

## THE POWER OF SOCIAL NETWORK APPS: PHOTO-CONTEST BASED APPLICATION STUDY

Antun Biloš, Ph.D.<sup>1</sup>, Davorin Turkalj, Ph.D.<sup>2</sup>, Ivan Ružić, Ph.D.<sup>3</sup>

<sup>1</sup>Josip Juraj Strossmayer University of Osijek, Faculty of Economics,  
Republic of Croatia, abilos@efos.hr

<sup>2</sup>Josip Juraj Strossmayer University of Osijek, Faculty of Agriculture,  
Republic of Croatia, dturkalj@pfos.hr

<sup>3</sup>College of Business Administration "Baltazar Adam Krčelić",  
Republic of Croatia, ivan.ruzic@vspu.hr

---

### Abstract

The Internet is definitely not a new medium any more. In its 20 odd year life, it has changed and transformed almost every aspect of our social and business interaction. However, it is still developing and it will influence the future with global penetration and its technological capabilities. Futurists predict that a global network such as Internet will not only connect all devices and things but living beings as well. There is a lot of evidence to this theory even now. Parallel with strong growth of global internet penetration, new forms of communication and advertising have been developing simultaneously. One of the major trends was and still is social network utilization. Almost instantly, mass popularity and diverse interactivity rapidly attracted businesses to different social networks, with Facebook, Twitter, Pinterest and Instagram currently being the most popular ones, even within different businesses sectors. The most popular one is still Facebook with more than 1.2 billion monthly active users as of December 2013. Businesses are finding new and different ways of interactive communication with their fans and target groups on Facebook so its developers are constantly refining the communication process also adding certain restrictions. This happens with 2 goals in mind: allowing users and businesses to use the potential of this communication platform and steering the ship in profitable waters. Along the typical Facebook based communication forms, lots of businesses are using third-party applications within the same platform with very impressive results. The aim of this paper is to explore the current forms of

different communication techniques for business pages on Facebook while talking into account the relevant trends in social networking. In addition, this paper will describe and evaluate a specific photo-contest based application within Facebook.

**JEL Classification:** D83, M15

**Keywords:** social networks, Facebook, apps, communication

---

## 1. INTRODUCTION

In the last 20 odd years, the Internet platform has been taken very seriously in the business world and has been applied as an irreplaceable tool for operative business efficiency. Its real value as a medium, market and communication and distribution channel has become noticed over time (Berners Lee, 2014). Original static brochure-like web sites have slowly been replaced by dynamic sites with significant adaptations towards the end users and their needs. The adaptation towards the end user and construction of social networks are significant trends of Internet information space development on a global and local level. We are witnesses to a dynamic and continuous transformation from the starting brochure-like Internet space and traditional banner advertising to globally accepted social networks and precise segmentation in direct advertising (Naughton, 2014). The implementation of a sustainable e-marketing strategy is more than just a simple transfer of ads to the web site i.e. the web environment is much more than a new marketing communication channel. However, some time had to pass in order to understand all the particularities of the “new” medium and communication channel.

## 2. THE RISE OF SOCIAL NETWORKS

Social networks are clearly one of the indisputable inheritances of Web 2.0. All Internet users who are at least partially sensitive to fairly recent events in the omnipresent Internet space are probably already acquainted with existing social networks, if they are not members themselves. Statistical data speaks in favor of the second assumption (Ružić & Biloš & Turkalj, 2009, 29-33). Almost 200 different active Internet social networks i.e. active social network web sites exist today (Smith, 2014).

At first, the largest number of business subjects which have been gripped by the social networking trend has focused on just a few large networks among which Facebook, Twitter and LinkedIn undoubtedly lead. However, new social networks

appear every day. While some are still quite small, new stars like Google+, Tumblr and Instagram have been born. These new networks give businesses a plethora of completely new possibilities for creating interesting content in different forms and allow them to reach completely new target groups. It has become natural for businesses to research and experiment with social networks and networking with the goal of reaching the maximum number of users, buyers and clients. This diversification has proven to bring results to many because, among other things, it improves the value of the brand through better recognizability. A significant fact is that search engines like Google give special content quality value to sharing on social networks because this form of virality is connected to a certain type of approval by customers. When certain content is shared more it implies its higher quality from the position of the user. Even though different user groups react differently to social networks (Elliot & Polyakova, 2011), it is possible to greatly utilize social networks for business purposes.

