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Higher Education Institutions in Bosnia and Herzegovina: Usage of Social Network Sites

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Abstract

The paper presents the research of the current state of the presence and activities of higher education institutions in Bosnia and Herzegovina (BiH) on social network sites (SNS). Although higher education institutions in BiH have recognized the necessity of using social networks for communications with their stakeholders, especially students, they still struggle with the content posted on SNS and its frequency. The authors use content analysis to examine SNS posts from BiH higher education institutions and engagement from their constituents on these posts. Results show that there are significant differences in engagement received on posts across institution type and according to content and type of posts. The aim of the paper is to analyze if HEIs in BiH use SNS and to what degree, as well as if there is any difference between public and private institutions related to the usage of SNS.

Keywords: social networks sites, higher education institutions

JEL classification: I2, O39

Introduction

Today's digital world is characterized by extremely fast, dynamic and ever-evolving way of communication. Modern technology like smartphones, tablets, and other gadgets enabling continuous "plug-in" virtually everywhere. The result of such "plug-in" is more than 4 billion active Internet users, more than 2 billion of Facebook users, more than 300 million of Twitter users, more than 5 billion of videos viewed on a daily basis, etc. (Internet Live Stat). There is no doubt that SNS have become the primary tools for interaction with the world for the younger generations. They are using SNS to get information about everything, including their university and studies selection. For the HEIs this shift in behavior is critical for successful communication with their prospective students (recruitment process), with their students during their study period, as well as with their former students (alumni engagement and fundraising). However, the research is mostly oriented towards usage of SNS by HEIs (Constantinides et al., 2011; Davis III, et al. 2012; Peruta et al., 2016; Hou et al., 2017). There is a few research related to SNS and HEIs in Bosnia and Herzegovina (Smajlović, et al., 2015; Masic et al., 2012).

Since one of the accreditation criteria for HEIs in BiH is *Information to the public* (Odluku o kriterijima za akreditaciju visokoškolskih ustanova u Bosni i Hercegovini,

2016), referring to the publishing of all relevant information about HEIs activities and providing communication with external stakeholders systematically; it is interesting to research if HEIs in BiH use SNS and to what degree to ensure fulfillment of this criteria.

The aim of the paper is to analyze if HEIs in BiH use SNS and to what degree, as well as if there is any difference between public and private institutions related to the usage of SNS.

Methodology

In Bosnia and Herzegovina, there are many high education institutions (HEIs), 8 public and more than 30 private, and their quality of work is supervised by the Agency for the Development of Higher Education and Quality Assurance (Table 1).

Table 1

The List of HEIs Included in the Research

Code	Higher Education Institutions (HEI)	Type	Web address
hei1	University of East Sarajevo	PUB	http://www.ues.rs.ba/
hei2	University of Banja Luka	PUB	http://www.unibl.org/
hei3	University of Zenica	PUB	https://unze.ba/
hei4	University of Sarajevo	PUB	http://www.unsa.ba/
hei5	University of Tuzla	PUB	http://www.untz.ba/
hei6	University Džemal Bijedić	PUB	http://www.unmo.ba/
hei7	University of Mostar	PUB	http://www.sum.ba/
hei8	University of Bihać	PUB	http://www.unibl.org/
hei9	University for business studies Banja Luka	PRI	http://univerzitetps.com/index.php/sr
hei10	Banja Luka College	PRI	https://www.blc.edu.ba/
hei11	Autonomous University of Banja Luka	PRI	http://nubl.org/
hei12	Banja Luka College of Communications "Kapa Fi"	PRI	http://kfbl.edu.ba/?lang=hr
hei13	University Sinergija Bijeljina	PRI	http://www.sinergija.edu.ba/
hei14	University Sarajevo School of Science and Technology	PRI	https://www.ssst.edu.ba/
hei15	College of Service Business Istočno Sarajevo - Sokolac	PRI	http://vub.edu.ba/
hei16	International University of Sarajevo	PRI	https://www.ius.edu.ba/bs
hei17	International Burch University	PRI	https://www.ibu.edu.ba/bs/
hei18	"Logos centar" College Mostar	PRI	http://logos-centar.com/
hei19	American University in Bosnia and Herzegovina	PRI	https://aubih.edu.ba/
hei20	University of Travnik	PRI	http://www.unt.ba/v2/
hei21	International University of Travnik	PRI	http://www.iu-travnik.com/bs/
hei22	College "Center for Business Studies"	PRI	http://www.ceps.edu.ba/
hei23	University Vitez	PRI	https://unvi.edu.ba/
hei24	Pan-European University Apeiron	PRI	http://www.apeiron-uni.eu/
hei25	College Primus	PRI	http://primus-gradiska.org/
hei26	College for Applied and Legal Sciences „Prometej“	PRI	http://www.prometejbl.edu.ba/index.php/bs-ba/
hei27	University Hercegovina	PRI	http://hercegovina.edu.ba/hr/
hei28	American School of Economics	PRI	

