

Social Networks as an Integration Tool in Rural Areas – Agricultural Enterprises of the Czech Republic

E. Červenková¹, P. Šimek¹, T. Vogeltanzová², M. Stočes¹

¹Department of Information Technology, Faculty of Economics and Management, Czech University of Life Sciences Prague, Czech Republic

²Department of Languages, Faculty of Economics and Management, Czech University of Life Sciences Prague, Czech Republic

Abstract

Social networks have been growing at a rapid pace. Social media represent one of the most significant phenomena of today's world and are more and more integrated from the private sphere into the commercial one (e.g. into marketing where social media already play a substantial role). The present paper is aimed at introducing an initial study on the use of social media in agricultural enterprises. The study was thus targeted at agricultural enterprises – both legal entities (public limited companies, limited liability companies and last but not least cooperatives) and natural persons (farmers) that farm the total area of more than 100 hectares (a basic selection criterion of the survey). This interesting study was conducted by means of a questionnaire survey that included information on social media awareness, development and use within the respective group of respondents (bigger agricultural enterprises). The paper deals with social media as such and naturally with the survey results. The data retrieved from the questionnaire were used not only for monitoring social networks integration in the agrarian sector (important factor in rural areas) but as well for exploring the potential of modern information tools in agriculture promotion. The survey has been carried out in mutual cooperation of the Department of Information Technologies with the Information and Consulting Centre, Faculty of Economics and Management, Czech University of Life Sciences Prague.

Key words

Social media, social network, Facebook, Twitter, Google Buzz, agrarian sector

Anotace

Sociální sítě rostou stále větším tempem. Sociální média jsou jedním z největších fenoménů dnešní doby, který postupně stále více proniká z původně osobní roviny do roviny komerční, např. do oblasti marketingu, kde již má svoji velmi důležitou roli. Cílem tohoto příspěvku je představit úvodní studii o využívání sociálních médií zemědělskými firmami. Cílovou skupinou proto tvořily zemědělské podniky buď vedené jako akciové společnosti, nebo společnosti s ručením omezeným a v neposlední řadě družstva. Další oslovenou skupinou byli soukromě hospodařící rolníci. Všechny tyto skupiny hospodaří na zemědělské půdě o celkové výměře vyšší než sto hektarů (základní výběrové kritérium komplexního šetření). Jedná se proto o zajímavou studii, v níž byly dotazníkovým šetřením získávány relevantní informace o znalosti, rozvoji a využívání sociálních médií v rámci dané skupiny respondentů (větších zemědělských podniků). Sociální média jako taková a především výsledky a závěry uvedeného šetření jsou předmětem tohoto příspěvku. Poznatky byly získávány za účelem monitoringu integrace sociálních sítí do odvětví zemědělství, jako významného subjektu působícího ve venkovském prostoru, a pro nalezení dalších nástrojů pro možnost propagace zemědělství při využití moderních informačních nástrojů. Tato studie byla realizována ve spolupráci Katedry informačních technologií a Informačního a poradenského centra Provozně ekonomické fakulty ČZU v Praze.

Klíčová slova

Sociální média, sociální síť, Facebook, Twitter, Google Buzz, zemědělský sektor

Introduction

„New communication technologies are being introduced at an astonishing rate. Making sense of these technologies is increasingly difficult“[1] The Czech Republic has been recently using information technologies based on Web 2.0 which facilitates information sharing, brings maximum presentation freedom, enables interaction with other users by means of the given interface and last but not least allows - within the framework of a chosen Platform - to eliminate strict barriers between the content creator and user in the electronic environment. As a result, enterprises and their

marketing can benefit from the social media upsurge while creating new communication channels. These channels firstly allow targeting people or groups of people who would otherwise be hard to keep in touch with and secondly maintaining a permanent active contact with these target groups. "Based on the surge in online communication, researchers have begun to explore self-disclosure online."[2]. Social networks started to permeate into corporate environment as a communication tool for both long-term and potential customers. We can assume that this trend is likely to replace the existing communication tools such as the e.g. Skype, ICQ etc. one day.

