



WEB 2.0 IN BUSINESS

G. Kiryakova*, L. Yordanova, N. Angelova

Faculty of Economics, Trakia University, Stara Zagora, Bulgaria

ABSTRACT

Information and communication are essential prerequisites for successful operation of businesses in the information society. The new level of business is directly related to Web 2.0. It is characterized by the enrichment of new business models to dynamic ones based on the services and technologies offered by Web 2.0. The role of social media in developing and implementing business strategies is expanding. Companies, who appreciate the power of social media, now use them as a new promising business environment with unlimited possibilities. The variety of social media does not facilitate business companies in their choice of facilities and services. Often, despite the use of the most popular social media the desired efficiency is not achieved.

The goal of this paper is to investigate and analyze different tools and services, especially social media and to determine an effective model for integrating and implementing them in order to manage successfully business.

Key words: Web 2.0, social media

INTRODUCTION

Information and communication technologies change the business environment and models in modern information society.

Through the application of Web 2.0 services and technologies basic model of interaction between companies and customers has changed from “sending” to “sharing”. This model is characterized by (1):

- Increasing visibility and influence of companies;
- Changing the way customers interact with each other;
- Communities that are created around a brand, product or service;
- New opportunities for rendering an account the customers’ views and recommendations;
- Improving interaction between employees.

Companies can benefit from the use of tools and applications of Web 2.0, if they apply them properly and efficiently. New business opportunities and new markets are opened to

the companies only if they choose the right tools for the target group of customers.

Social media play an increasing role in developing and implementing business strategies. Companies, who appreciate the power of social media, use them as a new promising business environment with unlimited possibilities. On the other side the variety of social media does not facilitate business in its choice of facilities and services. Often, despite the use of the most popular social media the desired efficiency is not achieved.

The purpose of this study is to compare and analyze various social media and to determine an effective model for integrating them in order to manage business successfully.

SOCIAL AND TECHNOLOGICAL ASPECTS OF WEB 2.0

Characteristics of Web 2.0 can be viewed from different perspectives. According to (2) the main features of Web 2.0 can be classified into two aspects: social/business and technology.

- **Architecture of participation**

Web 2.0 provides a Web architecture that encourages user participation in the process of

*Correspondence to: *Gabriela Kiryakova, Faculty of Economics, Trakia University – Stara Zagora, Bulgaria, gabriela@uni-sz.bg,*

creating and sharing content and collaboration between users. The available information resources are enriched and improved continually as the result of this feature.

- **Personalization of Web resources**

In the Web 2.0 model users play an active role in managing Web resources. They have the tools to manage resources that are relevant to their needs; personalize content and resources according to their preferences; choose a way of navigating among them; choose the means for notification when there are changes and etc.

- **The power of Long tail**

The theory of Long tail is a concept describing the strategy for selling a large number of unique products in relatively small amounts – usually in addition to the sale of less popular products in large quantities (promotional products). Successful implementation of the strategy in distribution and inventory allows the companies to realize significant profits of selling small quantities of products that are hard to find instead of selling large amounts of a reduced number of popular products. Total sales of this number of “unpopular” items are called “long tail” (3).

In Web 2.0, each user can create its own products – information, music, and video, designed for both personal and business goals. These products are in digital form, thanks to technologies used to create them and are available anytime and anywhere. This reduces the expenses associated with them.

- **Deployment of Rich applications**

The definition of rich in this case is associated with the deployment of applications, providing a rich set of features and capabilities for interactivity directly in Web browsers. These applications and technologies provide opportunities for reducing the number of queries from client machines to servers and therefore reduce the traffic between them. On the other hand complicated Web applications can be deployed and complex business services can be delivered.

- **Constant beta release**

New features can be added to each Web application in the process of its use. The users themselves contribute to the development of applications because they test each new feature

and can help to analyze various errors and bugs. There is a rapid and continuous feedback. This model avoids the creation of different versions of software; the need to update to new versions and related problems of different nature.

- **Syndication of information and services**

Web 2.0 provides opportunities for reuse of information resources. It is possible thanks to the use of Web applications that make syndication of different applications and services (offered by different suppliers) possible. Web 2.0 technologies create information and resources not only for consumers but also for reuse by other software applications.

SOCIAL MEDIA

Social Web. Web 2.0 is often defined as social web according to its new role and fundamental change in the way users use the Internet (4). They become a part of the Web, actively participate and contribute to the creation of content, interact and collaborate with other users.

