Amigos: Social Networking with Advertisement Management

Devika Joshi, Rutuja Kulkarni, Arundhati Rao, Pooja Wagh, Roma Kudale

Abstract- With the vast growth of Internet use nowadays, business advertising has enjoyed a more advanced phase. There is a wider selection for media, advertising cost and market range. The challenge is to find which one to focus on. Among the many options, social networking site has turned out to be one of the most promising media today. Keeping this motive Amigos offers completely redesigned advertisement management algorithm which takes advantage of the profile data and hence targets advertisement directly to user according to his interests. Amigos covers most of the essential aspects of social network including editable profiles, messages, groups , events , status updates , uploading photos. Although that is true , the social network does have some unique features of its own like segregation of personal and professional information and displaying the UI accordingly. It would help people willing to join a single networking site and yet be able to control the two fronts of their lives separately. The advertising module looks over the space management of ads and displays them according to user preferences. Not only that, it also gives the advertiser different options to choose from fixed spaces for frequently accessed pages or real time bidding for inner pages .Thus using Social networking the advertising industry can target masses and lead the advertisers to build long term success in the performance advertising industry.

Keyowrds - etwork including editable profiles, messages, groups , events , status updates , uploading photos.

I. INTRODUCTION

A social networking service is an online service, platform, or site that focuses on facilitating the building of social networks or social relations among people who, for example, share interests, activities, backgrounds, or real-life connections. A social network service consists of a representation of each user (often a profile), his/her social links, and a variety of additional services. Online community services are sometimes considered as a social network service, though in a broader sense, social network service usually means an individual-centered service whereas online community services are group-centered. Social networking sites allows online community members to share ideas, hobbies, religion, politics ,activities, events, alternative lifestyles and interests within their individual networks.

Social networking websites function like an online community of internet users who are looking to meet other people, to gather and share first-hand information and experiences about cooking, golfing, gardening, developing friendships professional alliances, finding employment, business-to-business marketing and even groups sharing information about baking cookies to the Thrive Movement. The topics and interests are as varied and rich as the story of our universe. Once you are granted access to a social networking website you can begin to socialize. This socialization may include reading the profile pages of other members and possibly even contacting them.

Another one of those benefits includes diversity because the internet gives individuals from all around the world access to social networking sites. This means that although you are in the United States, you could develop an online friendship with someone in Denmark or India. Not only will you make new friends, but you just might learn a thing or two about new cultures or new languages and learning is always a good thing.

Anyone can become a member, no matter what their hobbies, beliefs, or views are. However, once you are inside this online community, you can begin to create

your own network of friends and eliminate members that do not share common interests or goals.

The great thing about online social networking is that it provides an easy way to keep up with friends and family. If you live a busy life, it can be difficult to keep in touch with everyone and still get everything done that needs your attention. Online social networking allows you to add people as friends so that you can easily keep in touch with them. They can also provide a great destination for families to keep in touch, share information and photographs, and even plan family reunions or get-together.

Whether you are looking for a way to stay connected with your family, or you are looking for a way to put your comprehensive knowledge of famous movie quotes to good use, online social networking can be a great choice. Social Networking is a nice form of entertainment, great for meeting people with similar interests, and can be a very effective business technique for entrepreneurs, writers, actors, musicians or artists.

II. LITERATURE SURVEY

Social Media: Social media is a phenomenon that has drawn a lot of attention both to companies and individuals interacting on the networking landscape. The rapid growth of social networking that has been observed over the last four to five years is indicative of its entry into mainstream culture and its integration into the daily lives of many people.

Devika Joshi, Computer Department, Smt. Kashibai Navale College Of Engineering, Pune University , Pune, India.
Rutuja Kulkarni, Computer Department,   Smt. Kashibai Navale College Of Engineering, Pune University , Pune, India.
Arundhati Rao, Computer Department, Smt. Kashibai Navale College Of Engineering, Pune University , Pune, India.
Pooja Wagh, Computer Department, Smt. Kashibai Navale College Of Engineering, Pune University , Pune, India.

In parallel with this, there has also been considerable media coverage of the growth of social networking, its potential positive outcomes and concerns about the way that some people are engaging with it. Social networking sites offer people new and varied ways to communicate via the internet. They allow people to easily and simply create their own online page or profile and to construct and display an online network of contacts, often called 'friends'. Users of these sites can communicate via their profile both with their 'friends' and with people outside their list of contacts. This can be on a one-to-one basis (much like an email), or in a more public way such as a comment posted for all to see.

