

INTERNET TECHNOLOGIES IN THE BULGARIAN TOURIST ENTERPRISES – STATE, PREREQUISITES AND PERSPECTIVES

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ABSTRACT

The tourist branch is a pioneer in taking advantage of internet technologies. Internet is a perfect place to plan, organize and economically arrange all kind of trips. The purpose of the paper is to present the status, prerequisites and perspectives for the internet technology implementation in the Bulgarian tourist enterprises. The main benefit of Internet is the elimination of mediators in the distribution of tourist products and services. The most of the tourist firms create their own websites for presenting a big variety of information and online services, but they still are not widely practiced.

Lately mobility has become a strategic part of the web-based tourist information systems and it is one of the prominent perspectives of internet technologies in the Bulgarian tourist enterprises. The tourism sector gives very favorable conditions and circumstances for mobile business. The wireless devices will become the preferable way for instant access to tourist information.

KEYWORDS

Internet Technologies, Bulgarian Tourist Websites, E-business, M-business.

1. INTRODUCTION

Internet takes an important role in the tourist business as a distribution channel, but still Bulgaria falls a little bit behind. There is not enough understanding of why and how the new information and communication technology (ICT) could be used, and this is the reason why there is no official statistics about the percentage of the tourist firms that use Internet.

The internet technology implementation in the tourist branch is a key factor for its survival, especially in the conditions of economic crises and strong competitiveness in the domestic and international market. The broad internet usage has been confirmed as one of the most important tasks of the tourist business and as a key factor for its prosperity.

The purpose of the paper is to present the status, prerequisites and perspectives for the internet technology implementation in the Bulgarian tourist enterprises. The author has made an attempt to present the actual situation in some selected enterprises from the tourist industry. Along with that, some important circumstances and perspectives are outlined, that will enhance the effectiveness in the tourist branch.

2. METHODOLOGY

The methodology of the research is based on statistical analysis of the data, collected by means of carried out inquiries in selected Bulgarian tourist firms. The research was carried out as an inquiry, held in 100 Bulgarian tourist firms (basically tour operators, tourist agencies and hotels). This was a scientific-research project, managed by the author with the participation of some colleagues from the Business Informatics Department at Tsenov Academy of Economics, Svishov, Bulgaria in 2009. The inquiry has been accomplished in the following different ways: through direct visit in the tourist firms, by sending e-mails containing a questionnaire and through filling an electronic form, published in the website especially created for the purpose of the project (<http://www-proekt-turizam.eu/?q=node/2>). The website has existed only during the working period of the project – 2009, and has already expired.

The questions in the questionnaire have been divided in six groups namely: general information about the firm, information infrastructure, application software, web presence in internet, online interaction with the clients and challenges in front of the firm's information system. Each of the groups has been assessed with the respective absolute and relative quantitative and qualitative indicators.

Some of the conclusions have been made on the grounds of the data, published at the official website of the national statistical institute (NSI) in Bulgaria and some other publications, concerning this area.

3. RESULTS

The invasion of ICT in the tourism is a world trend that Bulgaria follows, but still not so actively and effectively. We found out that the major part of the Bulgarian hotels and tour operators is present in Internet, but with basically informative functions and still with online sales confined.

As main reasons for that could be mentioned:

- The low degree of computer usage by the population - 31,7% in 2009 (NSI,2009);
- Access to Internet is still confined in comparison with more developed countries. As a whole Bulgaria takes the 42nd position in the world ranking for e-readiness from 65 countries;
- E-payments are still not enough popular due to the low rate of credit cards utilization and the banks' restrictive policies towards online payments because of fear of fraud.

The latest data, published at the National Statistical Institute official website shows, that during 2009 the percentage of the persons that use Internet regularly has increased to 39,7 and the family internet access is 29,6%. This is not a satisfactory result at all, by leaving more than half of the Bulgarian population not covered. On the other side, in comparison with internet users in a world scale, which are approximately 2 billion according to the paper of International Telecommunication Union (ITU), i. e. 29,5%, it could be accepted as successful.