1. What are social media?

Social media are a set of Web-based technologies that enable the democratization of content, change the role of users from consumers of content to creators and publishers of content. These technologies allow people to connect with each other and to create value through collaboration and cooperation (5).

Other experts say that social media can be defined as a group of Internet-based applications created on the basis of ideological and technological foundations of Web 2.0, which allows to create and share user generated content (6).

From those definitions we can conclude that the term social media includes different means – tools and services that make possible to create, share and publish Web content or resources by the users themselves. On the other hand, these means create conditions for active communication, interaction and collaboration between users. The result of these activities is expressed in content creation, users’ interaction with the content and with other users.

Using social media users can share their ideas, photos, videos; become a part of a community sharing common interests and views.

From a business perspective, social media are a subject of interest because they make possible the establishment of business contacts; market expansion; create communities that support companies or their products. Social media can be used also as a tool for marketing and etc.

The main **advantages** of social media for business are:

- There are no additional investments in hardware, software or maintenance – Web 2.0 services allow remote access to software and its functions thanks to the model for software delivery – SaaS (Software-as-a-Service);
- Easy to use;
- Do not require any special training of staff.

Disadvantages are associated with the losing control of:

- Content – sharing content gives control of it to users;
- Services and tools – Web 2.0 services are provided by vendors (Cloud computing). This results in the inability of company to implement full control of them.

2. Which means and tools of Web 2.0 are in the group of social media?

One of the most popular tools and services of the social Web are blogs, wikis, social networks, social bookmarking, sharing of multimedia information (7-10).

1. Blogs

Blogs are one of the most popular representatives of the social Web. The term corporate blog is usually used in the field of business. Corporate blogs are focused on marketing and can be used for announcing and promoting new products, services, company benefits and new markets. Blogs are divided into two groups – internal (only company employees use them) and external (they are accessible to all users and they aim to present corporate policy, products and services, etc.). Blogs can be used by business company in the following areas:

For the employees:

- Improve internal communication between employees, solving the problems with not received or lost e-mails;
- Sharing personal opinion and experience;

- Stimulate the activity of employees to participate in discussing and solving different problems;
- Opportunities for distance work – from remote locations and at different times.

For the company:

- Establishing a web presence;
- Creation and maintenance of community;
- Presentation of products, services and events;
- Implementation of marketing campaigns.

Customers – Company:

- Effective communication in an informal form with customers and business partners;
- Understanding the views of customers for company's products, collecting ideas from them, etc.

One of the best examples of a company that manages to maintain and benefit from a blog is Starbucks (**Figure 1**) (<http://mystarbucksidea.force.com/apex/ideaHome>). Through its blog, the company enables its customers to offer and share ideas for new drinks, food, even the design of cafes. Other users have the opportunity to discuss and evaluate the ideas. Each user feels personally involved in developing new products and the company has a generator of ideas and suggestions.

Corporate blogs of Google (<http://googleblog.blogspot.com/>), Coca Cola (<http://www.coca-colaconversations.com/>), Delta (<http://blog.delta.com/>) and etc. are good examples of using blogs effectively. An interesting Bulgarian example is the blog of Bella (<http://blog.bella.bg/>). Publications in blog are about new products of the company, different recipes, reviews of company events, photos and performance of employees and etc.

2. Wikis

Wikis are tools that fundamentally alter the nature of communication and collaboration between employees of a company. Modern Internet encyclopedias provide opportunities for collaboration of many people on:

- documents – problems with versions of documents are solved;
- projects – participants have access to all information and documentation of the project; they can complement and edit each document and track changes. This encourages employees to actively participate, share ideas, offer solutions to

the problems. Wikis give an opportunity to determine the contribution of every individual in the final group result.

Each wiki can be seen as a knowledge database, filled in by the community of users. It becomes a source of knowledge shared by knowledgeable and informed users.

On the other hand, anyone can contribute to the enrichment and expansion of knowledge.

