

# Croatian libraries on Facebook – content analysis

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**Abstract - There is little doubt that social networking today plays an important role in online communication. Between the different existing social networking services, the most popular one with more than 750 million users worldwide is Facebook. As the Facebook platform attracted more and more users, libraries started to perceive the benefits they can get from building their presence: from using Facebook as a marketing tool to reach existing or potential users, to extending their library services in a social networking environment. This research focused on examining the library wall activity and the content Croatian libraries made available through their Facebook representations. First part of research analyzed the Facebook wall activity of 91 library during a period of 14 days in May/June 2011. In the second phase a detailed content analysis was undertaken on libraries that had at least one wall post in the observed period.**

The results of wall activity analysis showed that a small number of libraries are responsible for generating a large portion of content, and most of the libraries are not very active. The content analysis has shown that libraries mostly use their Facebook representations as a platform for marketing and posting links potentially interesting to subscribers. Also, a significant number of library posts falls into the “spam” category, which can show the lack of knowledge on potential threats when using the Facebook platform.

## I. INTRODUCTION

Social networking today has become an everyday activity for many Internet users. Between many currently existing services that provide the possibilities for users to create and maintain their online social network, Facebook (<http://www.facebook.com>) has emerged as the most popular one. Some key statistics from different researches can help in gaining some insight into the impact of social networking and Facebook on today Internet users:

- Over 80% of all Americans use a social network; nearly 23% of online time is spent on social networks [1]
- There are now more than 750 million active Facebook users [2]
- 98% of 18- to 24-year-olds access social accounts monthly; college population logs on to Facebook the most [3]

Those numbers are confirmed by another research, undertaken by the Pew Internet Project [4], where 2255 adult Americans answered questions about their online activities. It was found that 59% of them have an account on at least one of the existing social network services, and 92% of them chose Facebook as their preferred service. A follow-up research [5] found that a single Facebook user can reach an average of more than 150,000 Facebook users through their Facebook friends; the median user can reach about 31,000 others.

As far as Croatia goes, latest numbers [6] show that from a total of 2,5 million Internet users, around 1,5 million of them use Facebook, which makes over 67% of the total online population. Demographic data show that around 60% of users are from 18-34 years old, and around 20% of them are under 18.

Considering the vast usage between Internet users, Facebook has quickly become a desirable marketing channel for many businesses: it's free, simple to use and has a very large user base. Apart from the business sector, the non-profit institutions have also begun exploring the possibilities that Facebook offers. As King [7] notes: “What if there was a way for your library to get the attention of 51% of your local community? For free? Would you do it? I'm guessing so. Guess what? There is a way to potentially do that – by using Facebook!”

By creating a Facebook representation, libraries can actively take part in the everyday online activities of its users by communicating with them through less formal channels. Besides the marketing possibilities in making the library more visible in the online environment, Facebook can also provide a platform for offering new library services or reaching new and existing users. One report [8] found that 50% of small business owners reported gaining new customers through social media; 51% of Facebook users are more likely to buy from the brands they follow.

Taking these trends in perspective, Facebook can give new options to libraries in enhancing their online presence, as well as reaching their potential users. In a world where information is easily accessible, but its value is often dubious, library can act as an educator inside the Facebook environment and warn users on the potential threats and problems of information integrity. By actively participating inside their chosen social network, libraries

can improve their image and gain many benefits, but the lack of proper strategy can often produce more damage than good. As Farkas [9] puts it: „A lot of libraries have started building presence in MySpace and Facebook by creating profiles. And I honestly think this is a really good idea though unfortunately most libraries are doing it *really* badly. When you decide to put up a library profile on MySpace or Facebook, what is your goal? If it's to look cool or to make students more aware of the library, don't bother...I think there is a big difference between "being where our patrons are" and being *useful* to our patrons where they are."

This opinion highlights the main problem libraries are facing when creating their representation in social networks – the lack of strategy. The process of creating and maintaining library representations often isn't thoroughly planned and depends on a single librarian and his/her knowledge and preferences. That can often lead to inconsistencies in types of posts and frequency of posting.

## II. PREVIOUS RESEARCH

In the area of non-profit institutions, libraries were among the first in researching the possibilities that social networking could bring to their services. Considerable amount of research was undertaken from different perspectives, but most of the research can be categorized into three main categories: library perspective (exploring how social networking could be integrated into the existing library services), user perspective (what users expect from libraries inside the social network environment) and content perspective (what kind of information libraries post inside their chosen social network).