The specific purposes that Bulgarian population uses Internet for are shown in Table 1.

Table 1:

| Purpose | Percentage |
|--|------------|
| Sending/receiving e-mails | 81,1% |
| Searching information and online services | 41,8% |
| Using online services for traveling and reservations | 14,9% |
| Internet banking | 4,4% |
| Sales of goods and services | 1,6% |

As seen from the data above, only approximately 15 % of Bulgarian population uses Web for organizing travels and reservations. The analysis of the types of ordered by Internet goods and services shows that the biggest share is to clothes and sport apparel – 43%, then are the books, magazines and electronic materials for education – 30,3%, and leaving on the 3rd place with only 21% for traveling and hotel reservations. In regard with e-commerce types of payments, the most preferable way is with cash or bank accounts – 55,1%, then through Internet by debit or credit card payments, followed by the internet banking – 10,5% and the last are prepaid cards – 4,3%.

The main problems and barriers encountered in ordering and buying goods and services through Internet are presented in Table 2.

Table 2:

| Problems for citizens | Percentage |
|--|------------|
| Website technical failure during the order or payment process | 4,5% |
| Difficulties in finding information about guarantee and other legal rights | 3,2% |
| The time for delivering/answering is longer than it is indicated | 3,9% |
| The final value is greater than indicated | 1,7% |
| The delivered goods are wrong or damaged | 2,4% |
| Fraud (undelivered goods or services, credit cards abuse etc.) | 0,7% |
| Barriers for enterprises | |
| Product and services are not suitable for e-commerce | 46,5% |
| Clients are not tending to buy through Internet | 39,5% |
| Embarrassment for the security of payments | 41,0% |
| Technical problems on e-commerce adoption | 35,5% |
| Business process reengineering necessity for e-commerce | 32,8% |
| Language problems for international commerce | 21,8% |

A trend of significant increasing the percentage of enterprises with internet access is observed lately, reaching 83,9%, from which 69,6% is broadbanded. But still the part of the enterprises with own website is not enough – 42,5%, and those who use a digital signature are only 45,5%.

The last official national research about information-reservation systems application in Bulgarian hotels and tourist firms shows that 58% of the hotels don't use ICT at all, and the rest 42% use them mainly in accounting, reception and restaurant and only 12% have complete reservation systems adopted. (itforum,2006). Even more eloquent is the fact that 85% of Bulgarian tour operators and 75% of tourist agencies don't use other tools for reservations except telephone and fax.

The tourist branch is one of the three priority sectors in the Bulgarian economy development program. The tourism generates 10% of GDP in Bulgaria and the tourist revenue in 2008 increased by 14,6% compared with 2007. Unfortunately due to the world economic crises the income from tourism declined for the first eight months of 2009 (till august) by 0,2% compared with the same period of 2008. (tourism.government.bg, 2009) That's why the necessity of innovative business models in tourism is increasing rapidly. Internet technologies enable a variety of alternative ways for promotion, distribution, marketing and advertisement of tourist product and services, which in practice generate a new electronic tourist market.

4. MAIN CONTRIBUTIONS

Not by chance one of the expected trends in the tourism development is the considerable expansion of ICT application in the hospitality and touroperator activity with respect to searching, planning and realizing the travels. This is an important prerequisite for sustainable development of Bulgarian tourism and building of the country image as a competitive world tourist destination. But let see first what the real situation in the Bulgarian tourist branch is. It could be determined from the basic results of the empirical study held by a team, headed by the author in the summer of 2009. We carried out the inquiry in 100 Bulgarian tourist enterprises with the following structure:

- Hotels – 41%;
- Tourist agencies – 22%;
- Tour operators – 21%;
- Others (ticket agencies, attractions) – 16%.

With respect to networking the results show that 87,25% of the tourist firms personnel have internet access from their workplace, 61,76% of the tourist firms have local area networks, 44,12% use wireless local networks, 41,18% have opportunity for remote access of their staff outside the organization and 27,45% use IP Telephony (Voice over Internet Protocol). These figures are reasonably acceptable for now, but not satisfactory in the foreseen future.

