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AUTHORS	Laurent Bourdeau Pascale Marcotte Jean Pagé Jr.
ARTICLE INFO	Laurent Bourdeau, Pascale Marcotte and Jean Pagé Jr. (2010). Market segmentation based on Internet consumer values: the case of tourism products. <i>Problems and Perspectives in Management</i> , 8(4-si)
RELEASED ON	Tuesday, 07 December 2010
JOURNAL	"Problems and Perspectives in Management"
FOUNDER	LLC "Consulting Publishing Company "Business Perspectives"



NUMBER OF REFERENCES

0



NUMBER OF FIGURES

0



NUMBER OF TABLES

0

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Laurent Bourdeau (Canada), Pascale Marcotte (Canada), Jean Pagé Jr. (Canada)

Market segmentation based on Internet consumer values: the case of tourism products

Abstract

To understand the behavior of consumers visiting a website and to segment the clientele, this study takes a look at the consumers' rational and non-rational values. The results of the empirical and quantitative study are based on a sample of 2.214 consumers who visit the transactional website of a tourism organization. Three segments were identified using cluster analysis. The first segment, corresponding to one third of the respondents, is made up of intensive users. They surf the web on a daily basis, not only to find information but also to purchase products and services. The values associated with their use of the Internet are utilitarian, but also hedonic. For transactional site managers, although these consumers are already customers, they represent the principal target group for marketing strategies. This segment has the highest confidence in the security of the transactional website. The second segment (22.5% of the sample) is made up of moderate users. Spending less time per week on the Internet than intensive users, they share almost the same values. The third segment (43.1% of the sample) is made up of travel planners. They spend almost as much time on the Internet as the moderate consumers, but are mainly looking for information. They use the Internet mostly for planning trips. Managerial recommendations highlight the importance of keeping the website constantly up to date, regularly adding news about events and packages, in order to maintain the interest of intensive users. What travel planners find important is the credibility of the information, and simplicity in the site's information organization and functionalities.

Keywords: customer behavior, market segmentation, Internet, value, utility, confidence.

JEL Classification: L83, M31, O30.

Introduction

Information technologies have quickly and largely changed the work of the tourism business. Since 2007, more than half of the trips reserved in the United States were reserved online. The multiplication and diversity of websites and computer tools, that have arrived on the tourism scene since then, suggest that this trend will only continue to grow (BizReport, 2008). Sales are increasing, but tourism consumers are not necessarily looking for information in the same way as presented by the travel providers (Xiang, 2009).

Although consumers are making more online purchases, the organizations do not always understand the behavior of websurfing consumers. The same observation is made in scientific literature, which generates an unparalleled amount of data on the people involved in online transactions. According to a study listing the principal articles published in scientific tourism reviews, most of these articles explore the technologies and the suppliers, but relatively few look at consumer habits (Law, Leung & Buhalis, 2009).

Added to this, gap in coverage is the obsolescence of computer tools, voiding certain research questions and accelerating the obsolescence of published and colligated data. Despite these problems, it is important for tourism managers to know their clienteles, whether they are physical or virtual. These managers need to know that one of the main func-

tions of these technologies is to lead the consumer, to become familiar with and purchase the offered products. Since a better understanding of consumer behavior on the Internet could increase the number of online transactions (Lee, Qu & Kim, 2007), managers should have access to the profiles of these consumers.

To identify consumer profiles, our study explores the use of values as a means of segmenting users of tourism websites. Specifically, the study examines values to determine whether distinct value segments exist and if they can be identified by their demographic characteristics. Finally, this article asks if the perception of transactional security on the Internet is one of the characteristics that could differentiate consumer segments.

1. Literature review

The literature review is divided into two parts. In the first part, the socio-demographic profiles of those who purchase tourism products on the Internet and their behavior are presented. In the second part, to better understand consumer behavior during an Internet transaction, the values that consumers attribute to the Internet are examined.

1.1. The socio-demographic profile and consumer behavior. Socio-demographic characteristics were analyzed in the first studies, attempting to describe consumer behavior on the Internet. These first studies presented this consumer as a man, relatively young, white, with superior income and education (Beldona, 2005). Until recently, senior travellers were believed to prefer printed brochures over the

use of computer tools (Lin, 2005). However, the latest information demonstrates that older consumers now visit tourism websites more often. Although more men than women use the Internet at this time (BizReport, 2010b). Baby boomers (born between 1943 and 1960) have turned to the Internet much more quickly than anticipated (Beldona, 2005). We also note the differences between men and women in terms of how they search the Internet. Women do more information searches and visit more sites, more frequently (Kim, Lehto & Morrison, 2007). Consumers who purchase products on the Internet also have particular characteristics in terms of their travel habits. They have more of a tendency to fragment their stays, compared to those who do not surf the web, to reserve their stays at the last minute, and show greater interest in active vacations (Raf-four, 2002; Frochot & Legohérel, 2007).

