Communication Strategy and Presence of the University Computing Centre (SRCE) on Internet Based Social Networks

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Abstract. The University Computing Centre (SRCE) established its presence on Internet based social networks in November 2009, namely on Facebook. Soon after, SRCE became present on Twitter, Google+, YouTube, LinkedIn and foursquare. Maintaining the presence and communication on social networks was initially one of the activities carried out by the SRCE Helpdesk service. However, as a result of the growing workload and responsibilities of the Helpdesk, a new service was established only for activities related to social networks. This paper discusses the communication strategy used by SRCE on social networks. The authors examined different web based tools and services to gather information about Internet users who follow SRCE’s activities on different social network. A data analysis shows that the initial goals SRCE set in 2009 related to its communication strategy on social networks have been fulfilled. This data will also be used as a starting point for reconsideration of the existing communication strategy. With the emergence of new popular social networks there might be a need for expansion.

Keywords. Presence on social networks, University Computing Centre, SRCE, communication strategy, Facebook, Twitter, Google+, YouTube, LinkedIn, foursquare.

1. Introduction

With the development of social networks and their growing influence, a need has emerged for companies and institutions to communicate with their users through these channels. This paper presents such a way of communication adopted by the University Computing Centre (further in the text SRCE)

The goal of the paper is to present SRCE’s online communication strategy and to determine if it has given the desired results. These results can be used at a later date to identify possible weak spots in the existing strategy and can also be useful for expanding the presence of the institution on social networks. The term “social network” has been used in this paper to denote social networking applications and Internet based social networks.

In the early development phases of this sort of communication, only few knew how to approach the public “on the other side” of social networks. The job of a social media specialist was just in the making and no one knew what skills the job would require. Things were even more complex because a social media specialist needed to be not only a great communicator and an innovative strategist, but also had to have technical capabilities of a webmaster or programmer. A lot of new skills had to be adopted by persons who wanted to make it in the world of social networks. [16]

Ever since its foundation SRCE has used different means to inform the public about its products and services. If we take a closer look at the Internet era we can see that it has played a significant role in the process of connecting Croatia to the Internet through CARNet, the project that was launched in November 1992. [1] Therefore it is of no surprise that SRCE has embraced this new medium in order to expand its communication channels. In February 1993, it registered the first Croatian Internet domain, srce.hr., [13] and it launched in the same year a Gopher service and a public web site. [18].

In addition to this on-line publications SRCE also launched a print publication “Glasilo sveučilišnog računskog centra” whose goal was to inform “all the employees and students of Croatian universities” about SRCE’s new services. [9] However, the publication was discontinued after three issues only to be replaced by “Srce Novosti”, which was established in November 2003 with similar goals.
and which still exists in both printed and digital forms.

With time, SRCE started publishing information and announcements on the web. The usual communication means and tools such as press releases, media advisory and press conferences were also established and used for the sole purpose of informing journalists who would then disseminate information to the general public. Web publishing of the already existing written materials for the press was driven by the desire to facilitate the availability of information and reduce the possibility of misinterpretation and errors that occurred during transcription of fax messages and phone calls. The development of the web as a medium also meant that information was directly available to the general public and this fact was used to emphasize the role of SRCE. Promotional materials, such as leaflets, became available on SRCE’s site as well.

In 2006, the building of SRCE was the first to be installed with a digital signage system while certain other premises of the University of Zagreb received it in the following years. [19] SRCE has also been using Really Simple Syndication (RSS) feeds to disseminate information about its services. These traditional ways of communicating with the general public have their strict rules and are very formal. With time SRCE recognized the need to establish simpler and more informal communication mechanisms with its users. With the emergence of social networks and their wider acceptance it seemed logical to use them in order to fulfill the desired goals of the institution. Presence on social networks can indeed offer institutions related to higher education different possibilities for use [21]. Additionally, social networks can also become an important marketing channel. [22] The efforts to establish presence on social networks were recognized by the jury of the VIDI Awards 2010 competition which awarded SRCE for the best web page in the category of governmental and state institutions. [20]

2. Communication strategy

At the very start of the research four target groups were identified: students, employees of higher education institutions, system administrators and IT courses attendees. It was thought that those groups could benefit the most from the information SRCE publishes on social networks. SRCE’s Public Relations service was involved in the creation of the communication strategy for social networks [11].

