

Dr. Igor Pustylnick

Patterns of Concealed Advertising in Social Network Websites



ABSTRACT

Social network web sites can be divided into two categories: user based and group based. The topologies of the sites of both groups are succinctly different which leads to a completely different patterns of use, member influence and information exchange in the sites of both categories. Group based web sites are used as a source of information about the products and techniques especially when dedicated to the activities within created industries. They are viewed by the members of the industry as an independent source of information about products and services. Certain activities performed by the users of these sites form a certain patterns of concealed advertisement. They harm both revenue stream and reputation of the group based sites. This paper discusses several patterns of such activities of concealed advertisement and proposes the ways of detection and elimination of these activities based on the existing capabilities of today's social media websites. The presented empirical study is the first step in defining the mechanisms of protection of social media web sites from free covert advertising.

INTRODUCTION

Social networking has become one of the hottest Internet trends of the last decade. The number of users was growing steadily and according to (Ostrow, 2009) reached 55.6 million adults in the USA alone. (Schonfeld, 2010) states based on the information obtained from eMarketer website that revenue from advertising on social networks is slated to increase from \$2.5 billion in 2009 to \$3.30 billion in 2010. The despite the high level grouping of all community web sites under Social Networking category, the social networking community is not entirely uniform. It can be divided into two large subgroups:

- The first subgroup would include pure social networking sites, such as Facebook, MySpace, Orkut and others. These websites have been developed as a next step in the chain of social networking endeavors, such as e-mail, Instant Messaging (IM) and Small Message Service (SMS). This group of social networking sites does not impose any restrictions neither on the membership, nor on the topics of discussion. By and large the members of these communities interact with their friends in free format and on any topic.
- The second subgroup includes the sites which are developed with the goal of attracting people based on their business experience, hobbies, etc. As a general rule these sites, such as LinkedIn, Ravelry, etc. have smaller numbers of membership and stricter registration rules.

In the recent years the influence of the websites of both categories increased significantly. While the sites of the first category influence mainly the behavior and social habits of the consumers, the sites of the second category became the source of subject knowledge. By accumulating a certain member volume the sites of the second category also gained a significant clout in reviewing and recommending products and services based on the internal reviews by their membership. The latter trait has recently been exploited by the promoters of products and services.

General public as well as the members of the sites belonging to the second category turn to the expertise accumulated in these sites as an ultimate and practically undisputable source of domain knowledge on the subject in question. Advertisement in the sites of the second category is also deemed as more “reputable” and trustworthy hence in many cases more expensive than the advertisement in generic media which reaches less target audience. This paper discusses several marketing techniques covertly used to promote products or services at the mentioned sites of the second category. These techniques allow the promoters circumventing the advertisement expenses and promote their products free of charge.

The use of the mentioned techniques harms social media websites of the second category in two ways: (1) the mentioned sites lose revenue which they would receive in the case of the conventional advertisement of the same products and/or services; (2) the products/services advertised via these methods are not properly reviewed by the experts whose evaluation may differ greatly from the one provided via this promotion hence bringing an irreparable harm to the reputation of the website.

LITERATURE REVIEW

The overall numbers of users of the Social Network Websites are very approximate. Users can appear in the same website under multiple nicknames. At any moment users can activate, deactivate and reactivate their account. Despite the fluctuation in the numbers of users sites of the first category have significantly larger membership than the sites of the second category (Facebook, 2010; Lopez, 2009). (Clemons, Barnett, & Apparadurai, 2007) discuss the value of advertising in the social networks in the view of their explosive growth.

(Ahn et al, 2007) discussed the topology of the Social Network Websites and asserted that this topology is very similar to the topology of any human social network. However, the topology of the sites of the first and the second categories are significantly different. The sites of the first group create a user-centric topology. Each user creates a sphere or a space (as in MySpace) where they create their connections and interact with the people based predominantly on the “personal ties”. Sites, such as Facebook, allow very little to no interaction with the other users who are not accepted as “friends” by the user, who wants to initiate/accept any communication. The majority of people connected via these sites have some kind of a connection in the real life. Because of this fact the connections (friends) of any user do not have in common much more than the knowledge of existence of the person, who is the center of the topology. From the point of view of any user they become a center of star-like topology where each ray connects them with a “friend” within the Social Network Site. According to (Trusov et al, 2010) the influence of any given participant in such networks is distributed via their personal connections.