The socio-demographic profile also influences the choice of technological means and the activities that stem from them. For example, high-speed Internet users usually have higher incomes. Even if this type of technology does not influence the search for information on the Internet, access to high-speed Internet will influence the likelihood of purchasing tourism products online. This access will also influence the different Internet functions (downloading, purchasing, etc.) (Beldona, Kline & Morrison, 2004). What country a person lives in also reflects major differences in Internet purchasing habits for tourism products (Moital et al., 2009). For example, nearly one quarter of adults in Great Britain buy tourism products over the Internet, while only 1% of Portuguese adults do so. Consumer behavior on the Internet as related to tourism seems heterogeneous.

1.2. Convergence of technologies and Internet access. In the study on purchasing behavior on the Internet, it seemed imperative to take the speed of technological changes into account, especially the convergence between online purchasing technologies. The computer is no longer the only gateway to the Internet. The telephone is another important source of access (BizReport, 2010c). For example, cell phone users are already using their phones to get tourism information or to buy services (e.g., GPS functions, research, comparing and reserving air or hotel services) (BizReport, 2010c).

There are three groups of cell phone consumers: “mobile intensives”, “mobile casuals” and “mobile restrained” (BizReport, 2010c). The “mobile intensives” spend a great deal of time consulting their phones and extensively using all of the device’s functions. The majority of them are aged 18 to 54 with an income of over \$50,000 per year. In their homes, these intensive users are responsible for

purchases related to tourism, financial management and health. The “mobile casuals” spend as much time on the phone but use it as a traditional means of communication. Aged 35 to 54, they earn less than \$50,000. The last group, the “restrained consumers”, represent over half of cell phone users, and they make conventional use of the device. They are over 45 years old and are sensitive to SMS advertising (BizReport, 2010a).

1.3. Purchases and security on transactional websites. The first tourism products sold on the Internet were simple and easily comparable products: airline tickets, car rentals. In recent years, multimedia functions have allowed the sale of more complex products, such as cruises and tours (Beldona, 2005). The variety and amount of information that can be stored on the Internet allows the diversification of marketing tools. Now it is easier for users to imagine the product (Beldona, Kline & Morrison, 2004). With the information they acquire, consumers are more successful in defining their expectations about tourism products, and so these products seem more tangible (Moutinho, 1987; Fodness & Murray, 1997; Vogt & Fesenmaier, 1998).

However, despite the commercial advances that reduce intangibility, tourism products are still associated with a high level of risk (cf., Xiang, 2009). Not only there are risks associated with the choice of products, but also with the method of purchasing on the Internet and the service provider’s site (Lin, Jones & Westwood, 2009). The perception of too much risk will negatively influence online purchasing (Chen, 2001), the perception of quality, and ultimately the satisfaction and fidelity of the consumer in a post-purchasing situation (Chen, 2006; Ho & Lee, 2007). To reassure their clientele, the service providers must offer a secure website (Austin, Ibeh & Chow Choy Yee, 2006; Dunn et al., 2009; Lin, Jones & Westwood, 2009).

1.4. Consumer values as a heuristic tool. The concept of the values that consumers attribute to products and services appears as an equivocation concept. However, this concept has a heuristic value, that is very relevant for understanding the reasons why consumers make certain choices, to buy or not to buy, to spend hours searching on the Internet. Contrary to personal values (e.g., friendship or love), which endure over time and which structure the personality, the values that consumers attribute to products or services are relative, temporary and circumstantial. Several authors suggest definitions and typologies for values (Sánchez-Fernández & Iniesta-Bonillo, 2007) or use the concept of values in an empirical manner. This was the case for the study about the experiences of vacations in the forest (Mar-

cotte, Bourdeau & Pagé, 2008; Marcotte, Bourdeau & Pagé, 2005), tourism products (Sánchez-Fernández et al., 2006), and also in the case of hospitals (Cengiz & Kirkbir, 2007) or the Internet (Bourdeau, Chebat & Couturier, 2002). Although the context of the study shapes the values consumers attribute to the experience of consuming, the empirical studies affirm that consumer values are not only utilitarian or rational. The concept has a multidimensional structure (Sánchez-Fernández et al., 2006).

1.5. The values of Internet consumers. The concept of values used to understand consumer behavior on the Internet, allows us to identify different values, values which are not, however, exclusive (Holbrook, 1994; 1999). In other words, a consumer may attribute more than one value to his Internet experience.

Consumers, who attribute a utilitarian value to the Internet, see cyber space as an efficient commercial space and a useful source of information (Chung & Henderson, 2001; Bourdeau, Chebat & Couturier, 2002). This value may be associated with a rational, functional value, based on cognitive reflection, oriented to a certain task (cf., Babin, Darden & Griffin, 1994; Sheth, Newman & Gross, 1991). More specifically, the literature allows the identification of two types of utilitarian values (Beldona, Kline & Morrison, 2004): the utilitarian-functional value and the self-improvement value. The functional value perceives Internet as a way to get a task done (e.g., banking). The self-improvement value is about how the user himself employs the Internet (e.g., searching for information of interest, interactivity, leisure activities).