### *Library perspective*

One of the first researches was undertaken by Charnigo and Barnett-Ellis [10] where 126 academic librarians were surveyed on their attitudes towards integrating Facebook as a part of library service. Although most of the librarians were familiar with the notion of social networking, most of them did not see its role in library services, with only 2 out of 74 libraries having a Facebook profile. Authors have concluded that with the emerging presence and popularity of social networking services, a new channel of communication is opened for libraries that shouldn't be rejected in advance. A similar research conducted by Bejune and Ronan [11] on the sample of 64 libraries members of the ARL has shown that 44 libraries (70%) have a social network representation, and that 33 of them actively maintain it.

As social networking was given more coverage in academic papers, a series of researches has emerged covering the use of social software in academic libraries. Chua and Goh [12] surveyed 120 web sites of academic and public libraries and concluded that only 24 of them use some kind of social networking service. In a similar research, Xu, Ouyang and Chu [13] have surveyed web

sites of 81 academic libraries in the state of New York, where only 4 of them had a representation inside a chosen social networking service.

These researches show that, although a growing number of libraries are starting to participate in the social networking wave, they still don't perceive social networking as an area in which they should extend their library services. The majority of libraries are still considering the notion of social networking as too unstable and „unprofessional“ for traditional library services. Furthermore, Facebook is still mainly perceived as fun (not suitable for business purposes), private (users do not want professional services inside their private social network), too commercial or even dangerous (known problems with data privacy).

On the other hand, some researches, such as one undertaken by Secker [14] have shown that Facebook has great potential in the area of enhancing library online presence, and especially in the educational segment of information integrity.

### *User perspective*

User studies exploring social networking and libraries have often included student population as a representative sample. One of the first user studies was undertaken by Mathews [15], trying to explore the usefulness of Facebook in promoting library services. The author concludes that Facebook can be of great help in the area of library marketing and encourages colleagues in exploring the service further.

Chu and Meulemans [16] explored the willingness of students to communicate with faculty staff through Facebook, as well as the potential use of Facebook platform in extending library services. It was shown that the library could use Facebook for promoting new services, providing reference services and teaching information literacy. As far as communication with students goes, students were more willing to contact the library as an organization than the individual library or faculty staff.

One of the most elaborate researches was conducted by Bietilla, Bloechl and Edwards [17] from the Gellman library from the University of Washington. The research team consisted from two librarians and an anthropologist who created an extensive methodological apparatus focused on determining how to plan services grounded in real user needs. During the first phase the anthropologist examined all the existing social network representations that the Gellman library created and formed an online image of the library. In the second phase, 105 students were surveyed on the current and potential library services. The last phase consisted of semi-structured interviews with 15 students on their habits of learning, using technology, Facebook and library services. In the end, authors concluded that Facebook is, for students, primarily a place of relaxation and informal communication. It is not used as a collaboration tool, and

the presence of faculty staff is generally considered as an intrusion to their private spaces.

One of the latest user studies on college students and libraries conducted by OCLC [18] shows a steep decline in the use of library web sites, stating that almost all researches today start with Internet search engines (84%) and none of the participants stated that he/she started their research on the library web site. Social networking plays a vital role in the online lives of people with 66% of Americans using social networking. Local research [19] on Croatian student population has confirmed those results and found that Croatian students see a role for the library inside their social network, and would like to use some of the library services in that environment, such as searching the catalogue or receiving useful and relevant notifications from the library.

User studies have shown that a large number of students have a profile on at least one of the social networking services, with Facebook being the preferred one. In the area of library participation inside social networks, opinions differ: some librarians and students do not see a role for the library inside their social network, while others can see the benefits of extending library services in these new areas. Although the opinions are divided, authors agree that the emerging role of social networking services in the everyday life of library users will inevitably change library services in the future.

#### *Content perspective*

The third category of researches deals with analyzing the content that libraries post inside their chosen social networking service.

One of the first content analysis studies [20] surveyed 72 medical libraries and the content they post on their Facebook wall. It was shown that only 9 libraries use Facebook, mostly to promote library services and post photographs. Although the libraries using Facebook had positive experiences, small sample has limited the value of the conclusions.

Another research [21] analyzed 12 libraries and the content they post on their Facebook representations. It was shown that libraries mostly use Facebook as a marketing tool, while the area of communication with the library users was not that widely used.