Advertisement Marketing: Recent approaches in advertisement marketing include focus on building relationship with the customer, along with business or industrial marketing which focuses on an organization or institution and social marketing which focuses on benefits to society. New forms of advertisement marketing makes use of the internet and are therefore referred to as online marketing, search engine marketing, desktop advertising or affiliate marketing. It attempts to perfect the segmentation strategy used in traditional marketing. It targets its audience more precisely, and is sometimes called personalized marketing or one-to-one marketing.

Social Media combined with Advertisement Management: Recent trends have shown that social networking sites can drive advertising revenue by encouraging the density of social ties or boosting the level of friendship or social connections between users. According to findings, more connected users prompt increases in visitation and browsing on the site, which helps stimulate online advertising revenue growth. According to reports, Social media advertising revenue is on track to reach $9.2 billion in 2016, up from $4.6 billion in 2012, representing a compound annual growth rate of 19.2 percent.

The density of the links between users on the network is critical for the ultimate success of the social network. It's not sufficient to just get people to join the site - increasing the strength of the relationships is key to increasing page views and therefore ad revenue. Ultimately, being more connected has a stronger effect on content generation than the reverse. And, establishing more user connections generates more content on the network, which leads to a self-reinforcing virtuous cycle that helps sustain the growth of the network site.

Targeting ads specifically towards the most productive users is a more viable way of generating additional page views, increasing click-through rates, and thereby boosting ad revenues. Earlier this year, Twitter rolled out targeted ads based on interests or hobbies that users share on their Twitter streams. Twitter also announced a promotion designed to bring at least 10,000 new small businesses into its advertising program. As for Facebook, the giant social network has been increasingly adding Sponsored Stories to its 1 billion users' newsfeeds and recently announced plans to develop an external ad network that would allow the company to use its data about users' likes and dislikes to show people ads outside of Facebook.

A. Advertisement via Social Networking

Social networks are also at the core of something called "social media marketing." This is a way of marketing products through social media sites like social networks, blogs, widgets and other social websites. If you run your own business, or if you just sell a few odds and ends on eBay every once in a while, having a social network presence can help out.

Advertising simply put is telling and selling the product. Advertising Management though is a complex process of employing various media to sell a product or service. This process begins quite early from the marketing research and encompasses the media campaigns that help sell the product. Without an effective advertising management process in place, the media campaigns are not that fruitful and the whole marketing process goes for a toss. Hence, companies that believe in an effective advertising management process are always a step ahead in terms of selling their goods and services.

As mentioned above, advertising management begins from the market research phase. At this point, the data produced by marketing research is used to identify what types of advertising would be adequate for the specific product. Gone are the days when there was only print and television advertising was available to the manufacturers. These days apart from print and television, radio, mobile, and Internet is also available as advertising media.

Broadcast advertising is radio, television, and Internet advertising. The commercials aired on radio and televisions are an essential part of broadcast advertising. The role of broadcast advertising is to persuade consumers about the benefits of the product. It is considered as a very effective medium of advertising. The cost of advertising on this channel depends on the time of the commercial and the specific time at which it is aired. For example, the cost of an ad in the premium slot will be greater than in any other slot.

Internet or online advertising uses the Internet or the World Wide Web for the purpose of attracting consumers to buy their product and services. Examples of such advertising include ads on search engine result pages, rich media ads, banner ads, social network advertising, and email marketing and so on. Online advertising has its benefits, one of them being immediate publishing of the commercial and the availability of the commercial to a global audience. But along with the benefits come the disadvantages too. These days, advertisers put distracting flashing banners or send across email spam messages to the people on a mass scale.

This can annoy the consumers and even the real ads might get ignored in the process. Therefore, ethics in advertising is very important for it to be successful.

Advertising management process in fact helps in defining the outline of the media campaign and in deciding which type of advertising would be used before the launch of the product.

If you wish to make the advertising effective, always remember to include it from the market research time and direct the user specific advertisements to the user. The whole process in the end should benefit the product or service.

The role of people designing the advertising campaign is crucial to its success. They have been trained by seasoned professionals who provide the training in the specific field. Designing an advertising campaign is no small a task and to understand the consumer behavior from the data collected from market research is a very important aspect of the campaign.