Many studies are based on the predominance of the useful and rational nature of consumer behavior in the use of the Internet (Chiu et al., 2005). Prices are considered the main motivator for consumers, visiting different websites. A high concentration of visits has been observed on some price-comparing websites (Frochot & Legohérel, 2007). The analysis of key words, used to find information on search engines, shows that consumers search more for information about the location, the prices, and the availability of tourism products, rather than the terms associated with experiences such as the senses or emotional aspects (Xiang, 2009).

Considering the time spent web surfing and the money invested in technologies that provide access to the Internet, the reasons for using the Internet may also be non-rational. For example, in terms of searching for information to prepare for a trip, over the past several years it has been established that the search for information is not purely functional (Vogt & Fesenmaier, 1998). The search for information may have an aesthetic or social aspect. Consumers, who perceive that the Internet has a social value,

consider that it facilitates communications and social relations (Chung & Henderson, 2001; Bourdeau, Chebat & Couturier, 2002). Consumers may also attribute a hedonic value to the Internet (Bourdeau, Chebat & Couturier, 2002), oriented to entertainment and characterized by emotional dimensions (cf., Babin, Darden & Griffin, 1994). Consumers who visit the Internet to play online games for hedonic reasons may also be considered. A learning value may also be attributed to the Internet (Bourdeau, Chebat & Couturier, 2002), oriented to searching for knowledge and new information (cf., Sheth, Newman & Gross, 1991). Also consumers may attribute a purchasing value to the Internet (Bourdeau, Chebat & Couturier, 2002).

Finally, comparisons can be made between consumer values and consumer profiles. The incomes of consumers who make online purchases also greatly influence how they use this technology. In fact, consumers with a high income attribute more use value to the Internet, especially in terms of searching for information, while consumers with lower incomes attribute a social value to the Internet (Chung & Henderson, 2001).

1.6. Research objectives. The main objective of this study consists of gaining a better understanding of the behavior of tourism consumers making online purchases. More specifically, this research has three objectives:

- ◆ to identify the segments of consumers who buy tourism products on the Internet;
- ◆ to identify the values that each consumer segment attribute to the Internet;
- ◆ to assess the relationship between the consumer segments and their perception of a transactional site's security.

2. Methodology

To better understand the values of the Internet users, we developed a quantitative measuring instrument with 13 variables. A preliminary exploratory study with a focus group and a reduced sample of consumers (n = 12) allowed us to identify a series of variables explaining why people use Internet. Moderators questioned respondents about the reasons they use Internet. We asked respondents to consider that the Internet can be used in different ways, for example, through either a computer or a cell phone. To identify the variables measuring instrument, a saturation procedure was used by two judges who conducted a content analysis of qualitative data. Once focus group responses have been generated, they must be converted into questionnaire items. The items are as follows: using the Internet to make purchases, to work, to spend leisure time, to take a

course, to find information about travel, to get to know people, to save money, to share information, to read news, to download music or pictures for entertainment purposes, to save time, to plan your leisure activities and vacations.

The 13 items were then inserted into a measuring instrument. The scale used to measure these variables consists of a five-point interval. We asked the subjects of the degree to which they agreed or disagreed with the usage attributes that were presented. The initial questionnaire was also pre-tested with a convenience sample of 25 consumers to check the clarity of the questions.

2.1. The quantitative study. The data for this research was collected from a sample of 2,214 respondents who had visited a national park in Quebec (Canada), managed by the société des établissements de plein air du Québec (Sépaq, www.sepaq.com). This organization has been mandated to manage and develop public territories and the related tourist facilities with a view to making the parks international caliber destinations. The survey was conducted electronically through a self-administered questionnaire. The data was collected over the course of a week and involved individuals who had purchased at least one service, associated with tourist accommodations over the last two months (campsite or cottage rental) using Sépaq's transactional website. The sample was also chosen so as to respect the general representation of Sépaq's clientele.

2.1.1. Profile of respondents. Table 1 provides general information about the respondents; 66.2% were male and 33.8% were female; the ages of the respondents ranged between 18 and 75 years old, 57.6% of whom were between 35 and 54 years old. An annual familial income of \$55,000-\$84,999 CAD was indicated by 33.3% of the respondents, and the same percentage reported earning over \$85,000 CAD per year. Consumers surveyed are relatively well educated ($X = 14.61$ years of schooling completed, $s.d. = 3.73$) and spend an average of 12.10 hours per week on the Internet ($s.d. = 10.87$) (email, surfing, etc.). We also asked respondents how much money they spent on the Internet over the last six months for the purchase of products or services. Close to half of the respondents spent \$300 or more in the past six months. The respondents live in a household with an average of 2.95 members ($s.d. = 1.26$).