Abbreviations: PUB – public HEI, PRI – private HEI

Source: Agency for Development of Higher Education and Quality Assurance

Accordingly, the list of HEIs for research (sample) was downloaded from the website of the said agency. But on HEA's website, there is no list of licensed higher education institutions with the explanation that there has been some misunderstandings and misinterpretation of the data from the list, HEA has decided to temporarily remove the said list from its website.

The following is recommended: For all information regarding licensed higher education institutions, please address the competent education authorities, the Ministry of Education and Culture of the Republika Srpska, cantonal ministries and the Department of Education of the Brčko District of Bosnia and Herzegovina (Info lista licenciranih VŠU u BiH).

The HEA's website offers a list of accredited higher education institutions in BiH, and these HEIs have taken in the sample. Table 1 indicates 28 HEIs in BiH, 8 public and 20 private. Activities of HEIs on social network sites were analyzed through two aspects. It was investigated whether the links to social network sites were available on official HEI's websites and whether these links were valid and active.

Basic characteristics of official profiles of the HEIs (numerical indicators available on the social network sites and published content) were analyzed on the most common social networks sites. The analysis was conducted during March 2018. Descriptive statistical analysis (frequency and percentage) was performed with regard to the adoption and use of each social media application by the BiH HEIs.

Results

Almost all HEIs on their official websites have a link to social networks, but they vary in the number of social networks they use. Detailed analysis of the presence of HEIs at SNS is shown in Table 2.

Table 2 shows that 4 of 28 HEIs has no any number of social networks. Namely, for three of these HEIs on their official websites there are no links to social networks, while for American School of Economics (hei28) the link to the official website was broken, so no data was collected. Of the 24 HEIs present on the social network, the most of them (9; 37.5%) are present on only one social network.

The quarter of HEIs (6) are present on 2 social networks; three HEIs have official profiles on 3 social networks, while two HEIs have 5 and two HEIs have 6 official profiles on social networks. Table 2 is omitted SNS Pinterest because only Autonomous University of Banja Luka (hei11) has a link to Pinterest, but the result of clicking on that link is official website again.

The black dots in Table 2 refer to dead links, meaning that links to social network profiles exist on official websites, but by clicking on that that links is not possible to reach official profiles on social networks. The four HEIs without any or active links to official profiles on social networks are excluded from analysis. Table 3 shows a summary of the use of particular social networks by BiH HEIs.

Table 2

Links to Social Networks Sites Available on Official Web Pages of the HEIs

Code	NoSNS	Facebook	Twitter	YouTube	LinkedIn	Google +	Instagram
Public HEIs							
hei1	4	+	+	+		+	
hei2	3	+	+	+			
hei3	1	+					
hei4	2	+	•		•		+
hei5							
hei6	1	+					
hei7	2	+	+				
hei8	1	+					
Private HEIs							
hei9	1	•	•	+			
hei10	5	+	+	+	+		+
hei11	2	•	•	+	•	+	
hei12	4	+	+	+	+		
hei13	2			+	+		
hei14	1	+			•		
hei15	1	+					
hei16	6	+	+	+	+	+	+
hei17	3	+		+			+
hei18	1	+					
hei19	6	+	+	+	+	+	+
hei20							
hei21	2	+		+			
hei22	1	+					
hei23	5	+	+	+	+	•	+
hei24	3	+	+	+	•		
hei25	1	+					
hei26							
hei27	2	+	+	•			
hei28							

