Katarina Ceran, Milos Stevic

Internet and E-Marketing Technology

Traffic on the Internet is growing so rapidly that many companies have troubles in maintaining pace with the demands of visitors of their Web site. One of the most important usage of the Internet is, of course, in electronic business. Internet is consisted of computer and communication technologies, and makes our work easier, because the information are becoming permanent and easily accessible, wherever they are in the world, which provides easy and afordable international presentation for individuals. This significantly changes the ways of conducting business. Is the site easy to use, if the site works properly, which are the standards for online customer service, how to deliver physical products, and the like, is a key issue in e-marketing, ie. how to achieve customer satisfaction with the usage of e-marketing.

Key words: *Internet, Web marketing, e-marketing, organization*

1. Introduction

Expansion of the Internet in the 90`s attracted the attention of the developed world, but arosed large dust, smoke and chaos. Before the emersion of the browsers, it was impossible to find content on the Internet without knowing the complete address of the Web site. Therefore, the real beginning of the expansion of the Internet is considered the emersion of Netscape's Web browser, at December 21st 1994., which is sold in more than 5 million copies in 6 months.

After that, traffic on the Internet is growing so quickly that many companies have troubles in maintaining pace with the demands of visitors of their Web site. Predictions that are the result of a number of researches are indicating that the Internet could replace the phone systems, television, radio and newspapers in the form in which we know them today. Power increased gap will allow better transmission of video and audio signals. Electronic forms from publishers of cryptographic protected books, with the imbeded multimedial content and

interactive possibilities with new updates, is a serious competition the paper. Companies in developed countries use the local television-based Web technologies. Internet has brought a particulary significant improvement of lifestyle to the people with disabilities, to which is much easier to integrate into the wider social environment by using Internet (a classical department store that can offer 50,000 different items at the same time does not exist in the world, while in the virtual store the same thing is very simple).

Quality technical information are not common in traditional stores, while the following descriptions and technical details in the electronic stores are on the highest technical and quality level. Research conducted in 1999. indicated that the registered level of satisfaction with customers who buy over the Internet is significantly higher in relation to those who buy in the traditional manner.

Internet has brought the total connectivity, real-time access and a unique, simple interface provided by Web browsers. Now every company can instantly communicate with customers, suppliers, banks, transporters and other business partners. This creates a new way of data transfer throughout the company and, on the basis of that, creates a new environment for conducting business processes and maintaining sucessfull business relations.

2. Defining E–Marketing

Marketing includes strategy and the actions undertaken by the company to establish relationships with potential customers, and to persuade them to buy its product or service. Besides, the goal of marketing actions is that the product / service is differentiated in comparison with the similar product / service offered by competition, because customers are willing to pay a premium price for a special product. In this way, the product is no longer a classic commodity, which was many distributors offering the same product, and customers choice is based solely on the amount of price and delivery terms. Competition is rising to the level above the price, to create unperfect market, where the income on investments is higher than average, and consumers are willing to pay a higher price for a product that has no substitute, because it is unique. Marketing techniques should ensure the consumer to select the product based on quality and other factors, besides price. In this regard, the Interent marketing involves the usage of the Web (along with traditional marketing channels) to develop positive and long-term relationship with the consumer (who will buy online or offline), and create competitive advantages for a company, which will be able to place its products / services on the market by higher prices than the competitors.

In addition to the term Internet marketing, there is an alternative e-marketing, which is defined as the achievement of marketing objectives by using electronic communication technologies (not just the Internet), and it is considered to be a wider term, which has external and internal perspective. E-marketing is often

44

defined as a subset of e-business, therefore, in a similar way as e-commerce, and the question of the relationship between e-commerce and e-marketing is arisen. They are considered to be very similar terms, but the concept of e-commerce is still broader than the concept of e-marketing, because it includes sell-side and buy-side of the transaction, while the e-marketing focuses only in sell-side of the transactions and communication in this segment. A key issue in e-marketing is how to achieve customer satisfaction by using electronic channels, which raises a number of dilemmas in this regard: whether the site easy to use, whether the site function properly, which are the standards for online customer service, how to to deliver physical products, and the like.