2.1.2. Measurement of security. We sought to evaluate the level of security respondents perceived about the Internet transaction. While the measuring instrument was used to assess the values assigned to the Internet, we measured the degree of security based on a transaction made on the Sépaq website.

From a methodological point of view, it seems important to allow customers to associate the precise degree of security to a transaction. We then asked whether they felt that the Sépaq site was safe for transactions. We measured the level of security using a single variable. The vast majority of respondents said that the website allows secure transactions (84.3%) ($X = 4.14$, $s.d. = 1.07$) (1 – strongly disagree to 5 – strongly agree).

2.2. Analysis and results. We divided the discussion of the results into two parts. In the first part, we present the descriptive analysis and the quantitative measuring instrument of Internet values. In the second part, we use a two-step cluster analysis to measure the different perceptions of the Internets' value between consumer segments.

Table 1. Profile of respondents

Characteristics	n	%	Characteristics	n	%
Gender			Amount of money spent		
Female	770	34.8	0 \$	304	14.6
Male	1444	65.2	1 to \$299	816	39.2
			\$300 or more	962	46.2
Age					
18-34	471	21.3	Website has secure transactions		
35-44	576	26.0	Strongly disagree	145	6.5
45-54	700	31.6	Disagree	31	1.4
> 54	467	21.1	More or less	172	7.8
			Agree	894	40.4
Annual income (CAD*)			Strongly agree	972	43.9
Less than \$54,999	688	33.2			
\$55,000-\$84,999	689	33.3			
\$85,000 or more	694	33.5			

Note: * Annual income in Canadian dollars.

2.2.1. Measurement of Internet consumer value. To assess the reliability consistency of the measurement instrument, we used a Cronbach's alpha with the data received from the respondents ($n = 2,214$). We identified the possible interrelationships among the variables contained in the measuring instrument. Cronbach's coefficient alpha shows that the 13 variables of the measuring instrument have a very satisfactory degree of internal consistency (0.824).

All of the respondents reported that they use the Internet mainly to plan leisure activities and vacations, to find information about travel, to read the news, to spend leisure time and to save time (See Table 2). To analyse our results, we associated the reasons for using the Internet with consumer values. More precisely, we can identify the reasons for using the Internet with the utilitarian self-improvement value and the utilitarian functional value (Beldona, Kline & Morrison, 2004), but also with the social and hedonic values (Bourdeau, Chebat & Couturier,

2002; Sheth, Newman & Gross, 1991; Holbrook, 1994; 1999). The utilitarian self-improvement value appears to be the most prominent.

Table 2. Descriptive statistics on Internet use

		Values	Mean*	s.d.**
V13	Plan leisure activities and vacations	Utilitarian self-improvement	4.32	0.77
V5	Find information about travel	Utilitarian self-improvement	4.21	0.82
V9	Read the news	Utilitarian self-improvement	3.99	0.99
V3	Spend leisure time	Hedonic	3.94	0.90
V12	Save time	Utilitarian functional	3.93	1.02
V11	Entertain myself	Hedonic	3.81	1.02
V8	Share information	Social	3.74	1.10
V2	Work	Utilitarian functional	3.52	1.30
V1	Make purchases	Utilitarian functional	3.30	1.25
V4	Take a course	Utilitarian self-improvement	3.22	1.18
V10	Download music or pictures	Hedonic	2.98	1.32
V7	Save money	Utilitarian functional	2.98	1.18
V6	Get to know people	Social	2.39	1.23

Notes: * Measured on a Likert scale ranging from 1 – *strongly disagree* to 5 – *strongly agree*. ** S.d. – standard deviation.

2.2.2. *Two-step cluster analysis.* To identify our segments, we used cluster analysis without having first conducted a factor analysis to better account for consumer differences. Moreover, factor is analyzing original responses before clustering them “...is not generally the best procedure to identify homogeneous groups of individuals (market segments)” (Dolnicar & Grün, 2008, p. 63). The two-step cluster analysis was used because we have a large sample size and we used interval-scaled data. Cluster analysis was used with the 13 variables that measured the values of the Internet users. The results in the final cluster solution show that the largest cluster contains 43% (n = 954) of the clustered cases, the second cluster 34 % (n = 761) and the smallest contains 26% (n = 499). A discriminant analysis showed that the three-cluster solution correctly classified 89.6 per cent of respondents into the right cluster, and that a statistically significant difference existed between the clusters. We named the clusters according to the characteristics of each consumer profile.

To better understand the composition of our segments, for each of the clusters we analyzed the values and the socio-demographic characteristics that the customers attributed to Internet use. Finally, we compared the profiles of our consumer segments.

Cluster 1 (intensive users). This cluster comprises 761 (34.1%) of the 2.214 respondents in the analysis. These respondents use the Internet for everything in daily life (see Figure 1). This segment shows a high level of approval for online shopping transactions.