Business models on which social networks are based are different from service to service; some charge for membership, others are financed through advertising. There are some examples where the monetization hasn't started yet. At the same time these autonomous business models form a contrast to traditional models in which there are clearly determined boundaries between seller and buyer. On social networks the users themselves are sometimes at the same time buyers, sellers and even creators of communities with their content.

## **2.1 POPULARITY OF SOCIAL NETWORKS**

Looking at the development of a broad area of social networking it can be concluded that Facebook is the globally most popular network. Since 2008, when it got ahead of the then market leader Myspace, until today Facebook has expanded its user base and according to data from the beginning of 2014 it has 1,23 billion active users on a monthly basis, of which 725 million visit the site daily (Facebook, 2014). At this moment, a social network that can exceed the popularity of Facebook can hardly be imagined. However, in the turbulent digital market world big changes can happen in a very short time, almost overnight because of the subjective perception of the speed of certain changes (Barker & Barker & Bormann & Neher, 2013, 184-187, 198).

After the most popular Facebook, which the majority (51%) of Internet users use, the next two social networks by popularity are owned by Google: Google+ is

in second place with 26%, YouTube is third with 25% of users according to the GlobalWebIndex research for the first quarter of 2013. Google+ is a fairly new, but very specific social network started in the middle of 2011 while YouTube is the most popular network for video content reproduction and sharing. In the fourth place we find the most famous microblogging network Twitter with 22% of users. It is important to point out that although it is in fourth place according to the number of active users, Twitter carries the title of the fastest growing social network on a global scale and the 3 countries where it is growth the fastest are interestingly Indonesia, Saudi Arabia and Singapore. After the 3 social network giants the biggest popularity enjoy local Chinese networks which is a reflection of the growing technological progress of the most populous country in the world, but also of the limited access to some other social networks. Very interesting networks with great potential like LinkedIn and Pinterest have fewer than 10% of Internet users (eMarketer, 2013)

## **2.2 FACEBOOK FOR BUSINESSES**

It was mentioned earlier that Facebook is currently the most popular social network among Internet users. This social network has celebrated its 10th birthday in February 2014. Apart from personal profiles Facebook enables the creation of specific profiles which are not end user related. Companies, artists, bands and public figures can create special user profiles using Facebook Pages. These profiles look very similar to classic profiles, but are different in their objectives. The profiles have a business character and companies use them for achieving their business goals. Users cannot be friends with these profiles, but they can express interest through liking a profile and connect in that way (Shih, 2011, 10-18). Although Facebook has stopped using the term “fans” for such users, we will continue to use the expression in this paper because of practical reasons.

Within the Facebook platform 5 steps can be achieved, which are available to businesses for achieving their specific goals (Facebook for Business, 2014):

1) Set up your page, 2) Identify your audience, 3) Create compelling content, 4) Advertise and 5) Measure and adjust.

By creating a business profile, numerous possibilities for utilizing the potential that social networks have are opened. The real prerequisite for realizing the potential is the identification of the target group. Business profiles are suitable for creating and sharing content towards your fans and accomplishing different com-

munication and other business objectives like informing about products and services, different events and special offers, directing users to your own web site and receiving information from the target group (Zarrella&Zarrella, 2011, 151-155). Apart from communication through publishing content and events and direct communication with users, the Facebook platform enables users and businesses to create special groups for communication in which a larger number of users can take part. The entire communication process is helped by advertising possibilities on Facebook. Advertisers have at their disposal an entire array of options which are different according to the objective that is desired (Curran & Graham & Temple, 2011): Page Post Engagement, Page Likes, Clicks to Website, Website Conversions, App Installs, App Engagement, Event Responses and Offer Claims.