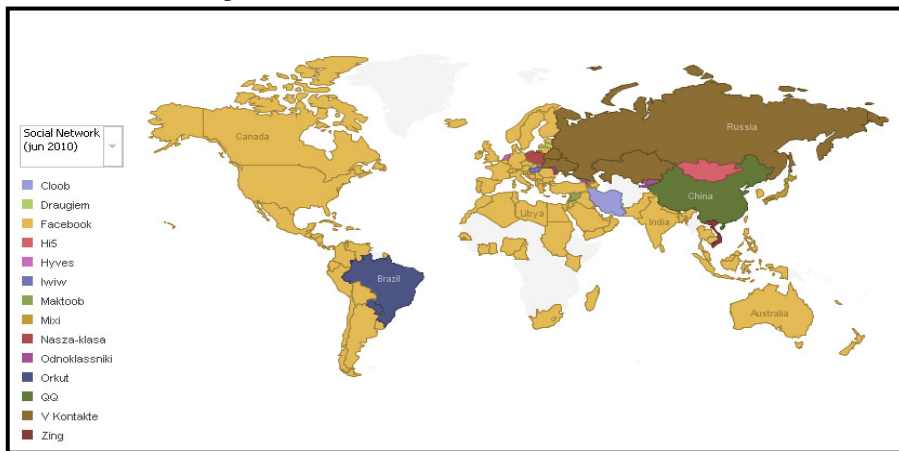


Figure 1: Social media – user support worldwide [14].



Figure 2: User interface of the QQ and Facebook social networks.

Social media

Social media have become an integral part of marketing strategies and cost structures of many companies all over the world (rem.: It is necessary to mention that social media user support differs and is not the same all over the world – see Fig. 1. The difference subsists not only in their popularity but as well in the cross-cultural differences – see Fig. 2). The costs of these marketing activities have been growing on the year and so has the number of companies that integrate their services with the social media. The Internet has become a transmitter for further rise and development of social networks targeted at different user groups. Internet social media overcome one of the biggest limitations – the place of residency, respectively the bond to a certain location. They incorporate a structure of "nodes" representing individuals, groups or organizations that are tied or connected by one or more specific types of interdependency; not only by friendship or kinship but nowadays more and more by professional interests or business relationships.

Recently, social media have been creating a new reality that allows people not only to discover new interesting pieces of information, to bridge over the distances and to facilitate business undertakings but at the same time to eliminate the so-called digital divide. Social networks in the Czech Republic are still used prevalently in private life and communication. However, we can shortly expect an intense development in professional and corporate sector as more and more companies started to explore the information and promotional potential of social media within the framework of their entrepreneurial prospectus. Scott Krinsky, for instance, perceives social media as *"a communication which is not targeted as traditional media. SM stand on the interaction among people. The crucial element is a feedback from the audience, no matter if in form of commentaries, editing of original text or content."*[3]. It has to be stated here that a wide range of companies have been so far only monitoring the field (monitoring the competitors, opinions and attitudes towards their company etc.) but have been reluctant to utilize social media actively and directly.

Social media develop first of all spontaneously using similar platforms and technologies as e.g. typography does. For instance, Facebook (the most spread social network in the Czech Republic) is run

as any other company and its investments. It thus started to be effective when it exceeded the so-called critical limit, i.e. 15% users of the total number of inhabitants. After exceeding the above limit, its popularity has not ceased in growing (see Fig. 3 – blue line). As we can see from the graph, other social networks are on the decrease. In the context of the Czech Republic, Facebook has been replacing other formerly very popular networks such as *LíbímseTi*, *Spolužáci* and *Lidé* whereas the number of Facebook registered users who started to use actively its functionalities has rocketed since 2009. Almost 3 million users were recorded within the last five years (as at 30 November 2010) [13]. The graph clearly shows that the most significant expansion occurred in the past two years (see Fig. 4).

The number of users in the Czech Republic is relatively high as there are approximately 550 million of registered Facebook users worldwide [9].

The promotion on Facebook is realized through many functions, especially by the advertisement tools themselves (e.g. banners), Applications and *Like Pages* or *Groups*. The latter will be mentioned later on, including information on their specificity and use.