Concerning Intranet only 38% of the tourist enterprises have it available. A key solution for the predominant part of the tourist firms is the website creation. The results from the above quoted research show that 94% of Bulgarian tourist firms are presented in Internet through their own website. This is definitely a positive result, which is more than twice compared to the average rate of 42,5% for the rest of the industries in the country. As a main reason for the creation of a website, 29% of the interviewed pointed out the opportunity to reach a broad range of users. Other important website functionalities are the online reservations – 28% and improved business processes, which led to

increased income with 24%. The rest of the arguments are cheap means of advertisement – 8% and pressure exerted by the competitors through promotion of their own products in Internet – 3%. The remaining 8% has no answer.

The basic functionalities that the investigated websites offer are reduced to:

- Filling online forms for placing a request/order – 46%;
- Searching information in updated database – 44%;
- Variety of tourist news – 39%;
- Multimedia content – 34%;
- User registration – 32%;
- Electronic bulletin – 18%;
- Subscription for last minute offers – 18%;
- Electronic payments – 14%;
- Online voting – 14%;
- Blogs – 9%;
- SMS – 2%.

As you can see the basic and preferable services offered by the tourist websites are placing orders, searching information and topical news of the day. Unfortunately very useful transactions, such as subscriptions for valuable information, e-payments, blogs and SMS messaging are not widely accepted. So in overall the Bulgarian tourist websites are helpful and informative but with restricted functionalities in regard to active payment transactions.

In relation to the website updating period, the tourist firms give the following answers:

- Once per week – 11%;
- More than twice per week – 18%;
- Once per month – 29%;
- Once per quarter – 14%;
- No answer – 28%.

The assessment here is also not very positive because the prevailing period for updating websites is too long. If the companies want to keep their clients, they have to offer current and interesting information presented in attractive way.

Very concerning are the results about Customer Relationship Management (CRM) systems application, because only 13% of the inquired use such software for saving information about their clients and present individual offers and discounts for them. On the other hand the clients themselves are somehow

reluctant to place online orders for goods, services or tickets. Only 8% of the tourist firms state that more than half of their customers make purchases online. This comes to show that Bulgarian people are not ready yet for buying and paying through Internet. They rather receive a big variety of information from Internet and then go to the tourist office or make a call for its confirmation and payment.

The main reasons for these are related with the security of the personal data and credit or debit cards abuse. Despite the IT industry big efforts towards the resolution of these problems, by investing a lot of money in information security, there is still way to go and therefore this feature plays key role in their IT strategies.

5. CONCLUSIONS

As a result of the investigated Bulgarian tourist websites, the following main conclusions could be summarized:

1. Almost all of the investigated tourist firms, including these with five people personnel, use Internet intensively and have their own website. As a main reason for website creation they pointed out the opportunity to reach the widest range of users;
2. The websites have mainly informative features and offer wide variety of information about the tourist products and services, with online communication facilities still not widely practiced;
3. After making the choice the user could place online order and send it to the tourist firm that facilitate and speed up the communication with the clients;
4. The user's registration enables the creation of client database needed for the enhancement of strong customer relationships. Owing to this their preferences could be examined in details and could be offered personalized tourist packages with price deduction for regular customers;
5. Very small share of tourist firms (basically big hotels) use CRM systems. The main reason for this is that the managers are not very well acquainted with their functionalities and advantages;
6. Electronic payments with debit or credit cards, which is indisputably very convenient for the clients, are not widely accepted;
7. It is recommendable to enhance the attractiveness of tourist websites by including video clips for presenting the tourist objects and online maps about their geographic place as well;
8. Low level of users interaction, which could be improved by the publication of the clients' opinion, asking questions and giving answers by e-mails or SMSs, discussion forums, online questionnaires, blogs and social networks access.