A whole lot of creativity and inspiration is required to launch an adequate advertising campaign. In addition, the management skills come into play when the work has to be done keeping the big picture in mind. It would be fruitful for the company if the advertising campaign lasts well over the lifetime of a product or service, reach the right customers, and generate the desired revenue.

Some great positive aspects when social networking combines with advertisement management -

▪ Development of society and growth of technologies

▪ Employment

▪ Gives choices to buyers with self interest

▪ Welcomes healthy competition

▪ Improving standard of living.

▪ Give information on social, economical and health issues.

Advertising Age: Change or Die and very well said. To understand what is going to change and what will remain the same should be on top of the list of the advertisers.

Beginning of the digital era.: The agencies had a system of having some few creative people who used to come with ideas for ads. That was the time when giving an ad in radio and television was very expensive. But now no one minds actually about the cost for such ads because consumers are responding well. But now and onwards, internet and technology has taken a front seat.

Today every television serial, all movies running in theatres and all breaks in the radio channels have fillers called ads. But in the coming years, the ads can be shown to the consumers only if they want to see and not because the advertiser wants them to see it. The cost of using internet and digital gadgets is everyday dropping down so the customers don't mind spending on these things other than fooling themselves with the colorful advertisements. The future will be in favor of the advertisers and advertisements but only at the cost of proper management and proper use of digital technologies and internet.

1. The Bond

Nowadays, no one trusts the ad industry because there is no transparency. The ethics are not being the part of ads anymore. In coming years, the bond of trust has to be again rebuilt between the consumers and the advertisers. The advertisers will have to work hard to gain the confidence of the customers.

2. More Creativity

The creative people of the agencies should not limit their creativity by only working with the old style menu. This is the time to explore with help of internet and digital tools.

3. Differentiated Products

The advertisers should launch a product which will be completely different but excellent to use. Then only the voice will be heard.

4. Attract Talent

More and more quality people should be hired today who will be leaders for tomorrow. They will be the people who lead the industry in the future will with the best quality being coping up will everything. Better HR practices should also be appointed.

III. EXISTING SYSTEM

From February 2008 to February 2009, Twitter experienced growth of 1,382% (Nielsen, 2009).
i). As of April 2009, Facebook had over 200 million active users worldwide, 100 of whom logged onto facebook daily for a total of 3.5 billion minutes (Tech Crunch, 2009).
ii) In May 2009, over 7 million Australians were members of either MySpace or Facebook communities.
Social Networking and Social Network Marketing look to be anything but passing trends. As the numbers suggest, we're witnessing only the beginning of a greater movement towards active engagement and interactivity.

IV. PROPOSED SYSTEM

The system we are proposing has a vast difference between all existing systems. Majority of the additional features which will be implemented have an added advantage over all the shortcomings of existing social networking sites.

The major objective behind collaborating the concepts of social networking and advertisement management was to include the best interests of both. Social networking mainly focuses on the newly found lifestyle and habit of networking online with common interests and hobbies, with people of same tastes. Joining all that with advertisement leads to more sharpened and narrow projection of ads towards its users.

To speak on the additional features in social networking, we plan to implement a very unique feature not present currently in any other social network, segregation of personal and professional friends. A person will be able to combine activities related to his personal and professional work lives, but at the same time keeping a distance between them whenever desired. Example: displaying change of job to only professional friends and circles but showing general albums to personal close friends.

The advertisement module will consist of mainly focusing on optimizing advertisement displays to accurate users who will be keen in those categories shown. Optimizing maximum number of hits to that ad is the main focus of the advertisement algorithm mentioned before. It consists of different genres like guaranteed and auctioned for various purposes. The advertiser will have to include various details about the target audiences for his ad during registration, and accordingly after analyzing the user scenario needed, the filtration of what ads should be shown to which user will be implemented. Owing to all such analysis and research on what specific patterns are followed, the displaying of ads will continue and lead to much greater profits than normal, to both admin of site and advertiser as well. The guaranteed and auctioned segregation of payment and choosing options will help in better utilization of space and optimized profits too.