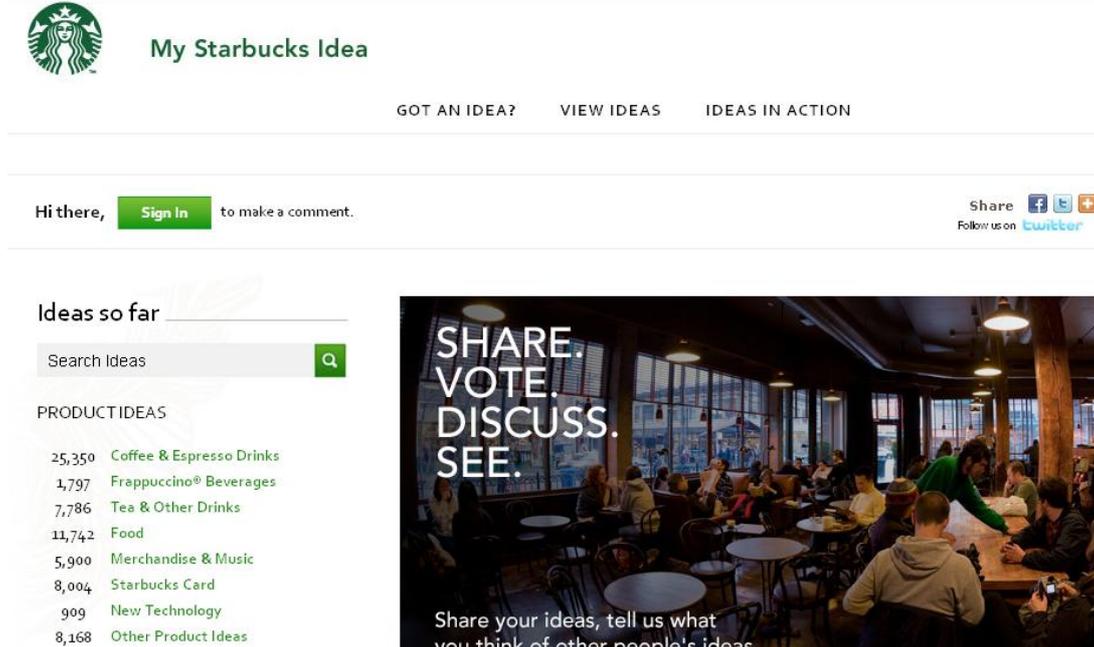


Figure 1. Starbucks blog.

Intelpedia (company Intel) is one of the most indicative examples of the use of Wikis in businesses (Figure 2). The Wiki system of this company contains different pages. Not every page is created for achieving specific business

purpose. Some of the pages are devoted to the company, its history, values, its products and services, employees, etc. Employees use Intelpedia to share information about social events and activities.

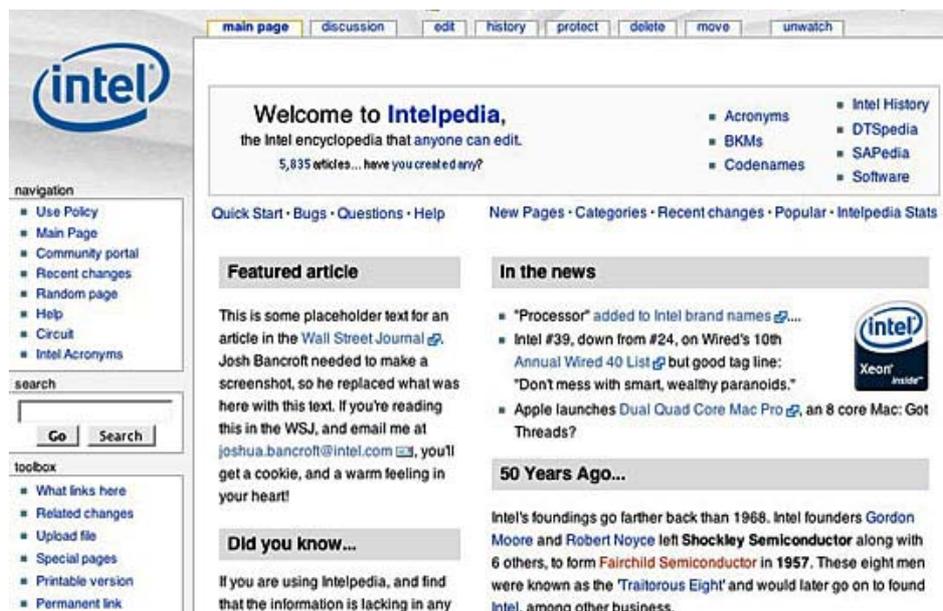


Figure 2. Intelpedia.

Other successful applications of Wikis are in companies like British Telecommunications, Motorola, Novell, Disney and others.

