewan et al., 2005; DiMaggio, 2004; Hargittai, 2003; Norris, 2001). Selwyn (2002) insists that people must attempt to look beyond the definition of a dichotomous digital divide and access to ICTs to obtain a more elaborate and realistic understanding of inequalities in the information age. Also DiMaggio and Hargittai (2002) pointed out that Internet access is sometimes used as a synonym for Internet use, although the two constructs are very different. Furthermore, Selwyn (2002) pointed out the importance of reconsidering

the relationship between access to ICTs and use of ICTs and argued that distinctions should be made. According to a PEW report (2009), broadband growth was strong in 2008 within rural community groups: 38% of those living in rural American had broadband at home, compared with 31% who said this in 2007, or a growth rate of 23% from 2007 to 2008. Following this discussion, this paper explores the digital divide in terms of use between urban and rural residents who have access to the Internet.

### **Online travel planning**

A recent study by Plog Research indicates that the Internet has become one of the most important sources for tourist information: “about 95% of web surfers use the Internet to gather travel-related content” (Cited in Pan & Fesenmaier, 2006, p. 810). Also, tourism scholars emphasize the importance of Internet resources for potential travelers to collect and review various forms of travel information early in the travel decision making process to reduce the risk of selecting poor destinations (Jeng & Fesenmaier, 2002; Cox et al., 2009). Furthermore, although differences in Internet use have been studied in the tourism context (Graeupl, 2006; Kim, Lehto & Morrison, 2007), no research currently exists that explores the issue from the rural versus urban perspective.

## **METHODOLOGY**

The objective of the study was to reveal and examine differences in travel-related use of the Internet by rural and urban adults who have Internet access. Urban respondents are defined as individuals whose residence is located in a county which is part of a metropolitan statistical area (MSA). Conversely, rural respondents are individuals whose residence is in a county which is not part of an MSA. Chi-square tests and t-tests were used to compare rural residents with urban residents.

For the purpose of this study, Internet use was defined as extent of use for travel planning and use of specific Websites as well as functionalities (including booking). In addition to use, respondents were also asked to report the benefits they derive from using the Internet for travel planning purposes.

The data set comes from the 2007 Internet traveller survey of the U.S. Travel Association (2008). This data was collected using an online panel of U.S. adults maintained by Survey Sampling International. A total of 4,405 adults responded to the survey. The majority of participants 84.5% (3720) were urban residents while only 15.5% (685) were found to be rural residents. Since the survey was conducted online, the sample could be skewed toward urban residents if access issues do indeed exist or represent special rural individuals who have access despite lower access opportunities in rural areas. Further, only 3,026 adults indicated that they had actively travelled and, thus were invited to complete the travel-related questions. Of those respondents, 2,433 respondents used the Internet for their travel planning and 1,903 respondents used the Internet to make travel reservations or payments online. The sample of online adults was weighted based on population by census division, race, age and gender in order to represent the U.S. population of adults age 18 or over.

## **RESULTS**

### **Internet use for travel planning**

Rural residents and urban residents are equally likely to indicate that the Internet is a source they typically use for travel planning (Table 1). However, when they were asked to indicate whether they had used the Internet to plan a trip within the previous 12 months, urban residents were more likely to say yes. Also, urban residents are more likely to plan all

or a substantial part of their trip online and are more likely to actually make travel reservations online.

**Table 1**  
**Internet Use for Travel Planning: Rural Residents vs. Urban Residents**

Use of the Internet for travel planning	Rural residents (%)	Urban residents (%)	Comparison Statistics
Internet Typically Used for Trip Planning	75.5	74.5	$\chi^2 = 0.2$
Recently used the Internet to make travel plans?	73.2	81.8	$\chi^2 = 21.2^{***}$
<b>How much of your overall travel planning effort is typically done online</b>			$\chi^2 = 58.3^{***}$
100%	16.8	24.8	
75-99%	20.9	32.2	
50-74%	33.8	22.4	
25-49%	16.1	11.6	
1-24%	14.5	7.2	
Uncertain	1.1	1.8	
Used Internet to make travel reservations?	72.3	79.8	$\chi^2 = 10.2^{***}$

\*\* p<.05; \*\*\*p<.01

#### Travel planning-related online activities

The two groups were also compared regarding their online activities during their online travel planning (Table 2). Significant differences were found for the type of web sites used for travel planning, types of online travel planning, and products purchased online for the trip. Interestingly, urban residents seem to be more transaction (booking) oriented, while rural residents more likely used the Internet to find destination information.