For these consumers, Internet is used primarily to plan their leisure activities and travel, to find information related to travel, to read the news, to save time, to spend leisure time, for entertainment, and to share information. These consumers mainly attribute utilitarian self-improvement, hedonic and utilitarian functional values to the Internet.

Moreover, this segment of consumers is composed of a majority of men – 64.3% (see Table 3). Most of the intensive users spent \$300 or more in the last six months. The two largest groups of consumers from this segment are aged 18-34 (26.9%) and 45-54 (31.1%). It is important to note that consumers over 54 years of age form only 18.5% of this segment. The subgroup of consumers with the highest annual incomes per household, over \$85.000 CAD, makes up 35.5% of this segment.

Cluster 2 (moderate users). This cluster comprises 499 (22.5%) of the 2.214 respondents in the analysis. When they use the Internet, it is mostly to search for information about a travel destination, to plan their leisure activities or their trips or to save time (see Figure 1). The other reasons for using the Internet do not seem to interest them much. Although these consumers use the Internet for entertainment purposes, we suggest that this segment is mostly composed of people who attribute a utilitarian self-improvement value to this tool.

This segment of consumers is composed of a majority of men (57.5%) (see Table 3). Close to one quarter of the consumers in this segment (21.3%) did not purchase products or services on the Internet in the past six months. The two largest subgroups of consumers in this segment are aged 35-44 (32.3%) and 45-54 (29.1%). The subgroup of consumers with the highest annual income per household, over \$85.000 CAD, makes up 34.1% of this segment.

Cluster 3 (travel planner). This cluster comprises 954 (43.1%) of the 2.214 respondents in the analysis. This is the largest segment of consumers in our sample. These consumers do not use the Internet much. When they do, it is mostly to plan their leisure activities or trips, to search for information about a travel destination or to save time (see Figure 1). Above all, these consumers attribute a utilitarian self-improvement and utilitarian functional value to the Internet.

This segment of consumer consists of a high majority of men (70.0%) and almost all of the consumers (84.6%) purchased products or services on the Internet in the last six months (see Table 3). The largest subgroup of consumers in this segment falls between the age of 45-54 (33.3%). Consumers with an annual household income of between

\$55,000 and \$85,000 CAD is the largest subgroup in this segment (37.3%). The segment could be classified as the average user, a person who uses the Internet only to reach a specific goal, such as searching for information.

2.2.3. Comparison between the segments. By comparing the clusters, we observe that the intensive consumer segment is that which spends the most time on the Internet (see Table 3). These users spend an average of 14.73 hours per week on the Internet as opposed to the two other segments, which spend an average of 11.11 and 10.00 hours per week surfing the web. The two other segments of consumers spend about the same amount of time surfing the web. This suggests that both of these segments differ from the first segments, the intensive users, in the intensity of their usage, but also by the values they attribute to the Internet. While the consumers in the first segment attribute different values to the Internet, the consumers in the second segment mainly attribute a utilitarian self-improvement value to the Internet. The consumers in the third segment attribute utilitarian self-

improvement and utilitarian functional values to the Internet. The number of people living in a household does not reveal any differentiation between the three segments. In other words, this variable does not allow us to statistically differentiate the three segments of consumers.

Travel planners differ from moderate users through their usages of the Internet, which are almost exclusively devoted to planning trips. For consumers in this third segment, interest for doing other activities on the Internet, such as downloading music or entertaining themselves, is low. Finally, in the six months preceding the study, 90 % of the consumers in cluster 1 bought products or services online, a higher percentage of purchases than those made by moderate users (85%) and travel planners (79%).

We questioned consumers about the security of the Sépaq website and observed that all of them express a positive perception about it. However, the intensive users, the largest group of Internet users, show the highest degree of confidence in online transactions to purchase products or services.