3. Social Networks

Social networks are a mirror of the real social and professional lives of users. They are a place where anyone can announce, comment, even brag with his achievements, projects, partnerships, etc.

Social networks provide tools and opportunities to connect with people, joining groups, organizing and presenting events. Especially valuable for businesses are: an access to a wide range of existing and potential customers; opportunities for presentation and promotion of business brands and products.

One of the most important advantages, that social networks provide, is that users (individuals and companies) can control the information that others see and know about them. An immediate consequence of that is that social networks can be used as a source of information.

In terms of business social networks are means for presentation and advertising of the company and its business – free or at very low price. They provide particularly important in

modern society Web presence of a company. This can significantly increase the potential market and customers in a broad geographic scale.

The most popular social network nowadays is Facebook. Facebook provides not only registration of individuals but also of business users. Users can connect with other people; announce their business and conduct advertising campaigns of their products; encourage the discussions with potential and actual customers, reaching multi-million audiences.

Some good examples of companies that manage to use Facebook in an effective way are: Pringles – amazing use of video materials, interactive games, discussions and etc.; Best Buy – the company conducts F-commerce, where users can directly view product categories and make online purchases; Pepsi – uses Facebook to promote corporate responsibility program and conducts various campaigns; Coca Cola, Kodak, Nokia and many others.

The most popular example of using Facebook by Bulgarian company is Brewing “Shumensko pivo” (Figure 3).



Figure 3. Facebook page of Shumensko horata sbira.

New social networks aimed primarily at businesses are on the horizon. They provide tools to meet companies and businessmen requirements and needs.

The group of social business networks includes:

- LinkedIn – opportunities to connect professionals; team building; new business opportunities.
- Ecademy – business network that allows networking between professionals; knowledge sharing.
- Networking for Professionals – business network, which combines online social business network with real life events.
- Ryze – opportunities to build business communities by interest, location, past or present employment.
- XING – one of the oldest business networks with more than 7 million users, offering different services for contacts, doing business and other business operations in 16 different languages.

4. Microblogging

In most cases, companies use microblogging to send short messages to their customers about new products or tips how to use them. There is an active communication between users and companies.

When a company decides to use or not microblogging an important issue is whether this service is applicable to its business. This depends on whether customers and its partners use this service. Benefits of microblogging for the company can be summarized as follows:

- Promotion of activities and advertisement of new products and services through short messages.
- Expansion of contacts and partnerships with customers and other companies.
- Opportunities to obtain actual information about the field of company's business.
- Posts can announce interesting articles and discussions published on the sites or blogs of the company and thereby contribute to increasing the sites visits.

Among the most popular microblogging are Twitter, Yammer, and Plurk.

Large companies find that microblogging is an effective Web 2.0 service and use it to achieve various purposes. For example:

- Dell and Starbucks – they inform and offer new products to their customers;
- JetBlue and TheHomeDepot – they offer an alternative customer support (**Figure 4**);
- Southwest Airlines and Best Buy – they communicate and run non-official discussions with their customers and fans.



Figure 4. Using microblogging by TheHomeDepot.

5. Social bookmarking

In modern society online business occupies an important place. Social bookmarking becomes more popular and replaces the word-of-mouth.

Social bookmarking is a means of storing links to Web resources. This service allows users to create a catalog of links. In comparison to the creation of bookmarks in user's browser social bookmarking allows access to the catalog of links anywhere and anytime. Another key feature of this Web 2.0 service is that

bookmarks are accompanied with tags or keywords. As a result of this is the categorization of the catalogs. Users can comment, rank and vote on the quality of the bookmarks. Benefits for businesses from using such services are related to marketing and can be summarized as follows (11):

- Increasing the visits of Internet users to the sites of the company. This is associated with the promotion of the company and its products. On the other hand, the ability to trace links can be used as a source of

information for development of potential future markets.

- Saving time and effort to find out interesting and useful sources of information, business ideas and etc.

Many sites for social bookmarking are offered in Web space. The most popular examples are Digg, StumbleUpon, Del.icio.us and others.

There are some sites for social bookmarking that are specially designed for business. They focus on the entrepreneurial side of business and how to improve various aspects of company activities rather than on business news. For example:

- bizSugar – social bookmarking site on topics related to business;
- Tip'd – social bookmarking site designed for sharing ideas and financial news.