As for marketing, *Like Pages* that act as spot brands are being and are likely to be the most trend-setting as they offer adaptability, SEO URL and many options. Accentuating their permanent development, Facebook is trying to actively predetermine *Like Pages* for marketing purposes. Nevertheless, from the point of view of virtual spread possibilities, *Groups* seem to be more suitable even if they have just a limited possibility of adding Applications and customizing. At the very beginning of the Facebook era, its use in terms of the community communication was obvious. However, using Facebook as one of the marketing tools has been recently gaining wider acceptance and popularity among progressive companies.

Social media users

Generally speaking, we can divide social network users into several age groups. The most numerous group is of course the group of users between 20 and 24 years of age that stands for 22.02%. The group between 16 and 19 years accounts for only a little less reaching 21.88% while users who range from 25 to 29 years of age represent 16.44% of all users. While talking about rural areas, we can of

course assume that the target group will not reach such a high percentage share in the pie chart (see Fig. 5) with regard to age structure. Age segmentation is relevant as well in relation to interest groups as these users share not only their

interests and hobbies but as well the perception of the world around us. It is highly interesting that some groups overlap as for their interests but are never willing to leave the "group" entirely. These findings are really relevant for marketers in general.

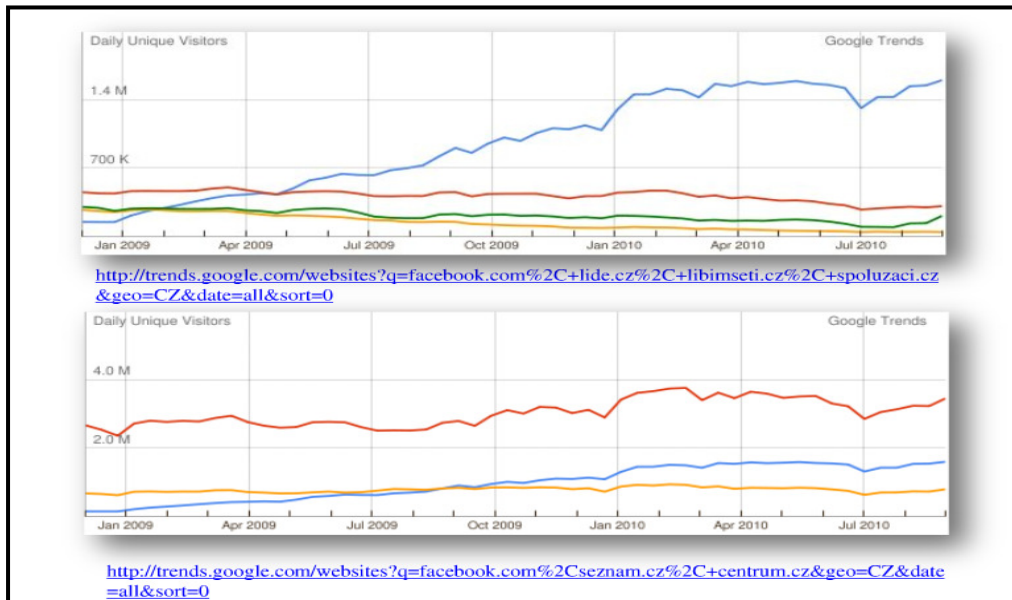


Figure 3: Facebook popularity in the Czech Republic [5, 6].

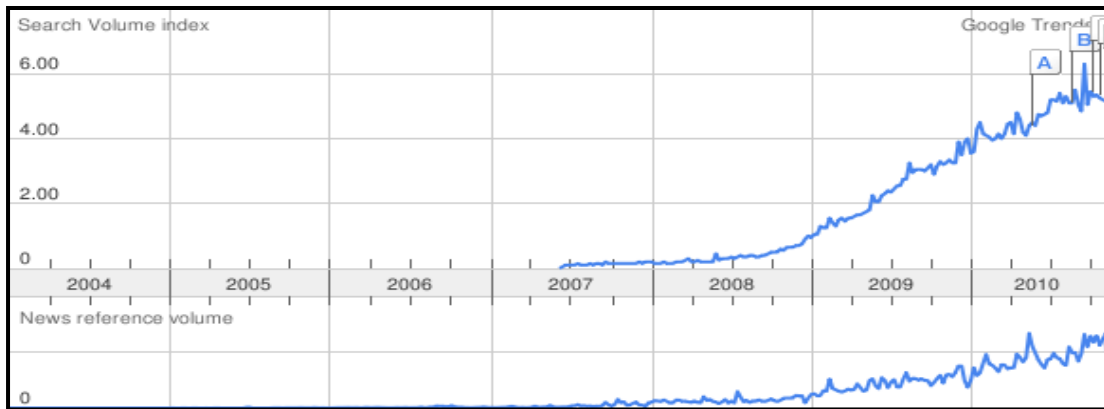


Figure 4: The growth of Facebook popularity in the world over 2004 – 2010 [7].