3. Internet Marketing Plan

Regarding that the most common form of sales of goods and services on the e-market is on the Internet, Internet marketing should be considered as a separate type of e-marketing, and the best way of observing this type of marketing is to create a brief overview of Internet marketing plan, which has been described by prof. dr Dragan Vukmirović, who named it „Sm@rt model" and represented it on a national site that deals with this problem.

a) Sm@rt model
SM@RT model is designed to define a marketing approach in Serbian Internet space. To access the general development of this model, it was necessary to complete the analysis of the domestic Internet. The basic assumption on which the model is based is that the process of e-marketing is the extension (not replacement) of classical marketing in the construction of the marketing plan, after which should be accessed to evaluation and possible correction actions. Starting oint in creating the marketing performance of a company on the Internet is the definition of an Internet business plan which includes mission and business objectives of a company. Situation analysis is a basic step in the realization of marketing performance of companies and support the process managing online marketing which, like traditional marketing, involves analysis, planning, implementation and control. The main task of this phase is a detailed analysis of factors related to the environment, the market, competition, customers and company itself. For this purpose, marketing research, market segmentation, competition analysis, evaluation of company strategy (SWOT analysis) are being conducted, as well as redefining of marketing strategies.

Through the process of developing and implementation of marketing plan, the company Web site, which is the basic tool of cyber-marketing, is also developed. Control phase represents the last step in creation of the marketing plan, but due to the importance in the process of implementation, is considered as a separate phase in the development of Sm@rt model. Control phase is based on statistical

analysis of Web traffic, which represents the basis of the process of evaluation previous activities in the development of models. If the obtained results are not satisfying, it is suggested to return to the previous phase (development and implementation of the marketing plan).

b) Definition of the Internet business plan

Business plan represents a written description of business goals and ways for their realization. Internet business plan is defined in accordance with the business philosophy, mission and objectives of companies, which are assumed to exist. Otherwise, it is necessary to define them. To successfully implement Sm@rt model, it is necessary that the company philosophy is based on the marketing concept.

Marketing concept is not just a theory, but also a business philosophy, which confirms that the company aims, above all, to satisfy the demands of customers. According to this conception, the key for achieving the objectives of the organization is consisted in determining the needs and desires of target markets and transfering of desired satisfactions by more successful and effective way than competition. The mission of the company is a purpose or reason for the existence of the company. Before the company appears on the Internet, it is necessary to determine which are the reasons for this type of business to be suitable for the company. There are many questions that marketing managers need to set themselves before you take any action on the e-media. Too many organizations compete on the Internet without pre-defined goals, plans and / or methods for the evaluation of achieved results. Business objectives are defined at the level of the company in order to meet the expectations of shareholders (the founder, owner). Time range of objectives can be from one to three, five or ten or more years (long-term goals). From the practical aspects, they are set as quantitative and qualitative. Quantitative business objectives are related to the rate of income on the basis of engaged and invested capital, earnings per shareholders stocks, etc. Qualitative business objectives are related to the image and position of the company, its identity and transparency. When defining the business goals, very improtant are: company position, market position of products, productivity, competitiveness, technological and financial capacity, staff, social responsibility, profitability of products, markets and customers, achieving certain image and identity, etc.

c) Situation analysis

Situation analysis is the second phase in the implementation of Sm@rt models intended for the definition of marketing emersion of companies on the Internet. The main task of this phase is a detailed analysis of factors related to the environment, the market, competition, customers and company itself. Without adequate information about market, the company can not create an effective

marketing strategy. Information are crucial, wheter a company is new on the market, broadening its operations, or intends to rationalize its global activities.

In particular, the situation analysis includes a range of activities:

Marketing research: segmentation (defining the target groups, which achieve the conditions for the establishment of 1:1 (one-to-one)) marketing, competitive analysis, evaluation of company strategy (SWOT analysis), and redefining the set of marketing objectives (if necessary).

Thus, the situation analysis supports the management of online marketing which, like traditional marketing, involves activities of analysis, planning, implementation and control.

d) Development and implementation of marketing plan

After defining the Internet business plan and the implementation of situational analysis, according to Sm@rt model, it is accessed to the development and implementation of the marketing plan.

e) Control phase

The last phase is the control phase which, in the development of Sm@rt model, includes a series of activities which enable a continuous process of maintenance and control of a Web site. Specifically, the task of the control phase is reduced in obtaining answers to questions such as: Does the Web site: meets the needs of interest groups; leads to prices reduction; increases sales and/or improves communication with interest groups; accomplishes business goals defined by business plan, etc. There is no way to determine the fulfillment of the aims of business plan if you do not build a method for measuring the effects of Internet activities. Most of the methods that are allegated in the literature, and found its application in practice, are based on statistical analysis of Web traffic and online research. In general, the control phase of the Sm@rt model involves the following steps, which are required to be performed: defining control mechanism goals, checking website ranking on search engines, collecting data and analysis of the results.