At that time Facebook was identified as a social network primarily related to younger population, such as students. The language and style used on the site were informal and casual which represented a completely different concept when compared to news on public web sites and in press releases.

It was decided that the following types of information should be published on Facebook:

- content from SRCE’s public web site
- content from the web sites of SRCE’s services that run their own sites
- photos and video clips
- schedule of IT courses and exams
- other useful information

At first the presence and communication on social networks was part of activities carried out by the SRCE Helpdesk service. As a result of the growing workload and responsibilities, a new service dedicated only to the presence of SRCE on social networks, was established. [15] This service has currently three people responsible for social media activities; one fully in charge, who leads the team, creates social media strategies and executing them, and two junior community managers. The whole team is above the third level of responsibilities as defined by the Skills Framework for Social Age (SFSA) [12]. The whole team can:

- publish content without previous approval (level3),
- advise other members of the team on how to create quality content (level 4),
- influence – execute communication strategy and try to get a better reach for content (level 5).

The team leader is responsible for setting strategy (level 6).

The team is responsible for finding and publishing content regularly, communicating with the public (by responding to their comments or direct messages), and for creating specialized video materials connected to SRCE’s products and services and publishing them via social networks, primarily YouTube.

As mentioned before, when compared to the SFSA matrix, the team shows a full range of responsibilities for all of the six levels but not in every area of the matrix. For now, the only exception is that the social media team is not responsible for the web presence, which is part of the online media strategy.
In the beginning, SRCE was focused on publishing its own, specially selected content with the frequency of 2 to 3 posts per week. With time new services brought about new forms of content, such as photographs and video making it more appealing for publishing. This increased amount of content resulted with greater posting frequency.

In the period between November 2009 and March 2011, SRCE was present only on Facebook. In March 2011, it established presence on Twitter as well. Twitter was identified as the social network that became more and more popular with the target audience. In August 2011, SRCE opened a YouTube channel as a repository for video tutorials and promotional video files. As part of the effort to keep up with the trends in social networking SRCE opened its profile on Google+ in January the following year.

At the same time, the profile on LinkedIn, which had been created and run by an unknown person, was taken over by SRCE in order to establish formal administration of the profile. The last in the row of social networks where SRCE had established its presence was foursquare where it appeared in February 2012 [19]. In a previous research Facebook, Twitter and LinkedIn were identified as the most prominent [7] social networks for the Croatian academic community. [8]

Major changes happened in January 2012 when it was decided that news related to technology, science and education from other web sites would be published on SRCE’s social network profiles and pages. This has increased the posting frequency to 2 to 3 posts per work day on Facebook, Google+ and Twitter. In order to maintain the posting frequency dozens of different portals that cover news in technology and education have had to be read on a daily basis. In most cases the same content is published in the Croatian language, on all three mentioned networks. A somewhat low posting frequency on LinkedIn is due to the fact that information transmitted in this way mostly comes from the English version of the SRCE public web site, since English is the posting language for LinkedIn. Since foursquare is a location based social network [2] it is used for informing the public about some of the services offered by SRCE. Although social networks have not been offered as an official communication channel of SRCE [17] they are sometimes used to send users’ inquiries to the Helpdesk. All the inquiries and requests received by the Helpdesk are treated as if they have been sent through some other communication channels.

3. Research

In order to measure effectiveness of the existing communication strategy the research was undertaken at the beginning of 2013. Data was harvested in the course of January 2013 from those social networks on which SRCE had established its presence. Data was harvested to gain answers to the following questions:

- What were the trends regarding the number of fans or followers on different social networks?
- What kind of influence is exerted by advertising on reach and number of followers (fans)?
- Is there a correlation between the number of published updates and their reach?
- Is there a correlation between the number of uploaded videos and the total number of monthly video views?
- What is the demographic structure of the reached Facebook users
- Are social networks important referrals for SRCE’s public web site?

The gathered data was analyzed, and subsequently interpreted, by using the tools built in within each social network, alongside with some on-line services:

- SocialBro (http://www.socialbro.com/)
- Crowdbooster (http://crowdbooster.com/)
- Google Analytics (http://www.google.com/analytics/)
- TweetStats (http://www.tweetstats.com/)
- Socialnumbers (http://socialnumbers.com)
- CircleCount (http://www.circlecount.com/)
- SocialStatistics (http://socialstatistics.com)
- bitly (https://bitly.com/)

Different metric tools were necessarily implemented due to the fact that some social networks used by SRCE, namely Twitter and Google+, do not offer any statistics within them. This is rather surprising, especially for Google+ because it has its own analytic tools - Google Analytics. However, the situation with Google+
should change in the near future. [6] On the other hand, Facebook offers an integrated in-depth analytic tool called Page Insights [3] which makes a large amount of data available for analysis or export. The same is true for YouTube.