In this regard let's draw attention to the most important prerequisites for e-business development in Bulgarian tourist branch. They could be summarized in four main aspects:

1. Forming reliable communication infrastructure;
2. Creating favorable conditions for electronic transactions and payments;
3. Establishing a flexible legal framework for e-business;

4. Developing professional skills for internet technologies implementation.

The easy and cheap internet access could be defined as a main requirement for e-business development in tourism. It creates a favorable environment for its growth and successful implementation. In addition this is directly related with the formation of high speeded communication infrastructure, based on open standards. Special attention should be paid to offering new internet services for citizens at specialized public places (for example Internet cafés).

The establishment of flexible and reliable legal framework is essential for e-business development. It gives bigger security and creates clear rules and correct relationships between business partners, taking into account public interests and clients' rights. The regulatory framework for e-business development in Bulgaria is based on European principles for transparency and consultation in taking decisions for economic development of the country, public announcement of conditions and absence of discrimination of e-business partners, clear and well known regulative mechanisms, loyal competition and customer protection. With the approval of E-document and e-signature Law, Bulgaria has accepted European standards about the security of information exchange and the responsibility of the participants in it.

The progress of digitalized communications requires increased customer trust in e-business and information exchange. Along with that some instruments for data protection should be elaborated, keeping the correspondence secret and information inviolability. In this respect the cryptography methods are well-tried expedient.

We shouldn't underestimate the user's ability to use the e-business full capacity. For this purpose they have to gain the required computer knowledge and experience that will enable them to interact successfully in the internet communication environment.

As a whole the tourist branch is a pioneer in taking advantage of internet technologies. The users interact directly with suppliers of tourist products and services, which suppliers on their part, could identify and satisfy more effectively the permanent changing divers and complex requirements of the clients. Tour operators use Internet on a mass scale to present, distribute and sale their products to the potential clients from all over the world with minimum consumption of financial and time resources. The main advantage of Internet is the elimination of mediators in the distribution of tourist products and services. By creating their own websites, the tourist firms build an e-business platform on which they promote all e-services.

For small tour operators and tour agencies, which predominate in the tourist branch, there should be found a solution for the reinforcement of the integration and interaction between them, by means of connection in a network. Only by doing so they are going to be able to cut the expenses and increase their market share. The cooperation among them will increase their competitiveness, variety and attractiveness of the new product and services and bottom line increase their profits.

As we mentioned above, Internet eliminates mediators in the tourist value chain and suppliers and customers communicate directly and more effectively. The majority of tourist firms have created their internet portals for offering online services. This shift of focus on Internet has changed totally their business models. Along with this process, some new mediators have emerged on the internet tourist market. Such examples are the destination websites and portals for e-marketing and sales of particular tourist destinations.

6. PERSPECTIVES

The modern user of tourist information wants not only to be acquainted with it, but to be able to actively take part in the formation of the rich information environment. The internet technologies penetration into the tourism area is a world trend, which Bulgaria follows, but still not enough actively and effectively. It is a matter of fact that most of the hotels and tourist agencies, are present at Internet, but in a way formally, with online sales still confined.

The Internet is a perfect place to plan, organize and economically arrange all kind of long or short distance trips. With these online tourist services could be purchased travel tickets, booked hotel rooms, rented car or bike. Most of the tourist sites use a function for sending e-mail messages about low-cost flights or last minutes packages to favorite destinations. The most popular tourist portals are Expedia.com, Travelocity.com, Orbitz.com, Hotels.com and Priceline.com (Turban, E. and L. Volonino, 2010, p. 213). The last one allows the customer to set a price he is willing to pay for an airline ticket or hotel accommodation and after that attempt to find a vendor, who matches this price. For Bulgarian tourism the famous web portals are Travel.bg, Travelborsa.bg, Bulgariatravel.org, Bgglobe.net, Tourism-bulgaria.com, Discover-bulgaria.com, Bg-tourism.com and many others. They also offer online tickets, rent-a-car, maps, travel news, travel guides, timetables of buses and trains, airline schedules, hotels and lodging information, interesting destinations, foreign embassies, blogs with travelers diaries where they share their opinions and impressions and so on.

