

Online Tourism Promotion in the TRNC

Hasan AMCA, Mustafa ILKAN, Ekrem VAROGLU and Cem YAGLI
Eastern Mediterranean University,
School of Computing and Technology
Email: hasan.amca@emu.edu.tr
Web: <http://sct.emu.edu.tr>

Keywords

e-tourism, tourism information system, web usage

Abstract

The paper discusses the effect of web usage on businesses with emphasis on tourism promotion. A detailed solution method is proposed for connecting the small tourism facilities in the TRNC to the Internet, which, can not built their on-line Internet infrastructure. The role of individual customers, companies and the government offices in realizing this project is well explained. The possible mutual benefits of such an implementation, is outlined.

1. Introduction

With the widespread use of the Internet and related technologies, it became easier to reach the masses of people once you created the necessary communication channels on the net. Developed countries are competing to sell their industrial products through the net while the developing and underdeveloped countries are still striving to build the necessary infrastructure just to get connected to the net. A research by Sun Microsystems [1] has revealed that, by the year 2003, 5% of global trade will be on-line, the B2C e-trade volume will reach 150 billion USD, 500 million users will be on-line, and the B2B e-trade volume will reach 3 trillion USD. In the TRNC by June 2002, being through the work-environment, the net cafes or through domestic premises, almost 50 percent of the society [2] has a kind of e-mail and Internet connection. However, the rate of on-line shopping is negligibly small. UK has decided to transform all official transactions within the government to digital format by the beginning of 2005. As a part of this transformation program, in Liverpool and Sheffield, they have already made the local elections online [3]. According to the official news release, the voting rate is increased by 12% when the e-vote system is implemented.

In the countries that are target tourism markets for the TRNC, online shopping is experienced by a large percentage of the population. Hence, being available on the net becomes a major advantage for marketing tourism. Due partly to the national ISDN network and partly the Digital Subscriber Lines, many European countries have already developed their online tourism marketing infrastructure and went online. Some small hotels and bed-and-breakfast facilities, however, could not afford to establish their own web sites and online payment facilities as they could neither afford to hire a full-time web designer nor could they have enough security to protect their data. In such situations, Call Centers¹ are established to securely host and update the web sites and reservation databases of small facilities.

In the TRNC, the National Information Infrastructure (ISDN or DSL lines) is not yet developed to the extend where secure on-line shopping (hotel advertisements and reservations) can be done. Unfortunately, the Call Centre culture is also not well established to continuously and reliably serve touristic facilities and gain the facility owners trust. The only chance for the touristic facilities to go on-line and market their tourism potential is the government support to establish and maintain a secure Call Centre. Of course, it will cost the government a large sum of money when the Ministry of Tourism and Hospitality becomes the Call Centre, but the result is guaranteed to have enormous benefit on advertising and promotion of the TRNC tourism. Hence, the Ministry of Tourism and Hospitality should act like a Call Centre and help all touristic facilities to establish and maintain their web sites and databases on the servers provided by the ministry.

The analysis, design and implementation of the ETIS are a very complicated issue and a hierarchical administration of the program is necessary as follows:

¹ A Call Centre is defined as the collection of web and database servers to advertised the touristic facilities, make on-line reservations and monitor the touristic activities throughout the year.

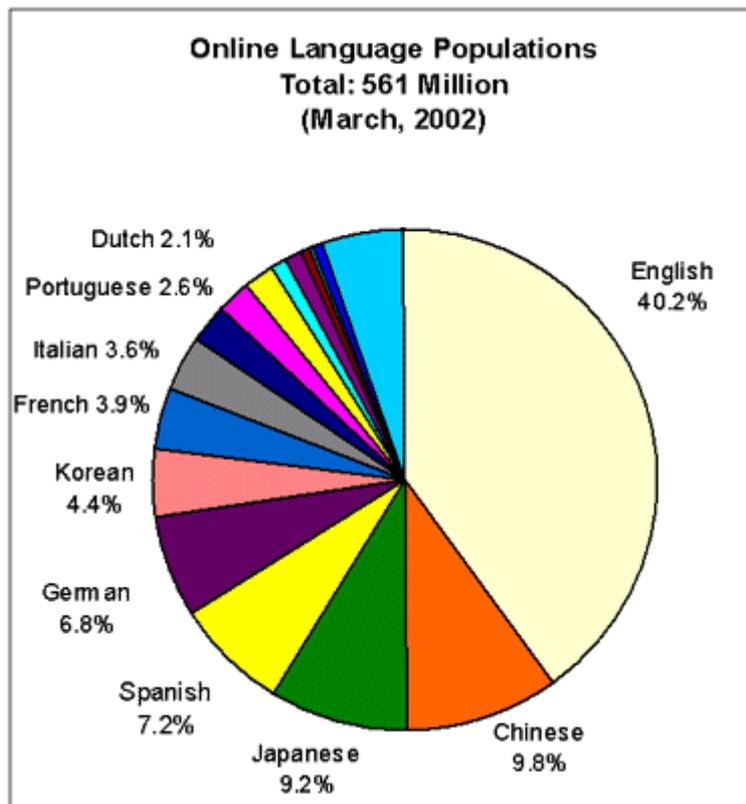
- The Tourism and Hospitality Ministry: Owns and finances the program.
- General Assembly of e-tourism program: Chaired by a minister from the Tourism and Hospitality Ministry, this body is responsible for approval of strategic decisions in the program.