A similar research undertaken by Calvi, Cassella and Nuijten [22] analyzed the Facebook content that 12 libraries posted in the period of 8 days. It was shown that libraries post only a few posts a day, mostly about library activities. Users were not that active on the library wall. Authors have concluded that further development of social networking services will enable more efficient ways of extending library services.

### III. SAMPLE AND METHODOLOGY

The initial data was collected during July 2011 using several methods: a) examination of the Facebook page

“Croatian Libraries on Facebook”, b) entering the keyword “library” in Facebook search, and c) browsing all the gained results as well as browsing the libraries’ “friend lists” and activities in order to discover new libraries. The collected data consisted of 91 libraries and their Facebook representations (profile/group/page).

First part of research analyzed library wall activity on the sample of 91 libraries, during the selected period of 14 days (May 30 – June 12 2011). This analysis included recording the number of new posts on individual page, profile or group opened by library.

The second phase of the content analysis attempted to organize the data according to specified content categories. From the original sample of 91 libraries, 27 libraries were excluded from further research due to their total wall inactivity in the selected period of 14 days. The overall sample for content analysis consisted of 64 libraries with the total of 402 individual posts, as shown in Table 1.

TABLE I. SAMPLE

Library type	# of libraries	# of posts
SCHOOL LIBRARIES	14	77
ACADEMIC LIBRARIES	14	50
PUBLIC LIBRARIES	36	275
<b>TOTAL</b>	<b>64</b>	<b>402</b>

The content analysis consisted of two types of data: the type of post and the post content. As for the type of post goes, the categories for analysis included library posts, user posts, pictures posted, user comments, library comments and the number of user “likes”. Based on previous similar researches [21] [22], the probable content categories for published posts were defined in advance, but during the analyses some new categories were added. The final categories were: activities in the library, culture news, notifications about library services, useful/interesting links, new book arrivals, calls for cooperation, spam and “other”. The results were collected and statistically processed in Microsoft Excel 2010.

### IV. RESULTS AND DISCUSSION

First part of the content analysis recorded the types of posts libraries posted on Facebook. In a period of 14 days, the data on library posts, user posts, pictures, user comments, library comments and the number of user “likes” were collected. The aggregated data for all 3 groups of libraries are presented in Table 2.

TABLE II. TYPES OF CONTENT PUBLISHED

Library type	Posts	Photographs	Comments	Likes
SCHOOL LIBRARIES	77	127	53	204
ACADEMIC LIBRARIES	50	55	6	214
PUBLIC LIBRARIES	275	286	98	950

Next, posts and comments were analyzed regarding on the source – whether the posts and comments were published by the users or by the library. Figure 2 shows that the vast majority of posts (83%) are published by the library, while the most of the comments are published by the users (77%).

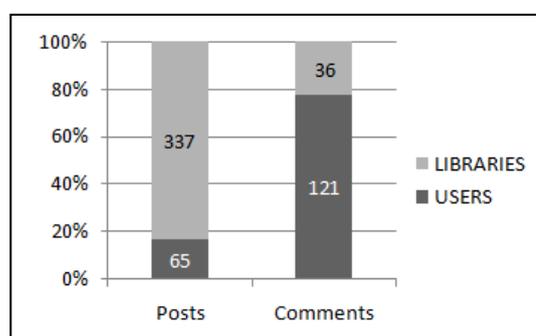


Figure 2. Comments and posts – library or users

Statistical analysis of the data showed unequal distribution of some analyzed categories. Table 2 shows that the largest dispersion (standard deviation) of values was present in the number of photos and the number of “likes”. These inequalities were also confirmed in a detailed overview of the results where it was shown that only one library was responsible for posting 125 out of total of 468 (26%) photos, and only 4 libraries with the biggest number of “likes” were responsible for over 40% of the total number of “likes”. Also, the overall results show that 39 libraries (61%) didn’t post any photos and 33 libraries (51%) didn’t have a single comment on their posts.

Detailed analysis of post frequency shown in Figure 1 indicates that the majority of the libraries (58%) have a very small number of posts (0-3), and only a small number of libraries have more than 10 posts published in a selected period of 14 days (14%). It should also be noted that one library is solely responsible for 16% of posts in the sample of public libraries and 10% in the overall sample of 402 posts.