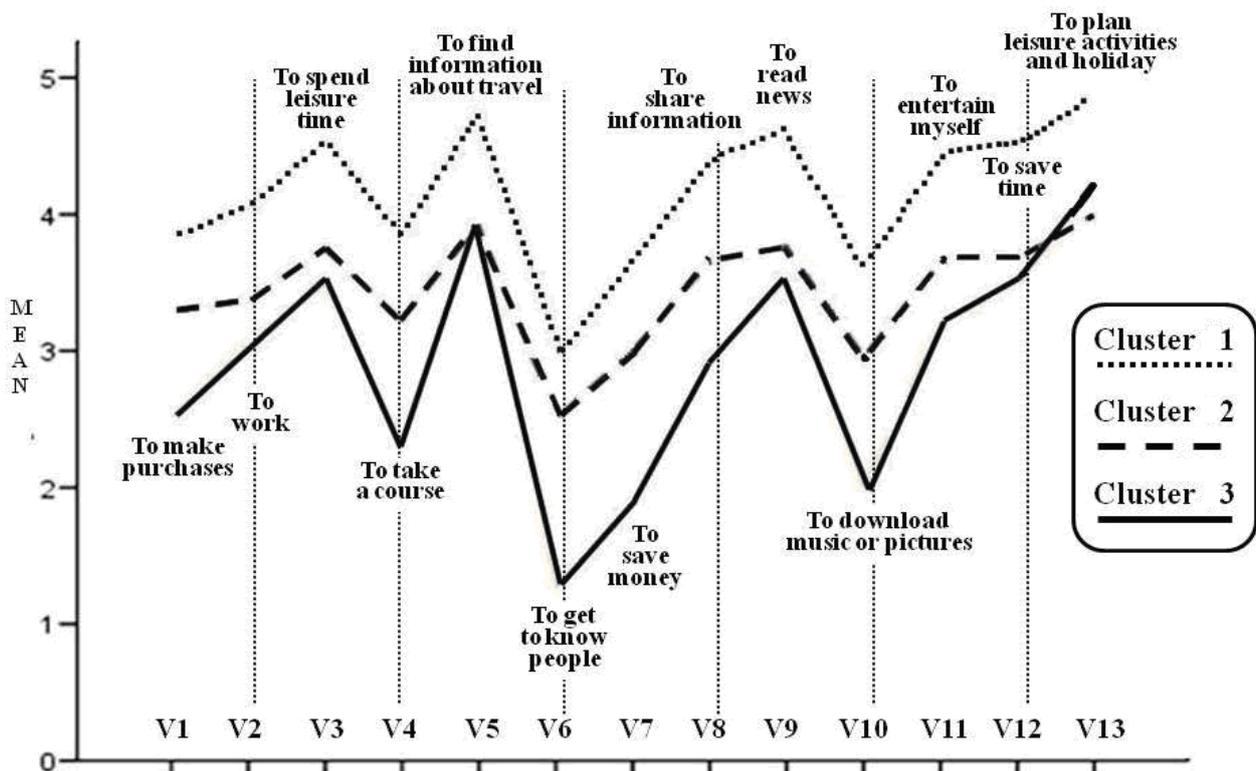


Fig. 1. Descriptive statistics of each cluster

Table 3. Summary table with characteristics of each cluster

Cluster 1 Intensive users				Cluster 2 Moderate users				Cluster 3 Travel planners					
N = 761 (34.4%)				N = 499 (22.5%)				N = 954 (43.1%)				<u>Correlation test</u>	
<u>Female</u>		<u>Male</u>		<u>Female</u>		<u>Male</u>		<u>Female</u>		<u>Male</u>		<u>Gender</u>	
35.7 %		64.3 %		42.5 %		57.5 %		30.0 %		70.0 %		$\chi^2 = 11.272$, d.l. 4, $p < 0.05$	
<u>Age</u>													
18-34	35-44	45-54	> 54	18-34	35-44	45-54	> 54	18-34	35-44	45-54	> 54	<u>Age</u>	
26.9%	23.4%	31.1%	18.5%	17.2%	32.3%	29.1%	21.4%	18.9%	24.8%	33.3%	23.0%	$\chi^2 = 33.859$, d.l. 6, $p < 0.05$	
<u>Family income</u>													
Less than \$54.999	\$55.000-\$84.999	\$85.000 or more		Less than \$54.999	\$55.000-\$84.999	\$85.000 or more		Less than \$54.999	\$55.000-\$84.999	\$85.000 or more		<u>Family income</u>	
35.3%	29.2%	35.3%		33.9%	32.0%	34.1%		31.2%	37.3%	31.5%		$\chi^2 = 12.209$, d.l. 4, $p < 0.05$	
<u>Amount of money spent</u>													
0 \$	1 - \$299	\$300 or +		0 \$	1 - \$299	\$300 or +		0 \$	1 - \$299	\$300 or +		<u>Amount of money spent</u>	
10.0%	36.9%	53.1%		21.3%	40.0%	38.9%		14.8%	40.0%	44.6%		$\chi^2 = 40.089$, d.l. 4, $p < 0.05$	
<u>Hours per week on Internet</u>			<u>Subgroup *</u>		<u>F ANOVA**</u>			<u>Secure transactions</u>			<u>Subgroup *</u>		<u>F ANOVA**</u>
			1	2							1	2	
Cluster 1				14.73	36,511			Cluster 1				4.27	36,515
Cluster 2			11.11					Cluster 2			4.06		
Cluster 3			10.00					Cluster 3			4.07		
Significance ^a			0.055	1,000				Significance ^a			0.900	1,000	

Notes: Significance ^a – the mean difference is significant at the .01 level. Subgroups * – Subgroups for alpha – 0.05. ** $p < 0,01$ d.l. pour ANOVA = 2/ Given the absence of homogeneity among the groups, we used the Duncan T2 test to see if the difference in averages between the subgroups are statistically significant.