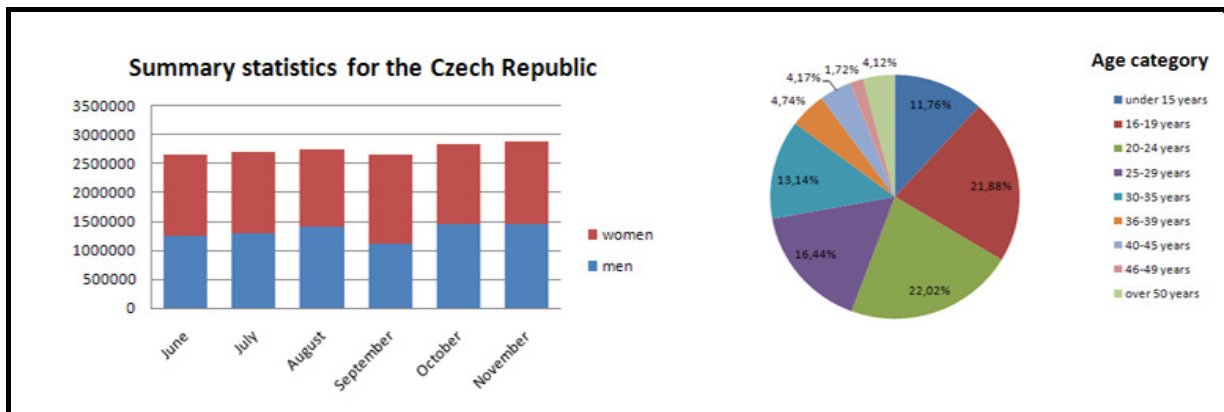


Figure 5: User structure (gender and age) [8].

Aims and Methods

The aim of the survey was to monitor the current state of social networks use and to assess their potential for agricultural enterprises of the Czech Republic. It goes without saying that the fore-mentioned general trends will be to some extent applicable here. However, there exist several departmental specificities and specificities of the rural areas. Firstly, we have to take into account the conservativeness of the users. Secondly, a limited availability of the Internet (connectivity) in the regions for both individuals and enterprises is still an important issue. Last but not least, the age structure of potential users is relevant together with other aspects.

Suitable communication infrastructure providing broadband connectivity is conditional for the use of all modern internet technologies and applications, including social media. Social media develop very fast towards multimedia content that is closely related with high quality connection requirements. Rural areas generally face substantial connectivity problems (even with connection availability), especially with the connection quality. These problems have been monitored and analysed by the Department of Information Technologies in the long term and are described e.g. in the following papers: [10] and [11].

So far, the first and isolated survey of social networks in the agrarian sector was carried out in 2010 within the framework of a study on the development and use of information and communication technologies in agricultural enterprises of the Czech Republic – Exploration 2010. The research was conducted by the Department of Information Technologies and the Information and Consulting Centre of the Faculty of Economics and Management, Czech University of Life Sciences Prague. The questionnaire was extended for this sake by items concerning the use of social networks, their structure and utilization. The methodology and further information on the above survey is available e. g. in [12].

The study was targeted at agricultural enterprises (public limited companies, limited liability companies, cooperatives and farmers). All the fore-mentioned entrepreneurs farm the total area of more than 100 hectares, which was a conditional selection criterion of the survey. The study was

itself conducted by means of an electronic questionnaire survey (eventually by sending a paper form) that included information on social media awareness, development and use within the respective group of respondents (bigger agricultural enterprises). The data retrieved from the questionnaire were used not only for monitoring social networks integration in the agrarian sector (important factor in rural areas) but as well for exploring the potential of modern information tools in agriculture promotion.

As a result, the 2010 survey brought 902 relevant questionnaires, which account for 20.5% of the total number of the addressed respondents (enterprises). 853 of the enterprises, i.e. 94.57%, have an internet connection at their disposal. These enterprises were then concerned with further analysis, including the use of social networks.