**Table 2**  
**Online Travel Planning Activities: Rural Residents vs. Urban Residents**

Online Activities	Rural residents (%)	Urban residents (%)	Comparison Statistics
<b>What types of Websites have you used when you planned a trip over the past 12 months?</b>			
Online travel agency	59.8	65.6	$\chi^2 = 4.1^{**}$
Company sites for airlines, hotels or rental car	51.8	57.9	$\chi^2 = 4.6^{**}$
Local destination websites	49.7	44.0	$\chi^2 = 3.8^{**}$
Virtual Communities	9.8	5.4	$\chi^2 = 9.5^{***}$
<b>What type(s) of online travel planning have you done in the past 12 months?</b>			
Searched for particular destination information	81	74.9	$\chi^2 = 5.6^{**}$
Searched for things to do at the destination	53	47.3	$\chi^2 = 3.6^{**}$
Searched for rental car prices and availability	31.2	41.0	$\chi^2 = 12.2^{***}$
Searched for any type of travel promotion	30.4	38	$\chi^2 = 7.1^{***}$
Searched for cruises	15.6	21.5	$\chi^2 = 6.1^{**}$
<b>Have you purchased or reserved online for trips you took in the past 12 months?</b>			
Airline ticket	57.1	69.1	$\chi^2 = 14.0^{***}$
Overnight lodging accommodations	77.7	67.1	$\chi^2 = 11.1^{***}$
Ticket for a spectator sporting event	7.7	13	$\chi^2 = 5.7^{**}$
100% online reservation for personal trip	30.5	35.5	$\chi^2 = 41.4^{***}$
100% online reservation for business trip	31.7	36.7	$\chi^2 = 35.4^{***}$

\*\* p<.05; \*\*\*p<.01

### Benefits derived from using the Internet for travel planning

Significant differences were found regarding benefits of the Internet for travel planning (Table 3). Interestingly, Non-MSA residents derive more benefits from using the Internet.

**Table 3**  
**Benefits Derived from Using the Internet for Travel Planning**

Benefits	MEAN		Mean Diff.	t-value
	Rural residents	Urban residents		
I can better imagine what the destination is like.	4.24	4.12	.116	2.338**
I can save time planning my trip.	4.22	4.09	.131	2.530**
I have a clearer idea of what to expect from the trip.	4.16	4.05	.107	2.240**
I can get better value for my money.	4.13	4.02	.114	2.240**
I do not have to waste time looking for information during the trip/at the destination.	4.20	4.06	.146	2.894***

\*\* p<.05; \*\*\*p<.001

### CONCLUSION

The results suggest that digital inequalities between urban and rural residents in the United States exist and go beyond access issues. Further, some of the findings are rather surprising, e.g. rural residents deriving greater benefits from Internet use. As such, a better understanding of the Internet use patterns for online travel planning in urban and rural contexts is necessary. Further, research would be useful to explore the contributing factors that affect types of use. For instance, confounding effects of the socio-economic make-up of rural vs. urban populations or of the travel experience and behaviours should be taken into account for future research. Given that this is a U.S.-centric study, the results cannot be generalized to other geographic areas. Research in other countries would certainly contribute to our understanding of the issue.

### Significance to the industry

It is of practical interest to identify the barriers to online booking perceived by rural residents so that they can eventually be overcome. The results show that Internet use for travel planning is pervasive but providers who depend on transactions might face problems in rural areas. The findings also have implications for online advertising spending as well as general online tourism marketing. According to the findings of this study, marketing dollars of online travel agencies are more wisely spent in urban areas but still matter in rural areas. On the other hand, destination marketers seem to have a more captive audience in rural areas. Also, tourism marketers who provide various features on their Websites, for instance social media applications, will have to consider if they actually touch potential tourists in all geographic areas. This is also a great challenge for tourism research conducted online. Depending on where most of the responses are obtained, results may sway one way or another, stressing the importance of rigorous sampling techniques and research design as well as the necessity to consider inclusion of residence as a confounding factor in analyses.