A business subject can reach new fans by promoting its profile and through specific ads it can direct users to other pages (e.g. its web site). The content which is published can be promoted and the overall reach (the number of users who are exposed to the content) can be expanded and/or strengthen the engagement. The analytical possibilities of this platform are big and they give a large amount of information on the achieved campaign results in order to create, test and improve new campaigns. Only the number of fans was used at first, but it was soon established that this was not a precise indicator although it is still used. The success of every published post can be measured with the number of likes, shares and comments and with the overall achieved reach. The engagement rate which represents the percentage of users which have seen the content and reacted to it is calculated based on these parameters. These are not all metric indicators, but they are used the most.

Apart from the mentioned utilization possibilities of Facebook which are available to business users, there is a part of the platform where business subjects are given free hand and creative freedom. Facebook apps enable this special kind of interactivity.

### **2.3 FACEBOOK APPS**

The basic functions of the Facebook platform from the user's perspective include publishing posts, images and videos, creating groups and events and sharing different content. These functions were developed by Facebook and are available to all registered users. On the other hand, there is a large amount of applications which were not developed by Facebook, but by private and business users. Such applications are called third-party applications and they encompass a wider range

of interest spheres; from computer games and watching videos to restaurant and club recommendations. Statistical data show that Facebook users on average install around 20 million different apps daily (Statistic Brain, 2014).

Facebook apps can significantly change user experience and can additionally enrich business profiles by differentiating that profile from others. A simple profile can very fast become a very interesting site which contains videos, reviews and ratings of products, games and virtual pets. App authors aim to make them interesting and achieve a new level of interactivity which will motivate the user to visit them and use them often (Zarrella&Zarrella, 2011, 111-128). However, it is important to point out that one should be moderate when using these apps since activating too many different apps can be pretty chaotic and directly influence users to ignore them.

One of the main reasons why apps have developed a great popularity is the fact that Facebook was rather restrictive in allowing the creation of competitions and prize games through business profiles. This has strengthened the creation of applications which were accessed through Facebook pages, but were situated on a different server. However, since August 2013, Facebook has drastically removed restrictions on creating promotional activities on business profiles, which has somewhat lowered the intensity of app development (Facebook for Business, 2013). Nevertheless, the interactivity which apps enable and the creative space that is available to the developers is still a significant argument for creating apps in order to achieve business objectives.

A commonly used promotion initiative which has found its home in the form of Facebook apps is the photo-contest. Within a given time period the users are motivated to take and share their photos by rewards. The reward model varies of course, but the option where users vote for the winners themselves is the most commonly used. There are numerous solutions on the market, from commercial with complex possibilities to simple ones (Dymski, 2013). The domestic app market also has a number of solutions. The modern global digital market is also known for ready-made digital products which are bought on stocks and customized according to your own wishes. An example of one such application is tested within this paper.

### **3. PHOTO-CONTEST APPLICATION STUDY**

A specific photo-contest app was tested using the shopping mall promotional activity. As it is the case with almost all similar shopping malls, this shopping



mall uses a wider array of online and offline communication activities because of a broadly defined target group. The presence in individual communication channel is determined by the marketing department of the mall according to the yearly budget allocation. The most significant online channels used by the mall were social networks and their official web site. The first among the social networks was undoubtedly Facebook which was rated as the most important online communication channel according to the mall marketing department analysis. Together with Facebook, the mall uses Twitter, YouTube, Google+ and some less significant social networks. The mall uses most of the available communication possibilities on the Facebook platform, from creating content and promoting it, organizing competitions and prize games to promoting the business profile and external content. The mall has already used photo competitions, although a Facebook app for this initiative was used for the first time.