Results and discussion

The survey showed that the target group is active on social networks. However, their practical use is relatively low, as expected. The volume of activity quite corresponds with the sector chosen (see Fig. 6). Of course, Facebook is by far the most used social network (see Fig. 7) that reflects the fore-mentioned graphical comparison and the overall boom of Facebook within the last two years.

In case of joining social networks, Facebook is the most commonly used with 100 respondents (out of the total number of 854 connected enterprises), followed by Google Buzz with 34 respondents. Other social media are used very little, representing only some 10 – 12 cases (LinkedIn, MySpace, Twitter) – see Fig. 7.

The authors of the paper were really surprised at the number of positive responses to Google Buzz. In spite of the overall increase in different social networks, Google Buzz is a less used social medium. It mainly provides services that originate from Facebook and Twitter activities. Its users can create statuses and microblogs while Google Buzz automatically creates a user. These are people with whom an e-mail contact has been started and they are immediately offered recommended statuses.

Social media are especially used for personal communication, gathering information and for company communication. Surprisingly, company presentation is only used at a relatively small extent (see Fig. 8).

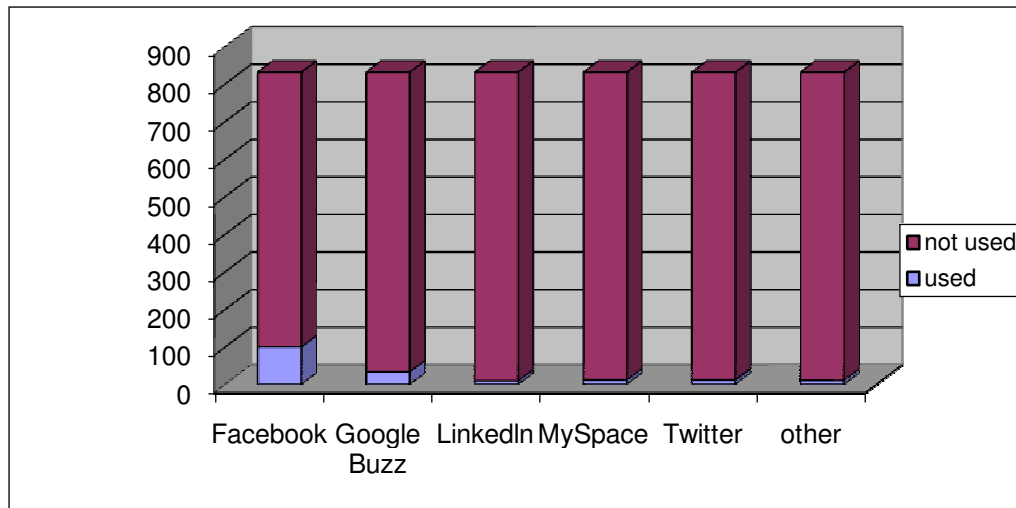


Figure 6: The use of social networks in the agrarian sector (Department of Information Technologies – Exploration 2010).