4. Marketing technologies and strategies on the Internet

In traditional channels of communication, marketing messages went from the company to the customer, with the minimum possibility of feedback reaction of the buyer. They were defined as "media push customers to the product"- Push media. In the case of the Internet, buyers first seek information on the web about a product or service, and interactively with the tenderer make buying decisions. This process is called Pull-Push technology.

In regard to all the specifics of the Internet, as well as the analysed segments of e-marketing plan, it is necessary to know basic technologies of Internet

marketing which are used in the realization of certain segments of the plan, in order to: get to know your customers, establish a relationship with online customers and support relations with online customers. Internet marketing technologies which aim to apprise online customers are: Web transactions, cookies, Web bugs, database - data warehouse - data mining, advertising networks and systems of relations with customers. Web transaction is a record of user activity on a Web page and it is the primary source of information about consumer behavior and tastes, and it is kept in the Web server software. Data from the Web transaction can be used in combination with the online registration form that consumers often fill in, or with the database of consumer shopping basket. Registration forms provide many personal details: name, address, phone number, interests and taste of users, while a database of consumer shopping baskets show what produchs are bought by consumers, what is their choice and also, which payment method is being used. Cookies are small text files which are embedded on the client computer by Web pages at each visit, during the visits and when visiting specific Web pages. Cookies, which are used by marketing analysts as a method for rapid identification of potential customers, are providing understanding of past behavior on the site. Web pages use cookies to determine how many people visit the site, are the visitors new or those who revisit the site and how often visitors come to the site.

Web bugs are small graphic files, hidden in the marketing e-mail messages and Web pages. They are used for the automatic transfer of information about the user and site that is visited on the monitoring - server. When a user opens an e-mail or Web page, the message is automatically transmitted to the server and induces the user is interest for the certain subject. Web bugs are usually white or transparent and, therefore, invisible to the user.

Database, data warehouse, data mining and profiling are technologies that enable marketing professionals to identify customers who are online and what they want and to represent them in the marketing message exactly what they expect, when they expect it and at the actual price. These technologies are in the category of technologies of marketing decision-making and are considered to be a real revolution that the Internet entered into the area in relation to the traditional techniques of demographic and market segmentation. The database is a software application that records all entries and attributes. Data warehouse is a database that collects information about transactions of companies and consumers in one place, for the purposes of offline analysis conducted by marketing and management experts. To this unique location data comes from different places, for example, the Web site, transaction paths, consumer baskets, POS terminals, storage inventory of supplies, financial information about the payments and the like. Analyzing the data in a particular location, managers come to answers for the questions: What are the products most profitable in a certain region or city; which regional marketing campaigns were successful and how effective is the promotion

of products on the Web site. Using data warehouse companies have a better market segmentation with the increase of income.

Data mining is a set of analytical techniques for finding common features or patterns in the databases, so the model of customer behavior can be formed and a profile of visitors and consumers can be developed. There are several types of data mining, and the simplest is based on the specific issues (query driven minig).

Advertising networks are specialized marketing companies with a task to provide help to e-trade Web sites, so they can take advantages and potentials of the Internet and the possibilities for directed actions towards potential consumers. These companies are known by abilities to present advertising banners to customers, in compliance with their interests. Advertising networks are based on data obtained from cookies and large database of consumer profiles, in order to select appropriate advertising messages for the consumers with positive results, including results achieved by selling products/services. Perhaps the most popular ad network is Double Click, which revealed a new service, called Boomerang, which monitors the behavior of people who were targeted by banners.

a) Online marketing communications

Online marketing communication methods is used by online companies to communicate with customers and create a strong brand. They can be divided into promotional online communication and online branding communications. Online promotional communications are used to promote sales of products, and to persuade customers to buy the product as soon as possible or „right now". Online branding communications inform the customers about the characteristics by which are product/service better and different from other competitive products. In these communications the customer is not persuaded to buy now, but a unique advantages of the products/services is being prefigurated. In the first era of electronic commerce, it was claimed that all marketing communications in the "digital economy" will be online. However, it that never happened. It is shown that the marketing communication campaigns are most efficient if they are used as a combination of online and offline methods. Offline media can convince the online audience to visit the site or to attract those who will now go online in the future to do the same. Many online companies are using offline marketing techniques in order to increase number of visiters to its Web site, create awareness of its existence or build brands. In online marketing communications, a number of tools is being used: online ads, e-mail marketing, public relations and the Web as a communication tool.