6. RSS (Real Simple Syndication)

Using RSS, users subscribe to various information sources and quickly and promptly can be informed of any changes that occur with these sources. On the other hand, RSS is a technology that allows obtaining information from different places in a form suitable for each user.

RSS plays an important role in the effective use of social media. The main advantages of RSS in business can be summarized in the following areas (12-13):

- Delivering actual information to users – employees, customers, suppliers. Each post in a blog or site of the company is published on the websites of other users who have subscribed to this service. Using RSS articles and discussions are promptly available to end users.
- Facilitating access to information that improves the company's Web presence and provide more visits to the company sites.
- Possibilities for promotions of events and activities, which is associated with advertising the company and its business.
- Presentation and advertising of new products, implementation of promotions and etc.
- The mentioned above services and tools are a part of the services offered by Web 2.0. Each company can select and apply them according to its features, preferences and needs.

A MODEL OF USING SOCIAL MEDIA

Traditional model

More and more companies rely on various social media to expand their business activities; to attract more customers and thereby increase profits. The use of various services of Web 2.0 is becoming more commonplace. Sometimes companies use Web 2.0 services and tools because they are fashionable at the moment or because the competition is aimed at them, without taking into account the specificities of the company, the target groups, expected results, etc. This inevitably leads to inefficient use of social media, negative and disappointing results for the company and for its customers.

Many companies have an official Web site, fan page on Facebook, blog, wiki system, Twitter accounts. We call this model Traditional. The results show that in most cases the Traditional model does not lead to better results. The main questions are: Where is the difficulty in implementing social media in business? Why some companies manage to increase the number of their customers and sales, while others fail?

The main drawback of the Traditional model is that all social media included in it work independently. The company uses any new popular Web 2.0 tool or service separately from others. Of course there are hyperlinks between different company's sites, but this is not enough. We get a situation where none of the means gives current information about the company and its campaigns to customers. The possession of many profiles in various media is difficult to monitor and the process of synchronization of information in them is often almost impossible.

Testing many social media “dilute” the presence of companies and does not lead to good results – investments in time, human resources and others do not refund. The purpose of commercial presence on the Internet market is overlooked; the company does not reach its target group and the expected effects of social media are not achieved.

It is obvious that even the choice and implementation of the most appropriate Web 2.0 tools and services in company is correct, the fundamental problem of synchronizing information is not solved.

Recommended model

It is appropriate to apply different types of Web 2.0 services and tools that help people and groups in business organizations to share and manage content and projects; to work and communicate interactively.

In terms of their informational role, it is advisable to include Web 2.0 tools such as:

- Persistent data are presented to a comprehensive Web site of the company. It is also appropriate to have a wiki system or simply to be presented in some of the general encyclopedias in different languages.
- Using microblogging account for the latest news.
- Sharing experience, knowledge and content can be done by using corporative and individual blogs.
- Video materials are distributed through Youtube channel.
- The social networks are the place where companies can conduct campaigns that present products and services or organize events. Social networks have tools for communication and can be used for the exchange of messages and files.

SEO optimization helps to the appearance of the company's main site in the first pages delivered by search engines in response to relevant keywords and tags. The means of ensuring the effectiveness of this process is improving every day and it requires companies to have people who follow trends and developments in this area. Sites and blogs of the company will be visible to users thanks to SEO optimization.

It is very important to be included a module to the site of the company for its definition as a supplement to sites that provide Web 2.0 syndication service – for example iGoogle. Company's customers will be facilitated in searching and receiving new facts about the company via RSS module/emission.

The best solution for ensuring synchronization between the various profiles and pages listed above is on-line tools for integration and synchronization (**Figure 5**). They facilitate posts in many social media. Users can change their status and this reflects in all services, used by them.