Discussion and conclusion

This research allowed us to identify three segments of Internet consumers: intensive users, moderate users and travel planners. The intensive users surf the Internet for all kinds of reasons, and the majority of these consumers do not hesitate to spend money online. This suggests that for these consumers, the absence of Internet access would have a negative short-term impact on them, since they use this tool in their daily lives. By attributing utilitarian self-improvement and hedonic and utilitarian functional values to the Internet, and being big users of this technology, these consumers seem to have integrated this tool into their lives. Similar user profiles are observed between the intensive user segment and cell phone consumers (cf., BizReport, 2010c). Intensive users are very assiduous and do a great deal of web surfing, as much for rational reasons (useful functions and carrying out tasks) as for non-rational reasons (e.g., maintaining social links, searching for information). These consumers are well-versed in the functions of these technologies, whether on the computer or the cell phone, and they perceive them as being secure. It is, therefore, easier for them to make transactions.

For the second cluster in this study, qualified as moderate users, the Internet is attributed a utilitarian self-improvement value. For these consumers, the Internet allows the search for information about a travel destination, to plan leisure activities or trips, or to save time. Finally, the largest segment of consumers is classified as travel planners. These consumers attribute utilitarian self-improvement and functional values to the Internet. They spend less time on the Internet than intensive users and do not use the Internet for entertainment purposes, but for reaching a specific goal. This could partially explain why the majority of them purchase products or services online.

Generally, the majority of consumers attribute a utilitarian value to the Internet – utilitarian self-improvement or functional – considering cyberspace as an efficient commercial space and a useful source of information (Chung & Henderson, 2001;

Bourdeau, Chebat & Couturier, 2002). Therefore the hedonic value is not attributed to Internet by users in all three clusters. A majority of men in each of the clusters is a relevant avenue for research (see Kim, Letho & Morrison, 2007), notably for an organization wishing to increase its clientele. Today's computers and cell phones may not attract female clientele. Possibly better adapted, the next generation of computers and cell phones could facilitate the presence of women on the Internet. It is also possible that the absence of women in the travel-planning cluster could in part be explained by the utilitarian functional value that these consumers attribute to the Internet. The hedonic and social values are almost absent from this cluster. An organization would need to think about the values that the women attribute to the Internet and adjust their organization's website to attract this clientele. This cluster should not be neglected, since women spend more time than men do on the Internet, and visit more websites (cf., Kim, Letho & Morission, 2007).

The results of this study lead us to suggest that the constant updating of a website, with the addition of new items, should be an objective for managers who wish to maintain the interest of intensive users in their organization's website. Travel planners attribute importance to the credibility of the information and a simple presentation of the information, and the site's functionalities. In this sense, consumers in this cluster are looking for efficiency in the use of a website. For moderate users and travel planners, the information should be easy to find, the website should be easy to use, and it should offer some form of standardization for information searches.

Even though the majority of consumers have a positive opinion about the security of the organization's website, we observe that the intensive users, the largest group of Internet users, show the most confidence in the security of Internet transactions for purchasing products or services. This result appears important in that an increased perception of security on the organization's transactional site could increase sales among the two other clusters of consumers (cf., Chen, 2001).

References

1. Austin, N., K. Ibeh, J. Chow Choy Yee. Consumer trust in the online travel marketplace // *Journal of Internet Commerce*, 2006. – №5 (2). – pp. 21-39.
2. Babin, B.J., W.R. Darden, M. Griffin. Work and/or fun: measuring hedonic and utilitarian shopping value // *Journal of Consumer Research*, 1994. – № 20. – pp. 644-656.
3. Beldona, S. Analysis of online travel information search behavior: 1995-2000 // *Journal of Travel Research*, 2005. – № 44 (November). – pp. 135-142.
4. Beldona, S., S. Kline, A. Morrison. Utilitarian value in the Internet: differences between broadband and narrow-band users // *Journal of Travel & Tourism Marketing*, 2004. – №17 (2/3). – pp. 63-77.
5. BizReport (2008). Americans buy more travel online than offline, http://www.bizreport.com/2008/01/americans_buy_more_travel_online_than_offline.html#January 10, 2008.

