SURVEY OF THE E-BUSINESS OPPORTUNITIES IN MACEDONIA

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Abstract: According to many experts' forecasts, electronic commerce will have increasingly bigger influence on the economic growth on of each country. This is especially true for the smaller countries, like Macedonia, helping them to overcome the regional barriers and to open themselves to the word businesses. In order to identify and analyze the potentials of the Macedonian companies towards using the Internet and New media in their day-to-day business, we have performed a survey among the Macedonian companies. The survey itself has been developed in collaboration with the St. Galen University in Switzerland, in the framework of the project "The Potential of B-B Platforms for the Macedonian industry –Technical and Economic Aspects".

The aim of the survey is to identify the potentials enabled by e-Business, but also to provide us with the necessary information for developing a simple guide on the new technologies that would help the companies to adopt them as seamlessly as possible. The questionnaire was developed in three models: form the companies using Internet, for the ones not using Internet and for the Internet service providers. The accent was stronger on the companies that already using some basic Internet services as they are identified as the early adopters of the e-Business technologies. The survey included questions concerning general company info, computer equipment, basic and advanced Internet usage. Technologies like intranets and extranets, e-commerce, e-procurements, supply chain management and electronic data interchange are also included. Equally important are the data gained from the ISPs, since they provide the foundation for the advanced business usage of the Internet. The results of the survey are processed using standard statistical techniques and some conclusions are made out of them.

Keywords: e-business, b2b

1   Introduction

According to many experts' forecasts, electronic commerce will have increasingly bigger influence on the economic growth on of each country. This is especially true

for the smaller countries, like Macedonia, helping them to overcome the regional bar-riers and to open themselves to the word businesses. In order to identify and analyze the potentials of the Macedonian companies towards using the Internet and New me-dia in their day-to-day business, we have performed a survey among the Macedonian companies. The survey itself has been developed in collaboration with the St. Galen University in Switzerland, in the framework of the project "The Potential of B-B Plat-forms for the Macedonian industry –Technical and Economic Aspects".

This joint project tries to answer some of the e-Business related questions in the Mac-edonian business environment, among them most important being:

- What is the current state of application of E-Commerce in Macedonia? What are the major obstacles for its implementation?

- What is the current-state-of-the art in B-B E-Commerce in Western Europe and how can Macedonian enterprises participate?

- What kind of technology infrastructure and interfaces are necessary in order to be able to participate in international E-Commerce?

2   Internet in .mk

The estimation of the Internet penetration in Macedonia, according to the commercial ISPs is 2-4% percent. This is among the lowest in Europe. Service statistics are also very disappointing. According to RIPE, there are 3500 registered hosts, around 800 web sites. The average number of persons per host is around 600. This places our country at the 47th place in the region (Europe and Middle East).

Macedonian web sites are usually static sites with basic information. Most of them are web sites held by educational institutions, NGOs and governmental institutions. Even the web sites of the commercial companies contain almost no advanced func-tionality.

In the ISP market, there are eight ISPs. Among them, 2-3 are major providers, some are focused on specific target groups and the others are very small ones.

The monopoly position of the Macedonian Telecom on the communication channels has a very strong negative influence on the infrastructure development in Macedonia. Some steps are taken to introduce alternative access methods, but all of them are in the initial phase (wireless, cable, ADSL). Nevertheless, the trends are positive, with the university networks being the leader.

3   The survey

The goal of the survey was to identify and analyze the potentials of the Macedonian companies towards using the Internet and New media in their day-to-day business. It was developed according to widely accepted models and reviewed by recognized ex-perts in the area. In the initial phase, there were three questionnaires, one for ISPs, one for companies using internet and finally one for the companies not using it. In the following phase, the later two merged into one questionnaire. The reason for that was

to introduce the B2B possibilities even to the companies not using Internet and New media.

First, we have delivered the questionnaire to around 200 companies by electronic means. Those were the companies already having some Internet usage (at least having registered an .mk domain). Later, with the support of the Macedonian Economic Chamber, it was delivered as hard copy to the members of the chamber, included in a monthly issue of their bulletin.

The questionnaire for the companies had five major parts:

- General info
- Basic internet usage
- e-Commerce usage
- Advanced e-Commerce
- If not using

The first part contained some general information about the company, including the number of employees, number of IT employees (dedicated and not dedicated) and IT infrastructure (number of computers, networks and Internet connection speed and budget.

The questions about the basic Internet usage included:

- Serviced offered to the employees
    - o Web and mail users
- Communication with the customers
- Web presence
    - o Site structure
    - o Information offered
    - o Web site feedback

The third part of the questionnaire covered the e-Commerce issues, among which most important were:

- Usage
    - o Using, planning
- Models used
    - o B2B
    - o B2C
- e-Business done through
    - o Own site
    - o Extranet
    - o electronic marketplace
    - o EDI

- e-Procurements
- Membership of extranets
- e-Business contacts home and abroad

In the area for the advanced e-Commerce Internet usage, the questionnaire covered both business and marketing usage:

- Business
  - o Supply chain management
  - o Electronic data interchange
  - o Electronic marketplace
- Marketing
  - o Inclusion in search engines
  - o Link and banner exchange
  - o Internet directories

Finally, the last part of the questionnaire was targeted to the companies not using Internet in their day-to-day operations. The question included

- The reasons why are they not using it
- Necessary preconditions to use Internet
- Can government help?
- Plans for future deployment
- Is using Internet an advantage?

Unfortunately, we had no response from a company in this category, so we could not evaluate this part of the questionnaire.

4   Results

The response of the companies was below our expectations. In the initial phase, we only received about 15 responses, most of them from IT or companies that strongly depend on IT. An interesting fact is that all responses were received from the companies that had the questionnaire delivered to them electronically. All of them have basic Internet usage. Most of them have high speed dedicated connection or ISDN. Most of them have web sites, with limited advanced e-Business usage.

The size of the sample was too small to draw some valid conclusions. Nevertheless, some basic statements about the e-Business Internet usage in .mk can still be made:

- The e-Business in Macedonia is still in the very early phase of development. The reasons for this are very low Internet penetration, low life standards, low level of own production to be offered, underdeveloped and high priced monopolized communication infrastructure etc.
- Some companies are making their firs steps in the e-Business world. Most of them are companies with strong relation to foreign or international companies.

Almost all of them are somehow connected to the IT industry. The lack of own production results in almost no domestic companies using e-Business.

- Raising the level of Internet and general computer literacy will increase the usage of Internet in everyday life, leading to more users wanting to perform their activities on-line. This will force the companies, especially service and public interest companies, to offer their customers and their business partners the possibility to satisfy their needs over the Internet.

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