In this paper, some statistical data about Internet access rates of the developed countries are provided and compared to those in TRNC and Turkey, which will give us an idea on how much it will improve the number of tourists visiting our country through the net.

2. The Influence of Web Usage on Tourism Marketing

The latest figures showing the number of people online in each language is shown in Figure 1 below [4]. The classification is shown in terms of languages instead of by countries, since it is observed that people speaking the same language form their own online community on the WEB regardless of their country of inhabitation.

Figure 1. Percentages of Online Language Populations on the WWW.



Considering the geographic location of the TRNC and keeping in mind that the potential tourists should be primarily from European countries, it can be forecasted that an ETIS on the WWW should be designed multilingual in languages of English, French and German. Italian and Spanish languages can also be considered as further options. The total percentage of users in these major European languages add up to a roughly 30% of all people connected to internet worldwide [4].

3. Customer Centered E-Tourism Program

It is important that e-tourism is not a technology project but it is an advertising and promotion program, which should have a vision extending several future governments. Together with the vision, necessary technologies must be established and the tourism facility owners and the society must be educated to be the owners of the program. Of course, all of these must be carried out in accordance with a transformation (to transform from conventional to e-tourism) master plan, which should also be a part of the e-government program master plan.

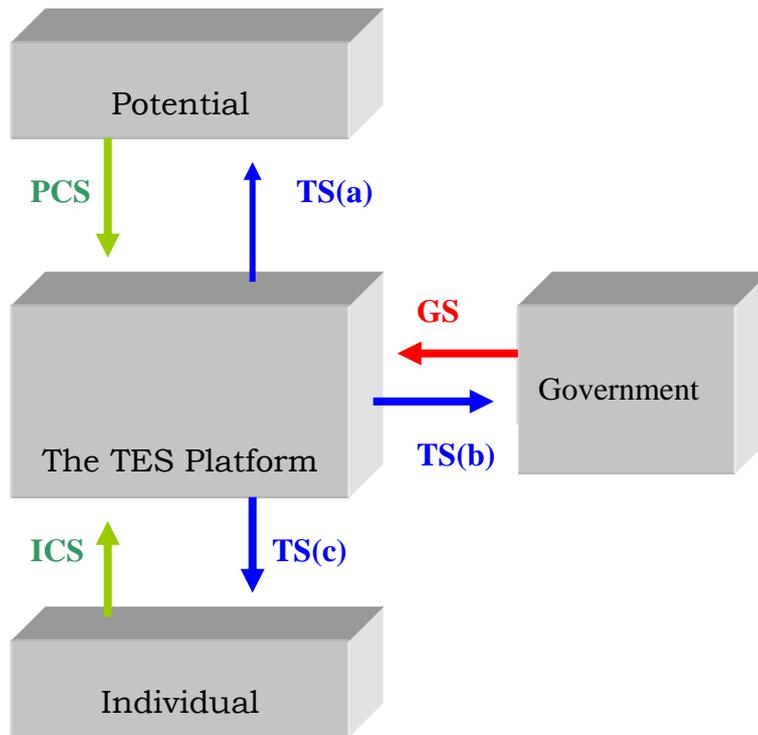
E-tourism program should be established with the common sense developed by the contribution of academics, private businessman, civil society organizations (e-tourism program general committee). In such large organizations, project management notion should be replaced by program management. A program office (approved by the general assembly of e-tourism program) should be established in this context in order to examine the conformity of the projects submitted by the private tourism sector to the e-tourism program.

4. The Technology Projects as Part of the E-Tourism Program.

The work within the e-tourism program should start with the analysis of the systems requirements (e-Tourism Information System Analysis). The Tourism Information System (TIS) will be made up of a TIS platform, which will host the entire individual companies which themselves will be made up of functional modules as shown Figure_2.

The TIS platform will work as a match maker between the potential customers and the individual companies of the TRNC. In addition, this systems will provide very detailed statistical reports to the government to be used in the decision making activities.

Figure_2. The TES Workflow Schema



The proposed system (TES) is going to be developed to give services to its members (Customers and the companies) and to the government. The potential customers (who will demand services) and Individual Companies (who will supply services) have to electronically apply to TES (ICS and PCS) in order to request a membership. Those applications will be considered by the TES and the accept or reject response will return to the applicants (TS(c) and TS(a)).