Due to a large amount of data, additional tools were used in order to facilitate interpretation. It is also important to stress that Facebook Page Insights data began to be available for the posts published after 19 July 2011 which allowed for an analysis of additional metric. [5] LinkedIn offers only the basic analytics and foursquare will make more data available for analysis at the end of January 2013. [14] Due to its lack of statistical tool, foursquare was omitted from the data gathering process in the course of the research.

Most of the aforementioned tools can analyze data only from the moment they were first used. Furthermore, social networks constantly get new features and metrics [10] available to users and analytical tools can most certainly vary from time to time.

Some products and services SRCE provides are presented via their own separate social network channels due to the specificity of their target audiences:

- International Conference on Information Technology Interfaces (ITI) is present on Facebook and LinkedIn as ITI Conference
- MoodleMoot Croatia is present on Facebook and Twitter as MoodleMootHR.

These social network channels are connected to SRCE, but they are not presented under the SRCE brand. SRCE publishes all the relevant information on these products and services via its social networks, but some of the specifics are sometimes not included. These products and services and their social network channels are not included in this paper.

**4. Findings and interpretations**

Figure 1 shows how the number of “Likes” has grown over time on SRCE’s Facebook page. Each “Like” represents a Facebook user that has at a certain point of time shown his or her affinity towards the centre. Since the very begging SRCE has shown a constant, almost linear, growth in the number of followers. As is can be seen, since August 2012, the number of fans has increased at a higher rate. This is due to several short term advertising campaigns for one of SRCE’s services. The primary goal of those campaigns was not to increase the number of “Likes”, although this increase is considered to be more than a welcome side effect of those campaigns. Out of 1434 actions that resulted from the campaigns, 667 of them manifested as the “Like” page.

![Figure 1. Number of Facebook fans from 2009 to 2012](image1)

In Figure 2 we can see the comparison between the numbers of followers for each of the four social networks. Data was collected for the entire 2012, with the exception of the data from January 2012 that was not available for LinkedIn, Facebook, Twitter, Google and LinkedIn. As the Figure 2 shows, the number of followers is constantly growing on all monitored networks. This growth is almost linear with the exception of Facebook where advertising campaigns have produced a faster growth, as it has already been mentioned.

![Figure 2. Number of fans or followers on different social networks between February and December 2012](image2)
The comparison of the number of posts and status updates with their reach for Facebook and Twitter is shown in Figure 3 and Figure 4. It clearly shows that the number of impressions grew as the number of posts and status updates increased. This is especially visible in 2012 when a new communication strategy with an increased number of daily posts was introduced.

A similar correlation between the newly published content and reach can also be observed at the SRCE YouTube channel. Figure 5 shows the number of monthly video views. In the months when new videos were uploaded the number of video views increased. This leads to the conclusion that the production of new content, in this case the newly uploaded videos, brings new viewers to the SRCE YouTube channel.

Figure 3. Correlation between number of status updates on Facebook and their reach

Figure 4. Correlation between number of published tweets updates and their reach

Figure 5. Correlation between number of uploaded videos and total number of monthly video views

As it has already been mentioned, Facebook offers the in-depth analytic tool Facebook Insights. With the help of this tool demographic data was gathered for the last week of each quarter in 2012 which is shown in Table 1. Seven major age ranges have been extracted from that data. The demographic data is based on the information provided by Facebook users within their personal profiles. This data is gathered both from posts published by SRCE and from the marketing campaigns run by SRCE on Facebook.

