SOCIAL NETWORKS AND STUDENTS' FUTURE JOBS

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Abstract

This study examines necessity of use big data from social network by students when looking for a job. We use for our analyses data from the professional networking website LinkedIn and from the students from Faculty of Economic Cybernetics, Statistics and Informatics (ECSI) within the Bucharest University of Economic Studies. This paper focuses on the interest of students to use social networks when looking for a job. It also highlights the level of using social networks and the students' perceive about the use of social networks in their activities. These preliminary results of our research accented the idea that is an opportunity for higher education to facilitate the access of students to social networks in two ways: through developing or enhancing students' knowledge of how to use social networks and as part of that effort, by educating students about how they can promote their skills. The main idea is that big data generated by social networks accelerate students' integration and their employment.

Keywords big data, social networks, students' future jobs, social media

JEL Classification O35, J25

1. Introduction

In our age the biggest problems are the acquisition, extraction, integration, analysis, and interpretation of data. Big data solutions generate values by linking data from different sources, in many cases with different formats. International Data Corporation (ICD, 2011) defines big data like "a new generation of technologies and architectures destined to extract value from a large volumes a variety data". In this case the new technologies is need for generate value from big data. In literature McKinsey Global Institute (MGI, 2011), International Business Machines (IBM, 2012) the characteristics of big data are: velocity, variety, volume and velocity. Big data solutions help us every day and are a new possibility to create value.

In the world we have different sources of big data: large data, advance analytics or analysis, data from visualization, data from social networks.

Data from social networks help everybody and in particularly offer solutions for students to find a job. But, on the other hand, social media solutions help the companies to find the right employer for their objectives.

The use of big data solutions is the biggest opportunity for students. This happened because they need to access, process and use different data type very fast and big data from social network sites offers these facilities. After a literature review analysis, this paper presents the advantages of big data solution for students when looking for a job.

More and more companies from business and administration are agreeing that big data from social network sites are an opportunity for students and for companies. This paper highlights with a case study that those students which use big data have good results. The students that succeed aren't the ones who have the most data, but the ones who use it best. Big data will fundamentally change the way in which students are employed.

Investment and development are the keys of evolution. This paper presents the impact of the big data solutions in students looking for a job and how can use all the facility of this in future human evolution. An efficient access and use of huge quantity of data through big data solutions and the involvement of students in the initiatives are the key elements that to achieve a harmonious development of our society.

The major research of this approach is focused on the process of using big data collected from social network in the analysis regarding how students are using these modern communication tools in finding a future job.

2. Big data

The concept of big data which creating value is not new and in our age the effective use of data is to becoming the basis element of competition. Universities of our time, according to Deng (2014) and Harper (2015), have always wanted to use correctly and to the real value the information and knowledge in order to make better, smarter, real time, fact-based decisions, this necessity of correct knowledge has fuelled the growth of using big data. In this case the big data concept is the most important support for students' evolutions.

Big data analysing can offer us a lot of information. Different authors like Campbell and Oblinger (2007) and Tulasi (2013) identified the major steps involved in big data analysing. Starting from them we can define the steps of big data analysing as: acquisition, extraction, integration, analysis and interpretation (fig. no.1).

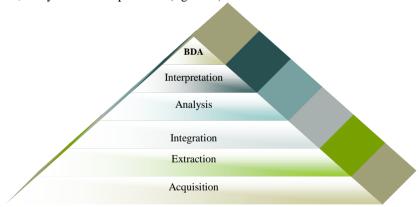


Fig. no. 1 Steps of Big Data Analysis (BDA)

Acquisition of data. Large volumes of data must be obtained in real time from a range of sources like social networking sites - Facebook, Twitter, LinkedIn, Google+ and Blogs; the internet provides - searches, sites visited, transactions; public sector data: geo and spatial data, transport data, government financial data and public service data; mobile technology generates new data about the location of individuals.

Extraction of data. Data generated by these sources would be very big. Identifying the data of interest in this huge volume is an important task. This can be done by defining filters which would discard unwanted data and retain only useful information (Campbell, 2007), (Campbell and Oblinger, 2007). Generation of right information from the data recorded is an essential task in our age.

Integration of data. Information collected has to be formatted for it to be ready for analysis. For example, the records from a social network are not in a format which can be utilized directly. Information extraction will generate the required information from the data sources and will represent it in a suitable structural format for analysis (Tulasi, 2013). This operation is a major technical challenge.