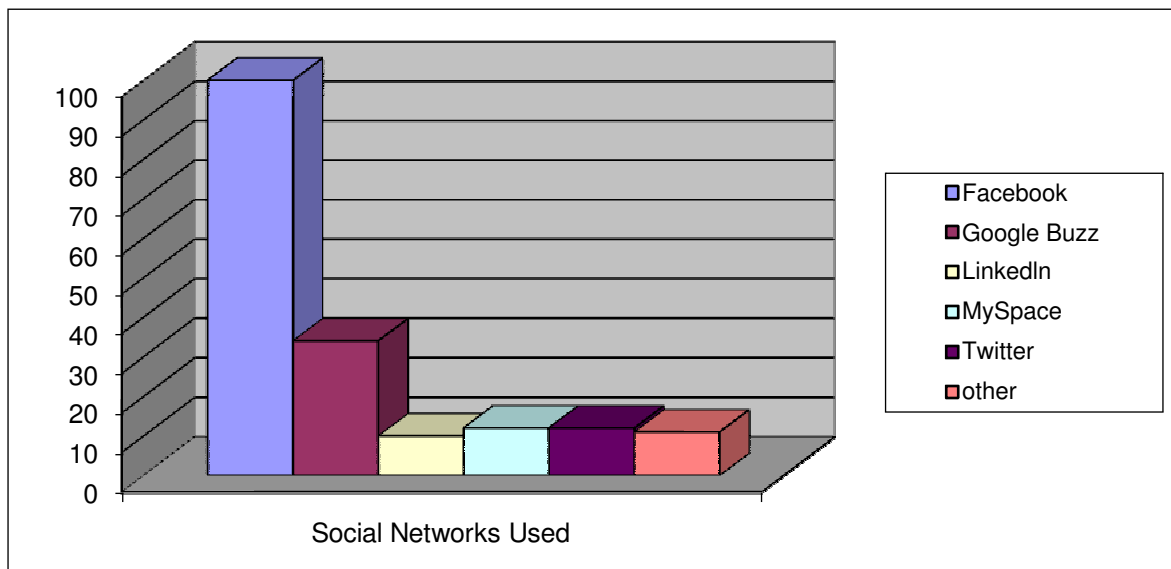


Figure 7: Social networks used in the agrarian sector (Department of Information Technologies – Exploration 2010).

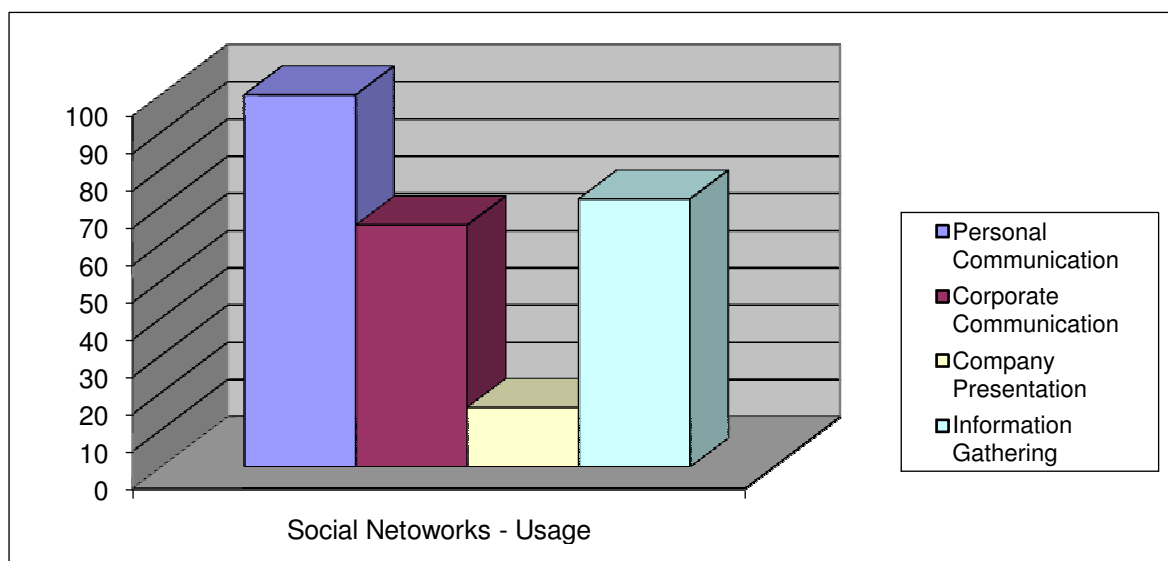


Figure 8: Social networks in the agrarian sector – usage (Department of Information Technologies – Exploration 2010).

It can be said that social media are an artificially created platform where a certain event or product is highly valued thanks to the social media popularity. That is one of the many reasons why we think that social media are increasingly popular and, compared to other media, enjoy a growing favour. Advertisement, newspapers and leaflets are not so trustworthy or in other words so popular with the new generation and modern users. Social media are not strictly intended for promotion and advertisement but primarily for the communication sake. Regardless to whether the two-way communication is with the existing or new users of the same product, service or event. This communication is always vital for feedback in any domain or sector, inclusive of agriculture.

Nobody doubts the fact that the popularity of social media will not cease to grow. It can be expected that the use of social media will be further extended as well within the framework of agricultural enterprises. However, a conservative and reserved approach is likely to prevail and prevent a much

wider acceptance of social media. Positive personal experience of the individual users could potentially act as a development accelerator. Social networks can have a significant role in rural areas integration within the framework of global society and can also contribute to diminishing the digital divide in Czech countryside.