Note: Abbreviations: NoSNS – Number of Social Network Sites;

Source: Authors' work; Analysis completed on 07/03/2018

Table 3

Use of SNS across HEIs

		Facebook	Twitter	YouTube	LinkedIn	Google+	Instagram
Total	F	21	10	12	6	4	5
(n=24)	% of n	87.5	41.7	50.0	25.0	16.7	20.8
Public HEI	Fpub	7	3	2	0	1	1
(npub=7)	% of npub	100.0	42.9	28.6	0.0	14.3	14.3
Private HEI	Fpri	14	7	10	6	3	5
(npri=17)	% of npri	82.4	41.2	58.8	35.3	17.6	29.4
% of F	Public HEI	33.3	30.0	16.7	0.0	25.0	20.0
	Private HEI	66.7	70.0	83.3	100.0	75.0	100.0

Note: Analysis completed on 10/03/2018;

Source: Authors' work

Table 4 shows the activity of BiH HEIs on social networks which is analyzed through a number of followers on researched SNS. The analysis of the number of followers by SNS shows substantial variations, so it is not advisable to count the mean of followers. However, it could be interesting to calculate median for the number of followers in order to even partially compare public and private HEIs. The results show that half of public HEIs have 2846 or less than 2846 followers at Facebook, and another half 2846 or more than 2846. When the private HEIs are in question, the half of them have 5373 or less than 5373 followers at Facebook, and other half has 5373 or more than 5373

followers at Facebook. The analysis of median for other SNS is not conducted because of public HEIs relatively poor use other SNS.

Table 4

Number of Friends and Followers According to Social Network Sites

Code	Facebook	Twitter	YouTube	LinkedIn	Google +	Instagram
Public HEIs						
hei1	2735	18	11		8	
hei2	4024	185	272			
hei3	2689					
hei4	4494					193
hei5						
hei6	3297					
hei7	1992	26				
hei8	693					
Private HEIs						
hei9			20			
hei10	3943	143	15	237		350
hei11			15		139	
hei12	1425	113	21	56		
hei13			37	235		
hei14	20589					
hei15	37					
hei16	16694	669	310	2993	40	1618
hei17	21815		271			650
hei18	8278					
hei19	45054	122	98	1439	19	1173
hei20						
hei21	1857		27			
hei22	4974					
hei23	5773	314	49	13		99
hei24	13588	62	138			
hei25	223					
hei26						
hei27	1047	32				
hei28						

Note: Analysis completed on 07/03/2018;

Source: Authors' work

Discussion

As it was expected, Facebook is the most common social network site among the HEIs. More than three quarters of the analyzed HEIs have a page (profile) on the said social network site. The second most common social network sites is YouTube where half of analyzed HEIs have their channels. They are followed by Twitter which is used by 10 BiH HEIs. LinkedIn is used by one quarter of HEIs, Instagram by 5 of them, and on the last place is Google+ with just 4 HEIs that use it. Because the public and private HEIs are differently represented in sample it is not suitable to analyze share of public and private HEIs in total number of HEIs with profiles on SNS. The disproportion of sample also affect the use of SNS. However, the separate analysis by public and private HEIs provides better insight present situation related to the use of SNS by BiH HEIs. All public HEIs, present on SNS, use Facebook, while in the group of private HEIs, Facebook is used by 82.4% of them. The share of Twitter and Google+ users is relatively equable between groups (Twitter ca. 40%; Google+ ca. 15%). The share of

YouTube users is twice higher in the group of private HEIs. LinkedIn is used by 1/3 of private HEIs, while public HEIs do not use it. The both groups show the highest interest for Facebook and the smallest for Google+ and Instagram.