The registered companies will upload their profile informations, missions, given services and some special advertisement materials to the system. Those material will be recorded into the main database of the system in order to answer the various customer inquiries related with the searched companies and the desired services (PCS and TS(a)).

Registered potential customers will able to do some inquiries on the system to search some companies, and services. The TES will use its own database to answer those search activities (PCS and TS(a)). Also customers will able to request onlie to reserve or buy some services supplied by the companies. These requests and their accept/ reject response will be directed by the TES. The Receipts of the accepted requests will be prepared from the company side and will be transferred to the customer side again by the TES. The online payments on the customer side will be accepted in a high secure manner, and the payment information will be then sent to the company side.

The TES also will function as a communicator between customers and the companies. The both side will able to send some reviews, review responses, invitation messages, etc. to each other.

The government also will use the gathered information generated by the customer-company transactions, as very detailed statistical reports. These reports will give a bright vision to the government to understand the profiles of the potential customers, their demands and the companies' service supplying quality and quantity.

This will make the decision making process in tourism sector, more easy, for the government.

5. E-Tourism Information System (ETIS) Design and Implementation

E-Tourism Information System will be developed in 4 stages, namely;

Stage 1: System analysis for the ETIS

Stage 2: Database design

Stage 3: Application program development (coding the programs)

Stage 4: Connecting to the WWW

Each of these stages is described in the following sections.

Figure-3. The TES Communication Schema

	PCS	TS(a)
1.	Membership request	Membership accept/reject response
2.	Start an enquiry (Search a service)	Response the query result
3.	Reservation Request	Reservation accep/reject response
4.	Online Payment	Online Receipt
5.	Customer Reviews	Customer Review Response

	ICS	TS(c)
1.	Membership request	Membership accept/reject response
2.	Uploading Company Profile Info.	Transaction recorded response
3.	Identifying the given services	Transaction recorded response
4.	Uploading special advertisement material	Transaction recorded response
5.	Accept / reject reservation	Reservation Request (originated by PCS)
6.	Response the Customer review	Customer review
7.	Receipt Details	Online Payment details

	GS	TS(b)
1.	Statistical Reports Request	Generated Statistical Reports

4.1 System Analysis for the ETIS

At this stage, the fundamental steps in the development, design, implementation and testing of the ETIS will be analyzed by interviewing the tourism experts on how to develop the on-line TIS. The tourism experts who will be involved in system analysis will include individual tour guides, tour operators, tourism facility owners, government tourism specialists, the tourism and hospitality ministry and the like. The flight and ship transportation systems will be analyzed in order to transform the conventional system into online version. Every form, receipt and books that are used in the conventional booking and transportation systems will be investigated and samples will be taken through discussion sessions with the corresponding experts in tourism industry who worked in preparation of these material. Potential problems that may arise in the future will be determined and avoided through analyses of the current law and **bylaws** that are applicable to the tourism sector. The automation system that will be developed as a result of the system analysis will be presented to the tourism personnel for approval.

4.2 Database Design

As a result of System Analysis, decision will be made on what database system software will be used to hold the application based on the proposal approved by the tourism authorities. The decision on what database system to use will also be dependent on the data to be stored and operated on, the computer and network hardware, the available budget.

Following the decision on what database software to use, based on the features, capabilities and limitations of the database software, data structures that will enable the best access performance will be designed.

Finally, the methods of entering, storing and protecting the data thsat will be entered by the users and/or calculated by the system, the personnel who will enter data to the system, the access rights and priorities of the users of the ETIS will be determined.

4.3 Application Program Development

The completion of the database design stage leads the way to the choice of the most suitable application program development package in conjunction with the database software to be used, data structures to adopt and the specifications of the computer hardware and network topology. Consequently, application menu, security and backup modules, data entry modules and reports production modules will be prepared and approved by the committee. Every module developed as part of this project will be added to the main menu and subject to the tests of the end users.

4.4 Connecting to the WWW

At this stage, those parts of the available data (approved by the committee) collected in the database will be given public access on the Internet with the forms and limitations determined by the committee. At this stage, initially, the decision on what data will be accessed by which users in what forms will be given. The Internet connections to the public data will be made according to the network topology, the budget available and the necessary updating period of information that will be put on the net. Following this, the site map, menu, security and control module, data entry, questionnaire and reports forms will be designed and submitted for approval. These forms will be added to main menu after necessary debugging and testing period is completed.

References

- [1] Sun Microsystems, www.sun.com
- [2] Necdet İcil, KKTC'de Bilişim Konferansı, Cristal Cove Hotel, Girne, October 2001
- [3] <http://www.pm.gov.uk/output/page4371.asp>
- [4] www.gltreach.com/globstats