The sites of the second group maintain a ring topology where circles (communities, groups) are built based on a certain interest and/or affiliation. The members of the groups may have no prior connection to each other in the non-internet life. At the same time the affiliation with the same group does not constitute that they share the same opinions on the subject(s) discussed in the group. (Stephen & TToubia, 2010) discuss the discovery mechanism used in the online shopping networks. The grouping approach to connecting users creates a very similar mechanism of introduction. (Maldonado, 2010) discusses a similar mechanism of promotion in career social networking, which is based on the same effect of introducing a set of marketable assets to the previously unknown group of people. (Du, Wu, Pei, Wang, & Xu, 2007) prove that social networks of the second category do have a distinct community pattern and supply the algorithm of detection of these patterns. (Tang & Liu, 2009) show that social media users do use the information stored/published in the social networks to learn about the variety of subject of interest. Using the same approach towards the social networks of the second category we can conclude that information supplied to the specialized networks is used for the purposes of learning more about the subject related products and services. (Trusov, Bucklin & Pauwels, 2008) discuss the effect of the word of mouth advertising on the signing up of the new members to the social network website. They conclude that the lasting effect of WOM advertising is much higher than the one of the traditional forms. Similar conclusions can be extrapolated to the forms of unconventional advertisement used to promote products and services within the web site of the second category. (Cross, Borgatti, & Parker, 2010) stress the importance of the informal relationships in the workplace and their projection on the social media. The informal character of the social media relationship plays an important role in the acceptance of the advertising/promotion message. The customers automatically consider social media messages as genuine without performing a proper scrutiny and due diligence. (Calvó-Armengol & Zenou, 2005) come to the similar conclusions with respect to the problem of job matching using word of mouth leads. The social media participants appear to trust the leads and reviews of the positions placed online.

The described concepts of covert advertisement are seen in its most vivid form in the scope of the creative industries. (Caves, 2000) (Flew, 2002). The different concept of product existing in the Creative Industries calls for the different concept of marketing and advertisement. (Potts, Cunningham, Hartley, & Ormerod, 2008). Social media based on creative industry concepts sometimes operates in somewhat unconventional ways according to (Flew, 2005). However, the actions viewed as quite benign by some can cause a significant harm to the reputation of the Social Media site of the second category.

Another rather important aspect of social media networks is the anonymity of their members. According to (Campbell, 2006) the anonymity played a large role in the expansion of the social networks to the state they are in today. (Chen, Chen, Lo, & Yang, 2008) list a number of factors which contribute into the desire of a person to keep their identity anonymous inside the social media sites. (Smith, 2008) cites Facebook approach to keeping anonymous as a desirable approach to social network advertising. However, the anonymity concept also contributes to the patterns of social media abuse described further in this paper.

PATTERN ANALYSIS

This part of the paper discusses the particular patterns discovered by the author during the analysis of the Social Media web site, called Ravelry which was created as forum for knitting and crochet community. The site is organized in the form of large number of discussion groups and forums where members of the site can discuss models, ideas and sometimes chat on completely unrelated topics. The site can be considered as a member of the Creative Industry community. Apart from the communicational aspect it offers its members a marketplace where they can sell the descriptions of their models known in the knit/crochet industry as "Patterns".

The recent knit/crochet boom according to (Myzelev, 2009) has brought a large number of new crafters into the fold. Many of them represent a younger generation, who are much more likely to interact in the Social Media than in person. In the view of this fact the presence on Ravelry and other such web sites becomes an important ingredient of individual or company promotion. Besides the regular advertisement the members of Ravelry and other Social Media web sites engage in certain behavioral patterns which allow them promoting their message free of charge. The patterns of such behavior are listed and described in the order of relative ease of their detection.

Excessive Praise

Excessive praise is the pattern of behavior which results in overly high ratings for a certain product or service. In Ravelry this pattern can be usually detected in the reviews of a certain local yarn store (LYS). In the Social Media site this praise would be expressed in a much localized manner in the space allocated for a certain product or a store. Customer approval rating usually consists of two indicators: the number of customers rating a product or a service and the overall rating mark (if asked for) of the mentioned product or service. Certain forms of evaluation such as for instance Linked In recommendation bits must be excluded from the review as they are accepted by the recommended person. Generally evaluation marks tend to decrease with the increase in the number of participants. Reviews of a product or service tend to vary in tone and a degree of satisfaction if reviewed by a large number of survey participants. The uniformity of such sample may point towards the orchestrated effort of promoting such product or service within the user community of the social media website.

The anonymity of the users inside the Social Media website may be a deterrent to the proper identification of this of promotion abuse. The detection of such kind of abuse must be performed on semantic level detecting the patterns of praise or satisfaction throughout the sample. If the sample shows the rate of satisfaction which the operator of the site considers excessive, the technical means must be involved detecting the commonality of origin of the users involved in the recognized pattern of excessive praise. The commonality of origin of messages created by the different users may effectively prove the orchestrated character of the praise campaign.

Leading Away

Leading away pattern is based on the desire of a certain user or a group of users to attract attention of the Social Media site community to a certain outside resource of information or an e-commerce web site. Leading away is the most dangerous for the Social Media site revenue stream as it circumvents the conventional advertisement which is the largest source of income for such sites.

Publishing information about the external sources of products and/or services is quite common in the Social Media web sites. The majority of this publishing is quite random and is used by the site customers casually in the conversation in non-repetitive manner. Generally the owners of the Social Media sites do not pay attention to such reference considering them minor singular indiscretions. The pattern of leading away can be observed when one user or a small group of users use the reference to a certain source regularly. In the Social Network sites of the second category the majority of users are participating in the activity of a small number of groups and/or forums. Even if they detect leading away messages they would not have observed enough occurrences of the leading away effort in order to make a conclusion about a concerted leading away effort taking place. Furthermore the average Social Media site user does not spend enough time inside the site to make any conclusions about the potential leading away occurrence.