Table 1. Demographic structure of reached Facebook users in given period

<table>
<thead>
<tr>
<th>Date range</th>
<th>13-17</th>
<th>18-24</th>
<th>25-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65+</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/25/2012-3/31/2012</td>
<td>10.20</td>
<td>36.50</td>
<td>36.40</td>
<td>9.90</td>
<td>3.00</td>
<td>0.90</td>
<td>0.50</td>
</tr>
<tr>
<td>6/24/2012-6/30/2012</td>
<td>15.50</td>
<td>29.30</td>
<td>32.80</td>
<td>13.50</td>
<td>4.60</td>
<td>1.50</td>
<td>1.10</td>
</tr>
<tr>
<td>9/24/2012-9/30/2012</td>
<td>35.50</td>
<td>35.10</td>
<td>18.00</td>
<td>5.60</td>
<td>2.20</td>
<td>1.00</td>
<td>1.70</td>
</tr>
<tr>
<td>12/25/2012-12/31/2012</td>
<td>0.00</td>
<td>51.10</td>
<td>25.40</td>
<td>11.10</td>
<td>5.80</td>
<td>2.60</td>
<td>2.10</td>
</tr>
</tbody>
</table>

Two extremes tendencies can be seen within the gathered data. We can offer no explanation why the data sample which was gathered on 30 September 2012 has such a large percentage of users in the age range from 13 to 17 years. The second extreme tendency can be seen in the data sample gathered on 31 December 2012. In this case the mentioned age range has a value equal
to zero while the ages between 18 and 24 have a significantly higher value. We believe this is a result of the marketing campaign conducted during December 2012. That campaign was targeted at Facebook users of 18 years of age and older.

Unfortunately, the gathered data does not allow for the establishment of a correlation between the age ranges of Facebook users and their geographic location. The geographic location of users shows that a large majority of them are from Zagreb, Croatia. This data is shown in Table 2.

Table 2. Geographic location of reached Facebook users in given period

<table>
<thead>
<tr>
<th>Date range</th>
<th>Croatia (%)</th>
<th>Zagreb (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3/25/2012-3/31/2012</td>
<td>80.24</td>
<td>54.23</td>
</tr>
<tr>
<td>6/24/2012-6/30/2012</td>
<td>79.48</td>
<td>33.71</td>
</tr>
<tr>
<td>9/24/2012-9/30/2012</td>
<td>87.91</td>
<td>35.10</td>
</tr>
<tr>
<td>12/25/2012-12/31/2012</td>
<td>99.91</td>
<td>36.62</td>
</tr>
</tbody>
</table>

One of the main target groups that SRCE wanted to reach over social networks are university students, especially those that are located in Zagreb. We believe that most of the students belong to the group within the age range from 18 to 34, depending on the level of academic programme in which they are enrolled. The data shown in Tables 1 and 2 indicate that SRCE was able to focus mainly on this target group.

Since July 2012, SRCE has been using Google Analytics as one of the metric tools for its public web site. In the period between August and December 2012 Google Analytics has identified ten social networks as sources of traffic for the SRCE public web site. Those social networks include Blogger, Delicious, Facebook, Google+, HootSuite, LinkedIn, tinyURL, Twitter, WordPress, Youtube. The data gathered with Google Analytics is presented in Table 3. It can be seen that referrals from social networks make 3.15% of all referrals. This percentage may not seem big enough to be relevant but if it is compared with the cumulative values for all referrals we can see that it is, in fact, very significant when we talk about traffic sources for the SRCE public web site.

Table 3. Referrals from social networks (SN) for SRCE public web site

<table>
<thead>
<tr>
<th>Month</th>
<th>Visits referred from SN</th>
<th>Total visits</th>
<th>% visits referred from SN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aug-12</td>
<td>582</td>
<td>8821</td>
<td>6.60</td>
</tr>
<tr>
<td>Sep-12</td>
<td>434</td>
<td>18968</td>
<td>2.29</td>
</tr>
<tr>
<td>Oct-12</td>
<td>1044</td>
<td>28424</td>
<td>3.67</td>
</tr>
<tr>
<td>Nov-12</td>
<td>638</td>
<td>22285</td>
<td>2.86</td>
</tr>
<tr>
<td>Dec-12</td>
<td>281</td>
<td>16188</td>
<td>1.74</td>
</tr>
<tr>
<td>TOTAL</td>
<td>2979</td>
<td>94686</td>
<td>3.15</td>
</tr>
</tbody>
</table>

If we take a look at the cumulative data given in Table 4 for the top ten referrals in the period between August and December 2012 we can see that Facebook is ranked in the second place, while Twitter is in the tenth place. Other social networks have a much lower ranking and can therefore be considered irreverent for this research. In the given period 20852 out of 94686 visits to the SRCE public web site originated through some referral sites. This means that 22.02% of all the visits to the SRCE web site originated from one of 524 referral sites that were recorder during early stages of the period in question. It is important to stress that some social networks use several referrals, e.g. Facebook also uses m.facebook.com and 0.facebook.com among other URLs. Since the Google Analytics default settings were used, those alternative sources have not been included in the data shown in Table 4. If they were included Facebook would become the top referral for SRCE’s public web site with 2508 referrals.