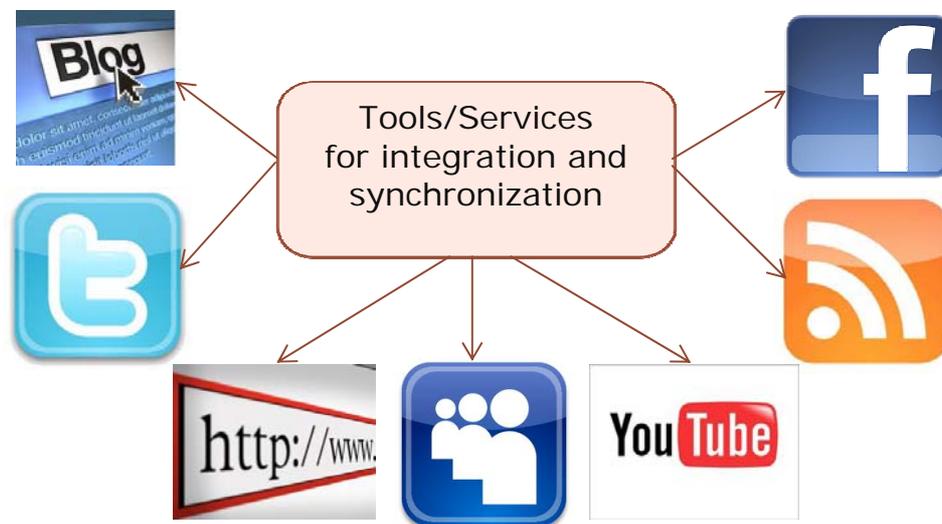


Figure 5. A Recommended model of the application of social media in business.

The advantages of Web 2.0 services and tools for integration and synchronization are:

- synchronization of information in different social media;
- free of charge or at minimal cost;
- free choice of social media to connect and monitor.

As representatives of Web 2.0 tools and services for syndication and aggregation can be pointed out Lotus Notes, TeamLab, Ping.fm and others. Some of them require the purchase and payment of license fees, while others are free and can be used free of charge or at minimal cost. The advantages of open source tools are related to the open information

society – they can be shared and modified according to the needs of companies; they are reliable; communities of users and developers support and help anybody at any time.

CONCLUSION

The proposed model of the application of social media would provide each company the necessary presence in the Internet space. There will be the following: profiles of employees and the company through blogs and sites; communities of users and employees through the pages in social networks; activities declared in social networks or microblogging for actual and potential customers; Wikis for knowledge base for employees and customers; sharing files; synchronization of the status and news provided by the simultaneous publication in separate profiles of the company. Synchronization and integration of information from various social media provide opportunities and conditions for effective activities of the companies. The proposed model can integrate a variety of Web 2.0 tools and services in the name of the successful business management.

REFERENCES

1. Swabey, P., Web 2.0 in business, 2008, <http://www.information-age.com/channels/information-management/features/650221/web-20-in-business.shtml> (last access 25.06.2011).
2. From Web 1.0 to Web 2.0, <http://documentengineeringservices.com> (last access 25.06.2011).
3. Wikipedia, <http://en.wikipedia.org/>.
4. Gunelius, S., What is the Social Web?, <http://weblogs.about.com/od/marketingablog/p/WhatIsSocialWeb.htm> (last access 25.06.2011).

KIRYAKOVA G., et al.

5. Scott, Peter R.; Jacka, J. Mike. Auditing Social Media: A Governance and Risk Guide. Hoboken, NJ: Wiley. <http://www.scribd.com/doc/57446058/Auditing-Social-Media-A-Governance-and-Risk-Guide>, ISBN: 978-1-1180-6175-6 Hardcover 187 pages April 2011 (last access 25.06.2011).
6. Kaplan, Andreas M., M. Haenlein. Users of the world, unite! The challenges and opportunities of Social Media. *Business Horizons*, 2010, 53, 59-68, <http://iranmanagers.net/wp-content/uploads/2011/04/Users-of-the-world-unite.pdf> (last access 25.06.2011).
7. What tools are considered Enterprise 2.0? <http://impeesa.blogspot.com/> (last access 25.06.2011).
8. Singh, S., A Web 2.0 Tour for the Enterprise, 2006, http://slant.avenuearazorfish.com/0606_slant/web_2.pdf (last access 25.06.2011).
9. What is Enterprise 2.0?, <http://www.fredcavazza.net/2007/07/27/what-is-enterprise-20/> (last access 25.06.2011).
10. Petrovic, M., Microblogging For Business, <http://biznik.com/articles/microblogging-for-business> (last access 25.06.2011).
11. Stephen, C., Social Bookmarking for Business, <http://articles.mplans.com/social-bookmarking-for-business/> (last access 25.06.2011).
12. Hrastnik, R., The Business Case for RSS, http://www.feedforall.com/rss_the_business_case.pdf (last access 25.06.2011).
13. White, M., RSS Benefits for Businesses, <http://www.betterbusinessblogging.com/rss-information/rss-benefits-for-businesses-bloggers-and-publishers/> (last access 25.06.2011).