b) Online ads

Ads are the best known and most common marketing communication tool, regardless of whether it is a classic or online marketing. Companies allocate significant amounts of money for advertisments, even though the participation of

advertisments published through the electronic media does not exceed 3% of the total advertising costs. In relation to the ads in traditional media, online advertisments have its advantages, but also disadvantages. General advantages are: the possibility of directing the advertising messages to the proper segments of consumers; the possibility of monitoring the effects of the advertisments in real-time and interactivity; two-way communication between potential buyers and companies. The main lack of online advertisments is tracking incurred costs, as well as the balance between effects of advertisments and costs for its creation.

c) Banner advertising

Banner is a horizontal advertisment placed on a Web page or in its frame. Represents the oldest and most common Web advertisment. Banners can be animated and they are still considered to be the key of advertising on the Web. Banners appear when a visitor comes to a Web page. Plain GIF image or animation can appear as a banner, or it can be created by using HTML. There are many tips for making banners, some of them are: the most powerful word in the banner is „FREE"; simple graphics; animation should attract attention, a good banner should call to action and should bear the signature of a company.

Regardless of the quality of teh banner, its life cycle is very short, untill the arrival of the phase of "banner burnout" - when banner fails to give a good return on the investment. In recent years, they are proved to be as one of the least effective forms of advertising, but still remain the most common and most accepted way of advertising. The first and so far the most serious attempt to improve the efficiency of banner is to increase their size. Three most important factors of a banner are: the appearance, position and size.

d) Direct e-mail marketing

Advertising marketing messages is sent to interested users of the Internet for a particular category of product or service. Differs from the SPAM message that is sent to a mass audience, regardless of the interest. Therefore, reactions to these messages are very large, and is estimated to reach a level of 3% to 10%, depending on the target group. Due to high reaction rates and relatively low cost, this method of online marketing shows very high growth rate.

e) E-mail models

E-mail models are consisted of sponsoring discussion lists and e-mail newsletters and mailing lists. The simplest way for creating mailng lists is to offer visitors of a Web site the possibility for entering the user's mail address, which is later used to send specific messages to potential users.

f) Online catalogs

This is the online version of the classical catalog, which is the primary goal of the presentation of goods that are offered. The online catalog is usually consisted from the photos of products, a description (size, color, material composition) and information about prices.

g) Online Public Relations

Public relations are a method of raising awareness of the existence of the site and increase traffic to the site. This is the communication with the target audience or the audience in general on the basis of the methods that are not related to advertising, such as special events, celebrations, press conferences and the like.

h) The effects of online marketing communication

Is the online advertising effective enough and how to adequately measure the costs and benefits is a set of key dilemmas that are set when one should make the decision about the usage of this communication channel.

5. Conclusion

Electronic and communication links allow continuous business processes with high efficiency, lower costs and fewer errors and discounts.

In such circumstances, the key characteristics of the process of globalization are expressed. That calls into question the traditional postulates of international trade and essentially redefines understanding of international competitiveness, in which is requested from all participants in the market to adapt to new business conditions and IT conditions od business processes..

References

[1] Vukomirovic D., *Internet marketing*, Belgrade, 2005
[2] Ilic M. Milovan, *Marketing Management*, Faculty of Management of small and medium enterprises, Belgrade, 2006
[3] Momcilovic, O., Adamovic, Z., Milosevic, S., *The methodology of scientific research (aspects of systemic thinking)*, Belgrade, 2009
[3] Momcilovic, O., Ph.D. thesis: *Knowledge management and changes in the decisive factors of IT Education*, Faculty of Management, Novi Sad, 2008
[4] Jankovic, S., Momcilovic, O., Milosevic, S., *Marketing - the easy way*, Familet, Beograd, 2008
[5] Jankovic, S., Momcilovic, O., Martinovic, D. *Management - time manager*, Familet, Beograd, 2008
[6] C. Laudon K., *E-comerce: Business, Tehnilogy*, Society, London, 2001

[7] Chaffey D., *E-Business and e-comerc management*, London, Europe 2005, 2002
[8] www.e-trgovina.com
[9] www.krstarica.com
[10] www.e-poslovanje.com

Addresses:

- B.Sc. Katarina Ceran, Megatrend University, Belgrade, Serbia, katarina.ceran@gmail.com
- B.Sc Milos Stevic, Health Center, Pozarevac, Serbia, milosstevic@yahoo.com