### REFERENCES

Chen W & B. Wellman. (2003). *Charting and Bridging Digital Divides: Comparing Socio-economic, Gender, Life Stage and Rural-Urban Internet Access and Use in Eight Countries*. AMD Global Consumer Advisory Board (GSAB)

- Choi, S. J., Lehto, X. Y., & O'Leary, J. T. (2007). What does the consumer want from a DMO website? A study of US and Canadian tourists' perspectives *International Journal of Tourism Research*, 9, 59-72.
- Compaine B.M. (2001). *The digital divide: facing a crisis or creating a myth?* Cambridge, Mass.: MIT Press.
- Cooper M. (2002). *Does the Digital Divide Still Exist? Bush Administration Shrugs, But Evidence Says "Yes"*. Consumer Union Available at: <http://www.consumerfed.org/DigitalDivideReport20020530.pdf>  
Accessed on 2/24/10.
- Cox, C., S. Burgess, C. Sellitto and J. Buultjens (2009). The role of user-generated content in tourists' travel planning behavior. *Journal of Hospitality Marketing & Management* 18(8): 743-764.
- DiMaggio, P. and E. Hargittai (2001). 'From the Digital Divide to Digital Inequality', working paper, Centre for Arts, Cultural and Political Studies, Princeton University.
- DiMaggio, P., E. Hargittai, C. Celeste, and S. Shafer (2004) From Unequal Access to Differentiated Use: A Literature Review and Agenda for Research on Digital Inequality, in Neckerman, K. (ed.), *Social Inequality*, New York, NY: Russell Sage Foundation, 355-400.
- Downes, T., & Greenstein, S. (2002). Universal access and local Internet markets in the U.S. *Research Policy*, 31, 1035-1052.
- Government Accountability Office. (2006). *Broadband deployment is extensive throughout the United States, but it is difficult to assess the extent of deployment gaps in rural areas* (Report No. GAO-06-426). Retrieved November 17, 2008, from <http://www.gao.gov/new.items/d06426.pdf>
- Graeupl, A. (2006). 'Silver Surfers' and their online information search behaviour. In M. Hitz, M. Sigala & J. Murphy(Eds.), *Information and Communication Technologies in Tourism 2006*, pp. 236-247. Vienna, Austria: Springer Verlag.
- Hargittai, E. (2002). Second-level digital divide: Differences in people's online skills. *First Monday*, 7(4). Retrieved September 9, 2007 from [http://www.firstmonday.org/issues/issue7\\_4/hargittai/](http://www.firstmonday.org/issues/issue7_4/hargittai/)
- Hargittai E. (2003). The Digital Divide and What To Do About It. In DC Jones (Ed.), *New Economy Handbook*. Academic Press: San Diego, CA.
- Jeng, J., & Fesenmaier, D. (2002). Conceptualizing the travel decision-making hierarchy: A review of recent developments. *Tourism Analysis*, 7, 15-32.
- Kim, D-Y., Lehto, X. Y. & A. M. Morrison (2007). Gender differences in online travel information search: Implications for marketing communications on the Internet. *Tourism Management*, 28, 423-433.
- Mossberger, K., C. Tolbert and M. Stansbury. (2003). *Virtual inequality: Beyond the digital divide*. Washington, DC: Georgetown University Press.
- Norris P. 2001. *The Digital Divide: Civic Engagement, Information Poverty & the Internet Worldwide*. Cambridge, UK: Cambridge University Press.
- Pan, B., & Fesenmaier, D. R. (2006). Online information search: Vacation planning process. *Annals of Tourism Research*, 33, 809-832.
- The Pew Internet & American Life Project (2009). <http://www.pewinternet.org/Static-Pages/About-Us/Project-History.aspx>
- U.S. Department of Commerce, (2002). *A Nation Online: How Americans Are Expanding Their Use of the Internet*. Washington, DC: Author.
- U.S. Travel Association (2008). *Travelers' Use of the Internet, 2008 edition*. Washington, DC: U.S. Travel Association.

- Warf, B. (2001). Segueways into Cyberspace: Multiple geographies of the digital divide  
*Environment and Planning B: Planning & Design*, 28(1),3-19.
- Whitacre, B. (2010) "The Diffusion of Internet Technologies to Rural Communities: A  
Portrait of Broadband Supply and Demand." *American Behavioral Scientist*, 53, 1283-  
1303.