6. BizReport (2010a). Report: Mobile consumer habits changing quickly, <http://www.bizreport.com/2010/05/07/#>, May 07, 2010.
7. BizReport (2010b). UKOM: One year, one million more silver surfers in U.K., <http://www.bizreport.com/2010/07/ukom-one-year-one-million-more-silver-surfers-in-uk.html>, July 02, 2010.
8. BizReport (2010c). Rise in smartphone use for travel-related tasks, <http://www.bizreport.com/2010/09/rise-in-smartphone-use-for-travel-related-tasks.html>, September 01, 2010.
9. Bourdeau, L., J.C. Chebat, C. Couturier. Internet consumer value of university students: e-mail vs web users // *Journal of Retailing and Consumer Services*, 2002. – №9 (2). – pp. 61-69.
10. Chen, C.F. Identifying significant factors influencing consumer trust in an online travel site // *Information Technology & Tourism*, 2006. – №8 (3-4). – pp. 197-214.
11. Chen, S.L. Effects of Value, affect, security, and web content on informational and transactions usage of the Internet // *Asia Pacific Journal of Tourism Research*, 2001. – №6 (1). – pp. 63-72.
12. Chiu, H.C., Y.C. Hsieh, Y.C. Li, M. Lee. Relationship marketing and consumer switching behavior // *Journal of Business Research*, 2005. – №58 (12). – pp. 1681-1689.
13. Chung, W.Y., J.C. Henderson. Americans on the Internet: utilitarian and social participation perspectives // *Case Western Reserve University, USA. Sprouts: Working Papers on Information Systems*, 2001. – № 1 (16). – 16 pp.
14. Cengiz, E., F. Kirkbir. Customer perceived value: the development of a multiple item scale in hospitals // *Problems and Perspectives in Management*, 2007. – № 5 (3). – pp. 252, 268.
15. Dolnicar, S., B.Grün. Challenging “factor-cluster segmentation” // *Journal of Travel Research*, 2008. – № 47. – pp. 63-71.
16. Dunn, G., S. Baloglu, P. Brewer, H. Qu. Consumer e-loyalty to online travel intermediaries // *Journal of Quality Assurance in Hospitality & Tourism*, 2009. – № 10. – pp. 1-22.
17. Fodness, D., B. Murray. Tourist information search // *Annals of Tourism Research*, 1997. – № 24 (3). – pp. 503-523.
18. Frochot, I., P. Legohérel. *Le marketing du tourisme*. – Paris: Dunod, 2007. – 276 pp.
19. Ho, C., Y. Lee. The development of an e-travel service quality scale // *Tourism Management*, 2007. – №28 (6). – pp. 1434-1449.
20. Holbrook, M.B. The nature of customer value: an axiology of services in the consumption experience // *In Service Quality: New Directions in Theory and Practice*. Roland T. Rust and Richard L. Oliver (eds.). – Thousand Oaks: SAGE Publications, 1994. – pp. 21-71.
21. Holbrook, M.B. Introduction to customer value. in *customer value: a framework for analysis and research*. – New York: Routledge, 1999. – pp. 1-28.
22. Kim, D.Y., X.Y. Lehto, A.M. Morrison. Gender differences in online travel information search: implications for marketing communications on the Internet // *Tourism Management*, 2007. – №28. – pp. 423-433.
23. Law, R., R. Leung, D. Buhalis. Information technology applications in hospitality and tourism: a review of publications from 2005 to 2007 // *Journal of Travel & Tourism Marketing*, 2009. – №26 (5). – pp. 599-623.
24. Lee, H.Y., H. Qu, Y.S. Kim. A study of the impact of personal innovativeness on online travel shopping behavior – a case study of Korean travelers // *Tourism Management*, 2007. – №28 (3). – pp. 886-897.
25. Lin, L. Internet as a distribution channel of travel information: a case study // *Journal of Hospitality & Tourism*, 2005. – № 9 (2). – pp. 49-57.
26. Lin, P.J., E. Jones, S. Westwood. Perceived risk and risk-relievers in online travel purchase intentions // *Journal of Hospitality Marketing & Management*, 2009. – №18. – pp. 782-810.
27. Marcotte, P., L. Bourdeau, J. Pagé. L’approche expérientielle et les valeurs que les touristes consacrent à la villégiature en forêt // *Loisir et Société*, 2005. – № 28(1). – pp. 299-317.
28. Marcotte, P., L. Bourdeau, J. Pagé, J. La qualité de l’expérience vécue dans un parc national: Le cas d’un service touristique // *Revue Économie Gestion*, 2008. – №9. – pp. 415-436.
29. Moital, M., R. Vaughan, J. Edwards, R. Peres. Determinants of intention to purchase over the Internet // *An International Journal of Tourism and Hospitality Research*, 2009. – № 20(2). – pp. 345-358.
30. Moutinho, L. Consumer behavior in tourism // *European Journal of Marketing*, 1987. – № 21 (10). – pp. 5-44.
31. Sánchez-Fernández, J., L.L.J. Callarisa, R.M. Rodriguez, M.A. Moliner. Perceived value of the purchase of tourism product // *Tourism Management*, 2006. – №27 (3). – pp. 394-409.
32. Sánchez-Fernández, R., A. Iniesta-Bonillo. The concept of perceived value: a systematic, review of the research // *Marketing Theory*, 2007. – № 7. – pp. 427-451.
33. Sheth, J., B.I. Newman, B.L. Gross. Why we buy what we buy: a theory of consumption values // *Journal of Business Research*, 1991. – №22. – pp. 159-170.
34. Vogt, C.A., D.R. Fesenmaier. Expanding the functional information search model // *Annals of Tourism Research*, 1998. – №25 (3). – pp. 551-578.
35. Xiang, Z., Z. Gretzel, D.R. Fesenmaier. Semantic representation of tourism on the Internet // *Journal of Travel Research*, 2009. – №47 (4). – pp. 440-453.