Lately mobility has become a strategic part of the web-based tourist information systems and it is one of the prominent perspectives of internet technologies in Bulgarian tourist enterprises. We are at the stage of a wireless revolution that is transforming computing and information systems. Although it is still in the beginning, it is already changing the way businesses produces and sells their products.

Mobile business (m-business) is supposed to be done in a wireless environment via the Internet. It is expected to be the next generation e-business that enables users to access the Internet, without needing to find a place to plug in. So called smart phones offer Internet access, fax, e-mail, and phone capabilities, all in one, paving the way of m-business. Mobile technology not only provides convenience and efficiency, but also can lead to competitive advantages that impact entire strategies and business processes.

M-business is growing rapidly in parallel with the explosive growth of mobile devices and networks. It creates opportunity to deliver new services to existing customers and to attract new ones. Concerning the tourism, so called mobile vacationers become very popular lately, as they are connected with the Internet from any place at any time during their holiday.

There are two basic characteristics that differentiate m-business – mobility and broad reach, which is based on the fact that users carry a mobile device anywhere they go and at any time. These two characteristics create additional attributes that drive the development of m-business and these are:

- ubiquity - real-time information and communication, independent of the user location;
- convenience - through Internet-enabled mobile device, such as a smart phone, it is easier and faster to access the Web from most of the hotels equipped with Wi-Fi connections – so called “hot spots”;
- personalization – it refers to the preparation of customised information for individual consumers as travel-related information and advertisements;

- localization of products and services – knowing where the user is located is a prerequisite for offering relevant products and services. This is possible only when GPS is attached to the user's wireless device and the nearest hotel or restaurant could be found.

The development of m-business in tourism is driven by the following factors:

- widespread availability of mobile devices – they have as much processing power as personal computers and very soon will become the foremost tool that connects people to the Internet;
- widespread use of cell phones – this is a social phenomenon especially among young people;
- declining prices and increasing functionalities – paying a flat fee per month encourages more users for mobile devices;
- improvement of bandwidth – it should be sufficient for transmitting all kind of information – text, voice, video and multimedia.

Thus, wireless devices could become the preferred way to access tourist information instantly.

Tourism sector creates very favorable conditions and circumstances for m-business. Such example is the web portal 3Deja-Vu (3Deja-vu.com) for tourists and skiers that promote the skiing resorts collectively known as the “Portes du Soleil”, the skiing area situated between France and Switzerland. The portal has 3D visualization system that enables web users to geographically identify and view business locations (tourist resorts and service providers) on a 3D terrain model by using satellite and aerial photography.

On the grounds of the research results and conclusions, we could make some suggestions for optimization of internet technologies application in the Bulgarian tourist firms. They could be summarized in the following way:

- Increasing the quality of the information services by creating an attractive dynamic content, including text, animation, visual and sound effects. Such type of interactive websites, facilitates the registration of the users and the creation of a database for further contacts and suggestions;
- Improving the communication processes through building such components as discussion forums, blogs, online questions and answers, subscriptions for news and promotions, e-mails and publishing client's opinions, whatever they are;
- Strong orientation to the customer through more intensive CRM applications in the tourist firms. This will attract new clients and retain the old ones. Keeping contacts with permanent clients and offering promotions and bonuses;
- Including online orders and payments by means of embedding in the websites electronic forms, invoices and other payment documents, with which could be transferred money electronically;
- Creating corporative blogs and profiles in social networks, that will develop the tourist market and influence the customer behavior;
- Including mobile services that connect people on holiday from any place and at any time.

The online market development in Bulgarian tourism is still an exotic. Only 5% of the tourist reservations in Bulgaria have been made through Internet (inews.bg). Therefore the problem of the present day is to set up a modern internet infrastructure and develop a special culture in the citizens to

use Internet and mobile devices not only for information, but for booking and payments as well. Other important aspects are the social networks and blogs, which are becoming very popular in sharing tourist information and experience. This could be an interesting topic for future research, especially as a tool for viral (word-of-mouth) marketing in tourism.

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