The result for LinkedIn is particularly interesting because LinkedIn is business SNS and somehow it is expecting that HEIs, as non-profitable institutions, present themselves on LinkedIn. By presenting their work to the wider public, the HEIs can substantially enhance their activities and further development. Namely, if the wider public is familiar with the work of HEIs, the result could be different kinds of cooperation with industry, like a specific project (research and practice), student's practice, increasing of social responsibility, and similar. However, the results of the research show that HEIs still are not fully thinking in that direction. Private HEIs mostly use LinkedIn to improve their visibility, but here is a lot of room for improvement. The public HEIs should consider the creation of LinkedIn profiles because according to available data, neither one public HEIs have an official profile on LinkedIn.

Broken or wrong links to SNS at official websites of HEIs create a bad impression and send a bad message to environment about particular HEI. However, if there is a possibility that SNS profiles exist, but they are not linked to official websites, one can speak about unsystematic approach relating both to the online presentation of HEIs and HEIs website development.

The context analysis of HEIs posts on SNS shows the significant variety and mostly refers to the contents that are already published on official websites of HEIs. The marketing activities related to the promotion of enrollment to the particular HEIs are more frequent in private than public HEIs what it is not surprising. However, public HEIs, because of stronger competition, should have been more interesting for promoting activities on SNS in order to become closer both, to their potential students and wider environment. On the other hand, all public HEIs have more organizational units than private, they have long history, and they have more employees and direct participants, so consequently they have more frequent and variety posts (announcements of conferences, participation in conferences, humanitarian actions, books presentations, students' activities, guests lectures, international cooperation, projects, etc.)

Pictures and videos are the most common contents. The activity of followers on HEIs' social network pages is primarily reduced to liking posts; any comments are very rare. The frequency of publishing also varies significantly - from several times a day to once in a few days.

As it was already explained, one of the criteria for accreditation of HEIs in BiH is ensuring "Information to the public." Today, because of the intensive use of SNS in everyday life (both, business and private), the SNS are, together with websites, becoming the de facto standard for public communication. If we analyze the HEIs usage of SNS in that context, then the conclusion is that some of analyzed HEIs do not fully satisfy the criteria related to the information to the public because of poor usage of SNS. Namely, visibility and availability of information today cannot be fully ensured without efficient use of SNS.

Conclusion

The results of the conducted research show that HEIs in BiH mostly use SNS as communication channels with their stakeholders. However, the manner how HEIs in BiH use SNS is still unsatisfactory. Although the authors did not conduct detail analysis of posts on SNS, it can be concluded that HEIs have to work very hard to improve their SNS usage. That is confirmed by the fact that HEIs are the most present on Facebook, Twitter, and YouTube, while the other SNS are substantially neglected.

HEIs post frequently, but their posts cause slack reactions, even in a situation when HEIs have a relatively huge number of followers. It leads to the conclusion that HEIs primarily use SNS as a marketing tool, based on one-way communication.

However, it is hard to make generalized conclusions because, as stated in the methodology of paper, the research was comprised HEIs listed by HEA. It is possible that among other private HEIs which were not included in the sample, there are some HEIs that efficiently use SNS both for marketing and pedagogical purposes. Additionally, this analysis is conducted just at the university level. Possibly, the results could be different if faculties (organizational units) are included in the analysis because they are more specialized.

One of the guidelines for further research can be the inclusion of the faculties in the analysis which can provide data for benchmarking of HEIs related to use of SNS. Further, the analysis of specific SNS through different indicators like Facebook Assessment Index (FAI) can give better insight related to the use of this SNS. One more guideline for the further research is a survey of different HEIs stakeholders, students and teachers primarily, in order to analyze how they are used or wanted to use SNS – just as a communication channel or a tool for reaching learning outcomes and ensuring the quality of education. After implementation of suggested analysis, the general conclusion related to the use and the importance of SNS in BiH HEIs could be possible.

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