Analysis of data. Considering the big volume of data and diversity of it, data analysis is more challenging. In this case, for an effective outcome the process of locating, identifying, and understanding has to be completely automated.

Interpretation of data. Analysing big data would have value if the results are interpreted by user. The interpretation involves examining all situations made and retracing of the analysis. This process would be difficult because of the complexity of big data. Hence the necessity to provide supplemental information along with the results is quite essential.

In our era most important elements are the internet, mobile devices, social media and cloud computing because these have changed the way of communication and work. The result is an explosion of large data sets being collected by business and government every day.

3. Social networks in our age

Social media has an important impact in the exponential growth of data set. Social networks improve communication and generate value. They represent a real support for hunting a job.

In our age the job hunt should start by creating online profiles on Twitter, LinkedIn, Google+ and Facebook. These, social networks are challenging the hiring. Social media websites make possible to build connections with potential companies or other employers. Social networks also allow us to hear about possible job opportunities. Social networks like Facebook, Twitter and LinkedIn can offer some solutions for job hunters.

LinkedIn is an easy way to share the information, experience and skills or data about previous projects. In the same time LinkedIn is a great tool for researching companies and offer the possibility of connecting with people from companies.

Facebook is probably the least popular social network used to find a job. Most of the people use the Facebook to inform about other people and to share photos and links. But, Facebook can be the place or the reason for losing a job opportunity, because many companies are scanning Facebook for current and future employees' profiles.

The great thing about social networks is that it lets us to communicate with other people whom we might not meet in real life or in real time.

The researches of Fountain (2005), Weaver (2012) and Keller (2013) suggest that new communication technology like social networks might be helping people to find jobs or to integrate because it facilitates the personal communication between friends and colleagues that often provide information about jobs. Starting from this it is evident that we can say

that social networks are a real support for hiring, for organizations and for citizens in the same time.

In generally, LinkedIn, according to Petersona and Doverb (2014), can be used for job search, because this includes the facility for use data of personal contacts, friends and coworkers who offers information on job openings.

4. A methodology to assess the use of social networks by the students when looking for a job

4.1 Data collections

In order to analyse the use of social networks by the students looking for employment we have developed a survey. The survey was performed among the students of the Bucharest University of Economic Studies and its aim was to analyse four main directions:

- the level of usage social networks;
- how students perceive the use of social networks in their activities;
- how existing social networks are used for students activities;
- if students consider beneficial the use of social networks when looking for a job.

The survey consists of 16 questions and these were grouped in the following categories:

- general data about the students: age, gender;
- questions regarding how existing social networks are used in students activities;
- questions regarding how online communication through social networks changes students relationship;
- questions regarding how students perceive the benefits of social networks for their hiring. For this survey we have prepared a data collection sheet with clear questions and easy to fill in

The methodology of the survey contains open and close ended questions and they were printed a distributed to the students from Faculty of ECSI. This paper presents preliminary results of our research.

4.2 Case Study – Analysis

The survey has four directions and for every part of our study we elaborated a set of questions. The results are presented for each of them: in the first part we presented general data about the respondents, in the second part we have in view the use of social networks (which are the most used social networks, for what, which are the advantages and which are the disadvantages), in the next part we analyse the level of use of online communication between students and if it is necessary for them and for their activities and in the end we try to obtain the information about the use of social networks by the students looking for a job.

4.2.1 General information about participants

The subjects of our analyses were selected from students of the Bucharest University of Economic Studies. The respondents were selected among the students of the Faculty of Economic Cybernetics, Statistics and Informatics. We developed a set of procedures for distributing, collecting and analysing more than 360 observations from students.

The majority of the students were male (59%). The distribution in this case is representative for Faculty of Economic Cybernetics, Statistics and Informatics and for our research.

The majority of our students have between 20 and 22 years (96%). The number of the students from this category is very important for us, because they are open to the new technologies. The distribution by age highlights that it is very important to analysis the use of social networks by the students looking for a job, because most of them are not

employed and are (might be) interested to look for a job. They are also students who learned how to access and use social networks and new technologies for improving communications and other activities. The distribution per year of study (table no. 1) indicates that most of respondents (90%) are from the third year from Faculty of ECSI, this being very important for us.