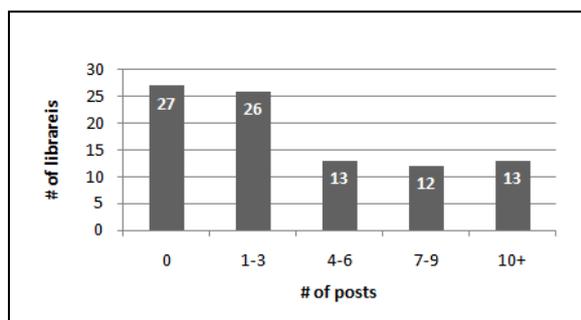


Figure 1. Library post frequency in a selected period of 14 days

When examining detailed data on total number of posts, this inequality becomes even more obvious. The results showed that 13 libraries with the biggest number of posts published (10-44) in a critical period were responsible for producing 50% of all the content. The other 50% was distributed on 51 other libraries. This clearly indicates that a small number of libraries are responsible for publishing a large amount of content, while majority of libraries only occasionally maintain their Facebook representations.

The second phase of the content analysis attempted to organize the data according to specified content categories. In this part of the analysis, only library posts were examined except when user post would belong to the “spam” category, so the total sample included 375 posts. The total data for all 3 library categories are shown in the Table 3.

TABLE III. TYPES OF CONTENT PUBLISHED

Library type	Posts	%
Activities in the library	157	42%
Useful/interesting links	79	21%
Spam	44	12%
Notifications (working hours, etc.)	34	9%
Book arrivals	31	8%
Culture news	18	5%
Calls for cooperation	7	2%
Other	5	1%
<b>TOTAL</b>	<b>375</b>	<b>100%</b>

Overall results show that almost half of all posts fall into the category “activities in the library” (42%), followed by “useful/interesting links” (21%) and “spam” (12%).

Detailed analysis showed some differences in content libraries publish regarding on the library type. In the group of school libraries, the majority of posts were equally divided between “activities in the library” (35%) and “useful/interesting links” (28%). In group of academic libraries the dominant content category was “useful/interesting links” with 51% of the overall posts.

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The third group, public libraries, had the most posts published in the category “activities in the library” (47%).

These differences between post content may indicate a more “social” dimension of Facebook representations of school and public libraries, achieved by posting more content on library activities. On the other hand, academic libraries are more oriented in providing useful content in the form of links potentially interesting to their users, maintaining a more “professional” approach to their Facebook users.

## V. CONCLUSION

Although a fairly large number of Croatian libraries have a Facebook representation, only a small number of them are using it to its full potential. The analysis has shown that a small number of libraries are responsible for publishing majority of the content. Most of the libraries only publish one or two times a month, making their Facebook representations very inactive. On the other hand, those few libraries that post often, have managed to achieve an active communication dynamics with the users inside the Facebook environment. In exploring how this dynamics is created, a content analysis of library posts was undertaken to group the content in adequate categories and show what kind of content libraries publish. Libraries mainly used Facebook as a marketing tool, publishing content related to activities in the library. A significant number of library posts (especially by academic libraries) were aimed to foster user activity in the form of comments or likes, by posting interesting/useful links. In those cases, library would post content potentially interesting to users hoping it would foster user activity. This communication dynamics follows a simple pattern: library posts content, and users comment on it, or “like” it. This is supported by research results where the vast majority of posts (83%) were published by the library, while the most of the comments were published by the users (77%). If the library manages to create this pattern of communication, their Facebook representation becomes very active and can generate a lot of content. This pattern is the model of success for those few libraries that have managed to use Facebook as a useful communication platform.

But, the need to carefully select and monitor the published content becomes obvious when we see that 12% of all posts fall in the “spam” category. Spam can be created by the library (mainly by playing Facebook games) or users (by using different Facebook applications). While the process of removing spam posts is fairly easy and quick, a large number of spam posts show a lack of knowledge about the Facebook platform and its potential threats.

The analysis showed that Croatian libraries still have a lot of space for improvement when it comes to integrating social networking into their services. Except from a few good examples, Facebook representations of libraries are often inactive, lack content and can generate spam posts.

Also, using Facebook as a platform for extending library services (for example, searching the library catalogue or reference services) wasn’t used by any of the libraries. Most of the Facebook representations are trying “to be where the users are”, but a lack of proper strategy hinders them from using Facebook platform in its full potential.

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