### **3.1 FINDINGS**

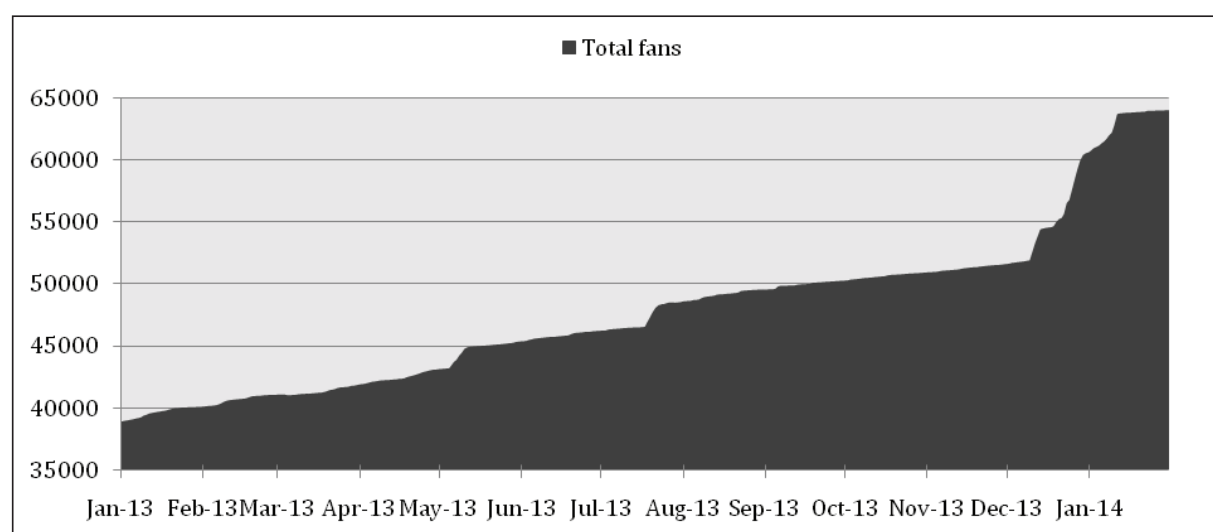
The object of the testing was a shopping mall competition which was conducted exclusively through Facebook apps. The mall bought a software solution as ready-made digital product, adapted it to its needs and customized it visually according to its own standards. The reason for this type of approach was the cost effectiveness because financing service solutions which are used only for a limited period of time was determined to be cost ineffective (comparative analysis commercial parameters are available exclusively to the marketing department of the mall and are not the subject of this paper). The application was formally placed on the mall server, but was operated and accessed through the Facebook interface. The prerequisites for participating in the contest included Facebook identification and confirmation of shopping mall fan status (if the prerequisite were not already fulfilled). The user sends his own photo and enters the contest as a participant. The photo reward model was based on the votes of the users themselves who were able to give one vote to each photograph. The prerequisites for voting were the same as for participating (identification and shopping mall fan status). The special Facebook rules on competitions were in power at the time of application development. That is why the voting was not based on likes, but based on a separate voting mechanism within the app.

The users sent their themed photos and gathered votes through the app. The mall promoted the app exclusively through digital channels, mostly Facebook.

With the competition rules the mall defined 3 cash prizes in the form of gift cards for the first 3 places with a total value of 2300 HRK. The participants have promoted their photo through Facebook functionalities and motivated friends to vote. In this way a significant part of competition promotion was actually done by the participants. The aim of the competition from a business perspective was shopping mall promotion by using viral social network power through participation motivation and gathering new Facebook profile fans. The success of the competition can be observed through two tested indicators: a) growth of the total number of fans during the contest and b) comparative analysis with identical competitions conducted on Facebook, but not with a Facebook app.

The tested competition took place during December 2013 and January 2014 lasting 27 days. In the mentioned period the mall had a rise in number of fans from 54.500 to 63.648 i.e. a growth of 16.9% or 340 fans daily (Figure 1).