Table no. 1 Students' distribution - by year of study

Year of study	No. of students
2	6
3	324
Master	30

Many students are from the last year from our faculty and in the same time they are interesting in finding a job. This situation confirms us that our survey is representative and useful, because they are interested, in the way, in which they can find a job.

4.2.2 The use of social networks

This part of survey wants to shows the level of use of social networks. In this section of our approach we developed a set of 5 questions about:

- the necessity of social networks in students' activities;
- why students use social media?
- the most used social network;
- the advantages of social networks;
- the disadvantages of social networks.

Almost of the students (98%) considered the use of social networks to be welcomed in their activities. The responses given to the first questions help us to identify if our approach relating to social networks is correct or not. Fortunately, our hope and effort were rewarded by this convincing result. The survey revealed that almost all the students had used the social networks for their activities.

Some of the highlights from the survey include the number of students who use social networks for communication (98.88%), documentation (80.27%), information (87.22%), for sharing information and collaborate (87%), for links to other organizations and companies to find information about a job (94.72%) (fig. no. 2).

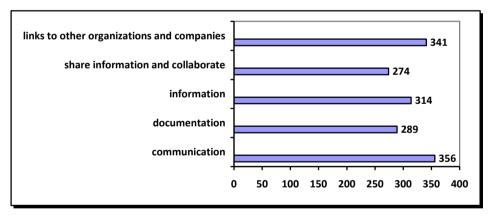


Fig. no. 2 Social networks usage

Analyses of responses indicate that the students use social networks to communicate and to

improve their activities.

The students revealed that social networks have changed the way in which they collect information, collaborate, communicate, share information, collaborate and find a job. We can specify that the social networks generate large sets of data and these "are the key to success in our competitive era, but data has to be linked to other data to generate value" (Tulasi, 2013). We have to highlight that, most of the students from the final years use social networks to link to other organization and companies to find information about a job. So, in this case they link their data with other data to generate value.

The approach highlights that the most popular social network is Facebook (98%), but a significant part of students from Faculty of Economic Cybernetics, Statistics and Informatics uses in the same time other social media like LinkedIn, Google+ and Twitter. The advantages of using social networks identified by the students are: accessibility, facility, commodity, efficiency, and rapidity, in the same time the social media are a source of information and resources and we can improve our communication. The social networks

represent an excellent means of obtaining new information in any domain. In this case, students can obtain information that helps them to improve their knowledge or to find a job. Almost all of the students (96%) consider that the social networks can improve the quality of communication.

The disadvantages of social networks can be grouped in the following main categories: incorrect or fake information, negative comments, lost efficiency and superficiality. These options were the most frequent in students' responses to the open questions regarding the disadvantages of social networks.

4.2.3 Online communications through social networks between students

In the third part of our survey we focused on the level of use of online communication between students and if these type of communication are necessary for them and for their activities. Online communication by social network is an important facility of our times for connecting students. It changed the students' life by made it easier to communicate between each other. Comparison to the past, students of our age communicate between each other's by different ways.

According to the survey, the Faculty of ECSI have a large number of students who believe that the online communication through social networks is essential in their activities and for interaction with other students (96.11%). We believe that this attitude reflects the openness to social networks. We find a large number of students who believe that the relationships between them are improved through online communication. This helped us to conclude that the use of social networks for their activities would be a real support for them (fig. no. 3). The survey shows also that the online communication through social networks is considered essential by the majority of students in terms of reducing time, costs and for linking their activities.

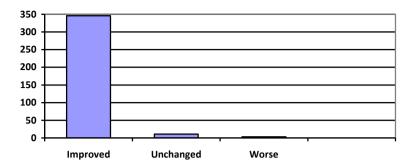


Fig. no. 3 Online communication through social networks

Users also highlight the possibility of obtaining additional information on a particular topic through online communication with other students and this are helping them to improve their knowledge.

4.2.4 The use of social networks by the students looking for employment

In the four part of our survey we tried to obtain the information about the use of social networks by the students looking for employment and integration. Social networks generate big quantity of data and in the same time these can help students to communicating effectively with companies and other students. Also companies can use their data to build a good relationship with students - future employees. Now, most firms public or private are on social networks to give more detail about company's business and hiring possibilities. Most companies use now social networks to find employees or to hire students.