The paper authors will go on monitoring the development of social networks in this specific and interesting domain in a survey planned for 2011 which will be extended by other aspects of social networks development.

The knowledge and data presented in the paper were obtained at the Faculty of Economics and Management of the Czech University of Life Sciences Prague as a result of the Research Program titled "Economy of the Czech Agriculture Resources and Their Efficient Use within the Framework of the Multifunctional Agri-food Systems" of the Czech Ministry of Education, Youth and Sports number VZ MSM 6046070906.

Corresponding author:

Ing. Eva Červenková

Czech University of Life Sciences Prague, Department of Information Technologies

Kamýcká 129, 165 21 Prague-Suchdol, Czech Republic

Phone: +420 224 382 050

e-mail: cervenkova@pef.czu.cz

References

- [1] Grant, A., Meadows J. H. (2010): Communication technology update and fundamentals, Focal Press 2010, s. 352. ISBN: 13- 978-0-240-81475-9 .
- [2] Christofides, E., Muise, A., & Desmarais, S. (2009). Information control and disclosure on Facebook: Are they two sides of the same coin or two different processes - CyberPsychology and Behavior, 12, 1–5.
- [3] Scheil, R. The Global Social Media Network. Blog [online]. 2009 [cit. 12.1.2010]. Available at: <<http://www.globalsocialmedianetwork.com/>>
- [4] Roblyer, M. D., McDaniel, M., Webb, M., Herman, J., Witty J. V. 2010. Findings on Facebook in higher education: A comparison of college faculty and student uses and perceptions of social networking sites, Internet and Higher Education, 7, 1.
- [5] Google Trends. [online]. 2010 [cit. 15. 12. 2010]. Available at: <<http://trends.google.com/websites?q=facebook.com%2C+lide.cz%2C+libimseti.cz%2C+spoluzaci.cz&geo=CZ&date=all&sort=0>>
- [6] Google Trends. [online]. 2010 [cit. 15. 12. 2010]. Available at: <<http://trends.google.com/websites?q=facebook.com%2Cseznam.cz%2C+centrum.cz&geo=CZ&date=all&sort=0>>
- [7] Google Trends. [online]. 2010 [cit. 18. 12. 2010]. Available at: <<http://trends.google.com/trends?q=facebook&date=all&geo=cz&ctab=0&sort=0&sa=N>>
- [8] Fejsbuček. [online]. 2010 [cit. 18. 12. 2010]. Available at: <<http://www.fejsbucek.cz/cesko>>
- [9] Dočekal, D. V3.1 Jak na firemní facebook a Twitter prakticky. [online]. [cit. 10. 12. 2010]. Available at: <http://www.slideshare.net/secret/DVNSMPMLekvYSM>

- [10] Jarolímek, J., Vaněk, J.: The intensity and quality of Internet usage in the agriculture sector and possibilities of its further development, *Plant, Soil and Environment*, Czech Academy of Agricultural Sciences, November 2003, str. 525 – 529, ISSN 1214-1178
- [11] Vaněk, J. ; Jarolímek, J. ; Šimek, P. : Development of communication infrastructure in rural areas of the Czech Republic, ISSN 0139-570X. *Agricultural Economics*, 2008 (3), s. 129 - 134.
- [12] Vaněk, J. – Šimek, P. – Vogeltanzová, T. – Červenková, E. – Jarolímek, J. *ICT in Agricultural Enterprises in the Czech Republic – Exploration 2010. AGRIS on-line Papers in Economics and Informatics*, 2010, roč. II (2010), č 3, s. 69-75. ISSN: 1804-1930.
- [13] Český statistický úřad. [online]. [cit. 19. 12. 2010] *Available at:* <http://www.czso.cz/csu/redakce.nsf/i/1_uzivatele_facebooku_v_ceske_republice>
- [14] Many Eyes. Social network worldwide 2009. [online]. [cit. 15. 12. 2010] *Available at:* <<http://www-958.ibm.com/software/data/cognos/manyeyes/visualizations/world-map-of-social-networks-dec-2-11>>