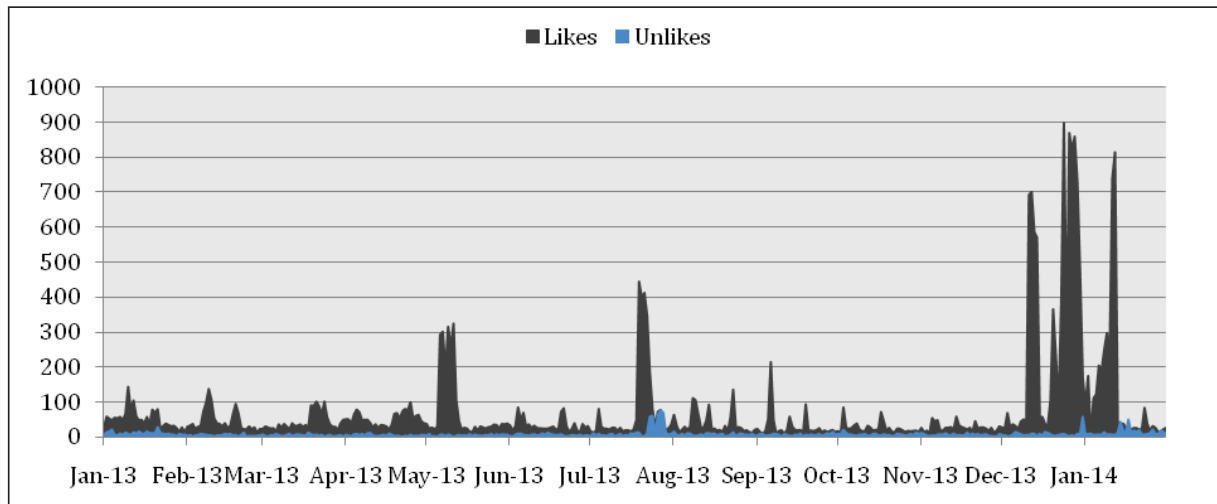
**Figure 1.** Rise in total fans number over time



Source: authors' research.

It was to be expected that a certain number of fans stop being fans after the competition was over, which did not really happen (Figure 2). It is important to point out that the increase and decrease in fans can't entirely be contributed to the competition, but a significant influence is evident. Apart from the competition influence, we can see fan numbers peaking on the graph in May and June. Both cases are connected with Facebook business profile promotional activities, although we are speaking of weaker results compared to the tested competition.



**Figure 2.** Display of likes and unlikes over time

Source: authors' research.

484 participants took part in the competition and 9898 votes were given. In order to get some perspective we will use the same initiative that took place a year earlier, although the competitors didn't use a Facebook app, but sent their photos through e-mail and the voting on the winner was conducted through a Facebook poll. Although there are significant differences in the way the competition was conducted which directly makes a comparison more difficult and total cash prize was smaller (1400 HRK), there were 110 participants in that contest and there were no significant oscillations in fan numbers. In other words, photo contest based on Facebook app was much more successful (more than 400% rise in number of participants).

### 3.2 STUDY LIMITATIONS AND IMPLICATIONS FOR FURTHER RESEARCH

As we are talking about a relatively unexplored Facebook app area regarding possibility analysis and effect, we must establish some important testing parameters which served as conditions for platform choice: a) the shopping mall uses Facebook from the beginning of its business operation (more than 2 years), b) Facebook constitutes a significant online communication channel (according to achieved communication and budget objectives) c) we are talking about a fairly large online population that follows a shopping mall through Facebook (the category of 50 000 - 100 000 fans). Although it is hard to talk about standard conditions because similar research is not available, we can assume that the mentioned parameters minimize the influence of uncontrolled factors (e.g. special market sector and business subject

features, seasonality etc.) However, the minimization of influence does not imply its non-existent. Every photo contest has its own peculiarities and is not standardized in all its parameters so clear differences can be spotted. The mentioned factors directly influence the achieved results and their interpretation. Further testing and research of interactive Facebook communication and influence on achieving defined communication (and other) goals of business subjects is needed because of this.