This part has in view the importance of linking the companies with students. Most students (98.64%) have stressed the interest in real connection with companies through social networks. This way, they can find a job by sharing information on LinkedIn and can find information about companies very easy. The results confirm the necessity of use social networks by the students looking for a job.

It is important to note also an observation made by one of the students who completed the answer with an interesting detail: he/she used social networks to find a job, but not in Romania. It is evident that the facilities of social networks help students to get hired and to integrate in all areas.

5. Conclusions

In our competitive era it is essential to communicate and link with other students and organizations. To have the right information in the right time it is the key of future development. Big data from social networks offers some really interesting opportunities for students. Social media is an interconnected system through which student alliances from are formed, help is obtained and provided, information is transmitted, and actions taken to achieve certain results. The results of this case study highlight that students are interesting in how to use social networks to: improve their knowledge, collaborate, communicate, and to find a job.

References

Campbell, J. P., 2007. "Academic Analytics: A new tool for a new era", EDUCAUSE, 41-57, [online] Available at: http://net.educause.edu/ir/library/pdf/ELIWEB0710.pdf, [Accessed 10 March 2015].

Campbell, J. P. and Oblinger, D. G., 2007. "Academic Analytics EDUCAUSE" white paper, 2007, [online] Available at: http://net.educause.edu/ir/library/pdf/pub6101.pdf, Accessed 10 March 2015].

Deng, J., 2014. Are Universities Sticky? Evidence from LinkedIn Users in the U.S., A thesis submitted for the degree Master of Arts in Urban and Regional Planning, University of California Los Angeles, [online] Available at: https://escholarship.org/uc/item/3mt7r9r0 [Accessed 10 March 2015].

Fountain, C., 2005. Finding a Job in the Internet Age. Social Forces, 83(3), 1235-1262, [online] Available at: https://muse.jhu.edu/login?auth=0&type=summary&url=/journals/social_forces/v083/83.3fountain.pdf, [Accessed 10 March 2015].

Harper J., 2015. Trends in Big Data: Real Time, [online] Available at: http://www.dataversity.net/2015-trends-big-data-real-time/, [Accessed 10 March 2015].

IBM, Institute for Business Value, 2012. Analytics: The real-world use of big data, How innovative enterprises extract value from uncertain data, [online] Available at: http://www-03.ibm.com/systems/hu/resources/the_real_word_use_of_big_data.pdf, [Accessed 10 March 2015].

IDC Raport, 2013. Worldwide Big Data Technology and Services 2012-2015 Forecast, [online] Available at:http://laser.inf.ethz.ch/2013/material/breitman/additional%20reading/Worldwide%20Big%20Data%20Technology%20and%20Services%202012-2016%20Forecast.pdf, [Accessed 10 March 2015].

Keller M., 2013. Social Media and Interpersonal Communication, Social Work Today, Vol. 13 No. 3 P. 10, May/June 2013 Issue, http://www.socialworktoday.com/archive/051313p10.shtml, [Accessed 10 March 2015].

McKinsey Global Institute, 2011. Big Data the next frontier for innovation, competition and productivity, 2011 June, [online] Available at: http://bigdatawg.nist.gov/MGI_big_data full report.pdf, [Accessed 10 March 2015].

Petersona, R. M., Doverb, H. F., 2014. Building Student Networks with LinkedIn: The Potential for Connections, Internships, and Jobs, Marketing Education Review, Volume 24, Issue 1, [online] Available at: http://www.tandfonline.com/doi/abs/10.2753/MER1052-8008240102, [Accessed 10 March 2015].

Tulasi, B., 2013. Significance of Big Data and Analytics in Higher Education, International Journal of Computer Applications (0975 – 8887), Volume 68– No.14, April 2013, [online] Available at: http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.403.7851&rep=rep1&type=pdf, [Accessed 10 March 2015].

Weaver, B., Lindsay, B., Gitelman, B., 2012. Communication Technology and Social Media: Opportunities and Implications for Healthcare Systems, Vol 17 2012, No3 Sept 2012, Communication Technology and Social Media, http://nursingworld.org/MainMenuCategories/ANAMarketplace/ANAPeriodicals/OJIN/Ta bleofContents/Vol-17-2012/No3-Sept-2012/Communication-Technology-Social-Media.html, [Accessed 10 March 2015].