V. ALGORITHM

The algorithm consists of two stages:

Guaranteed Fixed Rate Space - Outer pages like Home, Profile pages

Auctioned or bidding Spaces

-Inner pages like messages, friend requests, etc

1.The Advertiser First select the type of page and space from the available spaces on which he wants to display his advertisement.

a. If (guaranteed)

{

- The space will be allotted on FCFS (First Come First Served) basis.
- The rate will be fixed for per 1000 impressions and time duration will be entered by user in no. of months
- Impressions=   ____ /1000
- Time duration= ____ months
- Time Slot= premium / non premium
- If (premium)
- Total cost= impressions * time_duration*2
- Else
- Total cost = impressions *time_duration*1

b. If(auctioned)

{

- Select space on which ad is to be displayed from the available spaces.
- Enter advertisement details.
- If (bidding not yet started)
  i) Start bid by opening bidding window.
  ii)Current_rate = base price (as decided by the administrator)
  ii)Enter your bid-
  -If (bid> current rate)
  Current_rate=bid
  -Else
  Message – Enter valid bid.

}

- Else if (bidding window not closed)
  i)Current_rate = last highest bid
  ii)Enter your bid-
  -If (bid > current rate)
  Current_rate = bid
  You have entered highest bid till now.
  -Else
  Message : Enter a valid bid.
- Select top 20 bidders and display their ads according to the rate quoted by them.
- The bidders will be given benefits according to the prices quoted by them.
- The 1st highest bid will get equivalent difference more no. of impressions than 2nd highest bidder and so on.
- No. of impressions = higher bid – next higher bid

- All the advertisers will be notified for advertisement renewal 1 week before their expiry time.
- He will be given an extra advantage to renew the advertisement at same rate for 3 consecutive months after which he will have to bid again by current rate at that month.

2. All the advertisers enter the following details to register their advertisement to the site-

- Ad name
- Description
- Link_url to be forwarded to
- Image
- Time duration
- No. of impressions
- Preferred time

VI. CONCLUSION

Our proposed system aims to integrate the benefits of online social networking with optimized advertisement management which satisfies all the actors of our site. We have successfully implemented the same using JSP, jQUERY , AJAX and MySQL technologies for achieving the desired results.

REFERENCES

1. Gavin Bell , "Building Social Web Applications Establishing Community at the Heart of Your Site , O'Reilly Media,," September 2009
2. Boyd, D. M., & Ellison, N. (2007) One history of social networking sites. Retrieved December 16, 2007, from http://yasns.pbwiki.com/
3. O'Reilly, T. (2004). What Is Web 2.0. Retrieved on 30 May, 2007 from http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web 20.html
White, T.; Chu, W.; Salehi-Abari, A.; "Media Monitoring Using Social Networks," Social Computing (SocialCom), 2010 IEEE Second International Conference on, vol., no., pp.661-

668, 20-22 Aug. 2010 doi: 10.1109/ SocialCom.2010.102

4. Java servlet programming : HeadFirst
5. Backstrom, L., Huttenlocher, D., Kleinberg, J., & Lan, X. (2006). Groupformation in large social networks: Membership, growth, and evolution.
6. The Facebook Advertising website. [Online]. Available: https://www.facebook.com/advertising Yahoo Adspecs [Online]. Available: https://in.adspecs.yahoo.com/index.php

AUTHORS PROFILE

Devika Joshi, Pursuing Bachelor of Computer Engineering degree from Smt. Kashibai Navale College of Engineering, Pune, Maharashtra. My present degree is of 73%..Last year I was the coordinator of community Association of Computer Engineers in my college. I am also working hard on project titled Amigos.

Rutuja Kulkarni, Pursuing Bachelor of Computer Engineering degree from Smt. Kashibai Navale College of Engineering, Pune , Maharashtra. My present degree is of 67%..Last year I was member of community Association of Computer Engineers in my college. I am also working hard on project titled Amigos.

Arundhati Rao, Pursuing Bachelor of Computer Engineering degree from Smt.Kashibai Navale College of Engineering, Pune , Maharashtra. My present degree is of 70%.Last year I was member of community Association of Computer Engineers in my college. I am also working hard on project titled Amigos.

Pooja Wagh, Pursuing Bachelor of Computer Engineering degree from Smt. Kashibai Navale College of Engineering, Pune , Maharashtra. My present degree is of 65%..Last year I was member of community Association of Computer Engineers in my college. I am also working hard on project titled Amigos.