Detecting of leading away pattern can be only performed by analyzing the activities of the users on the site level. There are several statistics which may give away this pattern. The review of the outbound web site traffic may reveal that customers switch from the site under review to a particular web site (web address) more often than it would be statistically warranted. If the pattern takes place and the external web site is not a part of the current advertising pool, the owners of the site must commence the second phase of detection of leading away pattern by identifying the users promoting the external site. As in the excessive praise pattern, the number of detected users may be much larger than the number of the originating addresses which in itself reveals the presence of the leading away patterns.

Question/Answer Pattern

Q/A pattern is an extension of the previous two patterns, which masks the abusive activity in the form of a simple question, which is answered by the small number of people in a very particular way, leading to an external web site or a product. The difference between the regular leading away pattern and the Q/A pattern is that the “askers” represent a fairly small pool of the Social Media site users who ask specially constructed questions where the answer leading to the external product or site is quite obvious.

The communication within the Social Media site is often constructed in Q/A format. Ravelry hosts a large number of inexperienced users who genuinely seek the answers to their questions about the feasibility of a certain product or a certain technique. Some answers would be a part of Leading Away pattern. It is important for the Site Owners to err at the side of caution and not to flag a beginner who has a large number of questions on different topics the answers to which would help him/her to understand the craft better. This person can be erroneously flagged especially if the same user tends to answer a majority of their questions.

There is a very important distinction between the constructed Q/A pattern and genuine exchange of information using Q/A pattern. Observing such exchange on Ravelry it is possible to say that genuine Q/A tends to lead to a longer discussion involving multiple participants who have their own views on the discussed subject. In the case of constructed Q/A pattern the discussions are rather pointed and short. The original participants of the advertising schemes do not intend to support the discussion and it wanes very quickly without meaningful exchange. The length of the discussion can be a sufficient giveaway revealing the covert advertising scheme. As in both previous patterns the originating web address is a better detection indicator than a user moniker.

Con Pattern

Con pattern takes its name from a similar criminal activity involving multiple participants. Con pattern usually starts with an absolutely benign question about a product or a service. The question is stated in the simplest of forms, such as for instance "What do you know about the product A?". The second participant works in the Q/A pattern answering something along the line "I know the product. You can buy it at www.product.com". The Q/A pattern in this form is absolutely obvious and general public would likely to ignore it based on their previous shopping experiences. The essence of the con pattern is the presence of the third person who usually has a complete finished project completed by using product A or with the help of the product A. This person has nothing but praise for a product and appears to be a part of the crowd rather than a seasoned marketer.

The key to recognizing the Con Pattern is timing between the events. The posts on the Social Media web site must appear in the particular order with very short intervals between them. As in the Q/A pattern described above the key to recognizing it is by measuring the time between three aforementioned responses and by measuring the length of the overall discussion. The reoccurrence of messages posted in the certain order by a certain group of people may reveal that Con pattern of covert advertising is taking place. While detecting this pattern it is again very important to identify the originating Web Addresses rather than monikers of the users in the Social Media.

DISCUSSION AND FURTHER RESEARCH

This paper presents an empirical study of the abuse of membership and covert advertising in the social media. The patterns described in it are derived purely by observing a number of Social Media web sites which belong to the second category. Similar patterns are not likely to be observed in the web sites belonging to the first category because of the different clustering of users in these sites.

According to (Goldie, 2007) the advertising in the social networks is the next step in building brand awareness among the consumers. The patterns of covert advertisement described in this paper are directed towards the same goal. The conventional marketing places advertisement as one of the cornerstones of building such brand awareness among consumers (Kotler, 2003). Advertisement revenue is the largest of all revenue streams which make Social Media web sites into profitable enterprises. (Constantinides & Fountain, 2008). In the view of the last statement the attempts to circumvent regular advertising approach by users can be constituted as an abuse of user privileges which hurt the revenue of the Social Media sites of the second category.

Apart from the direct decrease in revenue figures which is the result of invoking such patterns of covert advertising of web sites, products and services, such advertising patterns may also hurt the reputation of the Social Media web site as a source of independent and balanced information on the subject matter. Excessive praise pattern in particular may lead users of the sites and especially the occasional visitors to believe in correctness of the information and act in accordance with the received information. If the owners/operators of the Social Media site do not keep an independent control over the provided information and do not discern the excessive praise pattern they may soon find that their web site is no longer considered as a viable source of the independent opinions and/or ratings.

Further research on the subject should result in further observation and detection of the additional patterns of such abuse. The other effort will be directed towards the obtaining of the physical data from the Social Media web sites mentioned in this paper and performing of the statistical analysis based on the collected data. Based on the collected data we should be able to make the conclusions about the frequency of detection of each pattern and the volume of abuse of the user privileges. This information should prove the concepts described in this paper.

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