#### 4. CONCLUSION

Parallel with strong growth of global internet penetration, new forms of communication and advertising have been developing simultaneously. One of the major trends was and still is social network utilization. Almost instantly, mass popularity and diverse interactivity rapidly attracted businesses to different social networks, with Facebook, Twitter, Pinterest and Instagram currently being the most popular ones, even within different businesses sectors. Businesses are finding new and different ways of interactive communication with their fans and target groups on Facebook so its developers are constantly refining the communication process also adding certain restrictions. Along the typical Facebook based communication forms, lots of businesses are using third-party applications within the same platform with very impressive results.

The testing of a Facebook photo-contest application on the example of achieving specific objectives of a business subject was presented in this paper. A large potential that applications have for achieving different objectives is apparent from the results, mainly in the form of interactive communication and consumer participation motivation. With all the mentioned research limitations and special characteristics, the Facebook photo-contest app has proven itself as a significant target group interest generator and an interesting platform for conducting viral marketing techniques. However, further testing and research of interactive Facebook communication and influence on achieving defined communication objectives is necessary.

#### REFERENCES

1. Barker, M.S., Barker, D.I., Bohrmann, N.F., Neher, K.E. (2013) Social Media Marketing: A strategic approach. South Western, ISBN-13: 978-0-538-48087-1, Mason.
2. Berners Lee, T. (2014) Welcome to the Web's 25th Anniversary - a Message from Tim Berners-Lee. Web at 25. Available at: <http://www.webat25.org/news/tbl-web25-welcome>. (11.03.2014)

3. Curran, K., Graham, S., Temple, C. (2011) Advertising on Facebook. *International Journal of E-Business Development (IJED)*, 1(1), 26-33.
4. Dymski, A. (2013) Facebook Contest Apps: Top 5 Apps for Your Next Contest. GuavaBox. Available at: <http://www.guavabox.com/blog/top-apps-for-managing-your-facebook-contest-2>. (10.03.2014)
5. Elliot, L.J., Polyakova, V. (2014) Beyond Facebook: The generalization of social networking site measures. *Computers in Human Behavior*, 33, 163-170.
6. eMarketer (2013) Which Social Networks Are Growing Fastest Worldwide? Available at: <http://www.emarketer.com/Article/Which-Social-Networks-Growing-Fastest-Worldwide/1009884>. (24.02.2014)
7. Facebook (2014) Key Facts. Available at: <http://newsroom.fb.com/Key-Facts>. (24.02.2014)
8. Facebook for Business (2013) It's now Easier to Administer Promotions on Facebook. Available at: <https://www.facebook.com/business/news/page-promotions-terms>. (11.03.2014)
9. Facebook for Business (2014) How to Use Facebook for Business Marketing. Available at: <https://www.facebook.com/business/overview>. (11.03.2014)
10. Naughton, J. (2014) 25 things you might not know about the web on its 25th birthday. *The Observer*. Available at: <http://www.theguardian.com/technology/2014/mar/09/25-years-web-tim-berners-lee>. (11.03.2014).
11. Ružić, D., Biloš, A., Turkalj, D. (2009) E-marketing, 2. izmjenjeno i prošireno izdanje, Ekonomski fakultet u Osijeku, ISBN 978-953-253-071-0, Osijek.
12. Shih, C. (2011) *How To Make Money Marketing Your Business On Facebook*, FT Press, ASIN: B004DNWSNW.
13. Smith, C. (2014) How Many People Use Facebook, Twitter and 415 of the Top Social Media, Apps & Tools? (updated March 2014). *Digital Marketing Ramblings*. Available at: <http://expandedramblings.com/index.php/resource-how-many-people-use-the-top-social-media/#.UyrfwvldV8F>. (11.03.2014).
14. Statistic Brain (2014) Facebook Statistics. Available at: <http://www.statisticbrain.com/facebook-statistics/>. (09.03.2014)
15. Zarrella, D. & Zarrella, A. (2011) *The Facebook Marketing Book*. O'Reilly Media, ISBN: 978-1-449-38848-5, Sebastopol.