Table 4. Top referrals for SRCE public web site

<table>
<thead>
<tr>
<th>Referral</th>
<th>Visits referred from site</th>
<th>Percentage among referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>moodle.srce.hr</td>
<td>2.438</td>
<td>11.69%</td>
</tr>
<tr>
<td>facebook.com</td>
<td>2.328</td>
<td>11.16%</td>
</tr>
<tr>
<td>cap.srce.hr</td>
<td>1.353</td>
<td>6.49%</td>
</tr>
<tr>
<td>merlin.srce.hr</td>
<td>936</td>
<td>4.49%</td>
</tr>
<tr>
<td>eduroam.hr</td>
<td>734</td>
<td>3.52%</td>
</tr>
<tr>
<td>unizg.hr</td>
<td>566</td>
<td>2.71%</td>
</tr>
<tr>
<td>hrcak.srce.hr</td>
<td>561</td>
<td>2.69%</td>
</tr>
<tr>
<td>scri.uniri.hr</td>
<td>555</td>
<td>2.66%</td>
</tr>
<tr>
<td>geof.unizg.hr</td>
<td>431</td>
<td>2.07%</td>
</tr>
<tr>
<td>t.co</td>
<td>376</td>
<td>1.80%</td>
</tr>
</tbody>
</table>
It is important to stress that not all of this web traffic originates from SRCE’s pages and profiles. Since January 2012, SRCE has been using the bitly service (http://bitly.com) for URL shortening before they get published on social networks. Data gathered from the bitly service shows that in the period between August and December 2012, the total of 1111 visits to the SRCE public web site originated from SRCE’s Facebook page or Twitter profile. When the data from the bitly service is compared to the data gathered from Google Analytics it can be seen that the presence of SRCE on the two aforementioned social networks amounts to 37.29% of the visits to the SRCE public web site that originated from social networks. The bitly service does not offer separate statistics for Google+ so it is safe to assume that if such statistics were available the percentage would be even more in favor of SRCE’s presence on social networks.

5. Conclusion

Social networks are gaining importance for the general public as information dissemination channels since they make direct communication simpler and more straightforward and the delivery time of information significantly shorter.

Since its foundation SRCE has been known as one of the IT leaders among the higher education institutions in Croatia and beyond. The most important goal of SRCE’s social network presence has been to inform the public about its activities and establish an additional, less formal, two-way communication channel. The data analysis shows that the initial goals SRCE set in 2009 related to its communication strategy on social networks have been fulfilled.

During this research different web based tools and services were used to gather information about the Internet users who follow SRCE’s activities on different social network.

Over the past few years a strong presence on all the major social networks used by the targeted audience has been established in trying to achieve these goals. For the reason the existing communication strategy had to be modified by introducing, for example, new posting frequency. More frequent posting also meant that the staff had to monitor more sources from which news stories for the targeted audience could be generated. As a result, new division of responsibilities among the staff members had to be made.

There is a clear correlation between the increase in the posting frequency and the expanded reach of messages. Creation and publishing of new content such as video clips resulted with an increased reach which means a larger visibility of SRCE and its services and products. Also important for the reach is the number of followers or fans which has increased almost linearly on all monitored networks. The only exception is Facebook where the advertising campaigns have produced a faster growth of fans. The data related to the web site visits originating from the social networks stresses the importance of building a presence on social networks. Social networks have become an important element in the referral traffic on SRCE’s public web site.

SRCE will keep monitoring trends in this field and establish additional presences if the need arises. Based the on gained experience we can say that new social networks can be integrated into the existing communication strategy. One or two social networks can be added without a need to enlarge the staff. Any more significant expansions to new social networks would result in a need to employ more people or redistribute the existing responsibilities, e.g. some tasks could be transferred to other employees of SRCE. Furthermore, the same tools will be used for further data gathering allowing us to make more detailed comparison in the future as we will have more data available for analysis and comparison.

We also plan to do audience research that will be focused on the quality of communication rather that the quantity of its channels, which was main focus of this research. A survey will be undertaken in order to gather opinions of social networks users about what sort of content is most appealing to them, as well as about their assessment of this sort of communication.

6. References


