# **Social Media studies**

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# **Abstract**

Social media sites offer a huge data about our everyday life, thoughts, feelings and reflecting what the users want and like. Since user behavior on OSNS is a mirror image of actions in the real world, scholars have to investigate the use SM to prediction, making forecasts about our daily life. This paper provide an overview of different commonly used social media and application of their data analysis.

# 1. Introduction

The benefit of social media data is its relative effortlessness of gaining, big amount, and capability to understand socially related facts, which might be challenging to collect from other data sources [[1](#_ENREF_1)]. The dramatic growth of social networks has been noticed over the last few years, Pew Research center [[2](#_ENREF_2)] studied that As of November 2016, and almost three quarters (79%) of online U.S. adults use social networking sites. Social networking sites offer people new ways of communication, whether through their PC or their mobile phone. They allow people to create their own profiles and accounts in few simple and easy steps. The users are allowed to add and accept contacts which called friends or followers. The contacts through the social network contain people we know as well as strange people. Many people have a presence on one of the social networking sites, many of them are addicted to it because it is the quickest way to communicate with friends and make different friends with common interest from different background and countries[[3](#_ENREF_3), [4](#_ENREF_4)]. Social networks, such as Facebook, Twitter were created for the individuals to communicate there are many other reasons that these technologies are used, but communication is main reason. The social media has become source of big data [[5](#_ENREF_5)] and also source of virus and malicious software [[6](#_ENREF_6)]. The text classification can be used to analysis of textual data [[7](#_ENREF_7), [8](#_ENREF_8)] in the same way can be applicable to social media. This paper provide an overview of different commonly used social media and application of their data analysis.

# **2. Brief of most popular social network sites**

***Facebook***

Facebook, founded in 2004 its goal is a social web that provides efficient communicates between the users and their friends. Facebook is a social utility that enable people to interact with the world around them, allowing them to post and share information online the same way they do in the real world .With over 1.110 billion active users as May 2013 the Facebook became a modern phenomenon and has attracted many researchers from different research area [[9](#_ENREF_9)] .

***Twitter***

Twitter is social network or microblogging which enables the users to send and read tweets. Tweet is a text messages limited to 140 characters. Registered users can read and post tweets, but unregistered users can only read them. Twitter has 200 million active as February 2013[[10](#_ENREF_10)]

***Google+***

Google+ is the second largest social network after Facebook with 540 active users[[11](#_ENREF_11)] . It includes basic social networking elements like a profile photo, background photo, work and school and university history, interests, places visited and lived. A circle is a core feature of the Google+ Social Platform. It enable users to organize people into groups or lists for sharing across various Google products and services. [[11](#_ENREF_11)]

***LinkedIn***

LinkedIn is largest professional social networking website for people in professional occupations. Founded in December 2002 and launched on May 5, 2003 [Ref] it is mainly used for professional networking as of 2 July 2013, Quantcast [[12](#_ENREF_12)] reports LinkedIn has 65.6 million monthly unique U.S. visitors and 178.4 million globally.

***Flickr***

Flickr is an image hosting and video hosting website, owned by Yahoo and was launched in 2005. Flickr had a total of 87 million registered members and more than 3.5 million new images uploaded daily [[13](#_ENREF_13)].

***Myspace***

Myspace is a social networking service with a strong music emphasis owned by Specific Media LLC and pop music singer and actor Justin Timberlake.

***Friendster***

Friendster is a social gaming site that is based in Kuala Lumpur, Malaysia. The popularity of Friendster has large number of user in Philippines and Indonesia[[14](#_ENREF_14)] .

***Orkut***

Orkut is a social networking website that is owned and operated by Google. It enables the user to create a profile and connect with friends and share contents.

**Tagged**

Tagged is a social network website based in San Francisco, California, founded in 2004. It enables users to browse the profiles of other users. Tagged has 18.6 million members As of 28 September 2011[[15](#_ENREF_15)]. Tagged encourages its users to meet strangers based on shared interests, with the idea of growing your network to meet as many people as possible.

# **3. The impact of social network on the society**

• Social network becomes essential in the lives of millions of people and has high impact in their education, their jobs, their daily, and even in their relationships. Previously social network such as e-mail and chat groups provided people the way to communicate, but didn’t provide them perfect visualization environment to visualize their social networks. Currently social networking creates visible connections between friends and followers. The social network becomes the diary of many people and place to post their daily activities, what they daily do, where they go, whom they meet, even about their personal relationship.

• Social network becomes a place to express feeling and intentions. Criminals are using the social media to confess about their crimes. For example In December 2011, a middle-aged Indiana man posted that he had shot dead his 19-year-old ex-girlfriend and her friend. He also announced his own death [[16](#_ENREF_16)]. Research shows that More than 80 percent of the police officials said they believe that social media will be important in fighting the crimes and for investigation[[17](#_ENREF_17)].

• Social networks rapidly growth has made great impact and effects on culture, society and economy. Social media can be utilized to forecast future outcomes [[18](#_ENREF_18)].

• Social networks like Facebook and Twitter have huge databases and various details about social behaviors. This huge of data can be used in different application such as predicts voting behavior, the spread of infectious diseases, crimes detections, market analysis, etc.

• Social networks encourage people to be more public about their profile exposing personal details to public. The details of our lives are posted easily to social network and showed to public, and the personal details which posted remain available indefinitely, therefore the misuse of user’s personal details may affect the users in future, while at any moment a photo of friends in funny or improper situation may seem harmless at the time of taking the photo but it may affect his future job when the employer check his back ground profile. Even though most of social network allow the user to control their profiles but many of users still wants to share the content to public.

**4. The use of social network data**

Social network can be used to monitor and predict all types of social behavior, political campaign, economic analysis, health studies (for example spread of infectious diseases such as influenza) and human-behavior. The application of social media data analysis as follows:

1. Mining Social Network for Crime Detection: the social media are mined to detect different cybercrime like cyberbullying fake identity, spam, and virus [[19-22](#_ENREF_19)] .
2. Mining Social Network for ﬁnancial prediction and Marketing [[23](#_ENREF_23), [24](#_ENREF_24)][[25](#_ENREF_25)][[26](#_ENREF_26), [27](#_ENREF_27)] .
3. Mining Social Network for Public Health Applications [[28-31](#_ENREF_28)] .
4. Mining Social Network for Politics [[32](#_ENREF_32), [33](#_ENREF_33)].
5. Using Social Network to Predict Disaster for example ,mining and tricking the real-time social network interaction of an event such as tsunami earthquakes using Facebook or Twitter [[34](#_ENREF_34), [35](#_ENREF_35)]
6. Mining social network for public opinion [[36](#_ENREF_36), [37](#_ENREF_37)][[38](#_ENREF_38), [39](#_ENREF_39)].
7. Mining social network forecasting box office revenues for movies [[18](#_ENREF_18), [40](#_ENREF_40)].

# **5. Conclusion**

Social media websites grow inviting thousands of users every day and inspire the users to post, communicate and get socialized with friends. The data available through social media can give us visions into social societies. . social media data is a rich research area for researcher in different fields giving data which can be analyzed with help of data mining algorithm in order to have useful knowledge in different uses such as crime detection, financial analysis and marketing strategies, modeling diseases spread etc.

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