

# PREDICTION OF SOCIAL NETWORK SITES USING WEKA TOOL

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## ABSTRACT

*A social network is a set of people or organizations or other social entities connected by set of social relationships such as friendship, co-working or information exchange. Social network analysis focuses the pattern of relationships among people, organizations, states and such social entities. In this paper a survey of the works done in the field of social network and this paper also concentrates on the future trends in research on social network. Social network sites (SNSs) are increasingly attracting the attention of academic and industry researchers intrigued by their affordances and reach. Today, the Web is a social, mobile, information, and communication commodity that fits in our hands and pockets. Users are using online social network sites to stay in touch with other online users and exchange useful information. New services such as Facebook Platform, Google Friend Connect, and MySpaceID let third-party sites develop social applications without having to build their own social network. These social-networks connect services increase access to and enrich user data in the Social Web.*

**Keywords:** Data Mining, Classification, Social Network, Students, Workers.

## I. INTRODUCTION

A social network is a social structure made up of individuals called nodes, which are tied by one or more specific types of inter dependency such as friendship, common interest, dislikes, beliefs. Social network is an structure of social relationships in a group to uncover the informal connection between people. Assumption importance of relationships among interacting units. It indicates the way in which they are connected through different social familiarities ranging from casual acquaintances to close familiar bonds. Social network sites (SNSs) such as MySpace, Facebook, Cyworld, and Bebo have attracted millions of users, many of whom have integrated these sites into their daily practices. As of this writing, there are hundreds of SNSs, with various technological affordances, supporting a wide range of interests and practices. While their key technological features are fairly consistent, the cultures that emerge around SNSs are varied. Most sites support the maintenance of pre-existing social networks, but others help strangers connect based on shared interests, political views, or activities. Some sites cater to diverse audiences, while others attract people based on common language or shared racial, sexual, religious, or nationality-based identities. Sites also vary in the extent

to which they incorporate new information and communication tools, such as mobile connectivity, blogging, and photo/video-sharing.

## **II. ADVANTAGES**

### **2.1 Worldwide Connectivity**

These connections can help one with a variety of things such as:

- Seeking a new job
- Locating assistance
- Getting and giving product and service referrals
- Receiving support from like-minded individuals
- Making or receiving advice on career or personal issues

In many ways, social communities are the virtual equivalent of meeting at the general store or at church socials to exchange news and get updated on friends and families. Snail mail pen pals have been replaced by virtual avatars and private messages sent via the social network.

### **2.2 Real-Time Information Sharing**

Many social networking sites incorporate an instant messaging feature, which means you can exchange information in real-time via a chat. This is a great feature for teachers to use to facilitate classroom discussions. A study by the John D. and Catherine T. MacArthur Foundation shows these networks can be used as effective vehicles for students to pursue self-paced online learning. In addition, the Internet is the ultimate online textbook. Students no longer need to take out six library books at a time. Much of what they need to know they can find online. School is not the only setting where this type of real-time information sharing can be beneficial. Social networking can provide a tool for managers to utilize in team meetings, for conference organizers to use to update attendees and for business people to use as a means of interacting with clients or prospects.

### **2.3 Free Advertising**

Whether you are non-profit organization who needs to get the word out about your upcoming fundraiser or a business owner marketing a new product or service, there's no better way to get your message in front of millions of people 24/7. The best part is it that you can spread the word through social networking profiles for free. You can promote one product, service or idea or many because you are limited only by the amount of time you wish to invest in the endeavor.

### **2.4 Increased News Cycle Speed**

Social networking has revolutionized the speed of the news cycle. Many news organizations now partner with social networking sites like Twitter, YouTube, and Facebook in order to both collect and share information. One can get a sense of what is going on in the world just by watching trending topics from many of these sites. This has led to the development of a near instantaneous news cycle as millions of social networking updates rapidly spread news and information.

### **III. METHODOLOGY**

#### **3.1 Data Mining**

Data mining is the process of discovering interesting knowledge, such as associations, patterns, changes, significant structures and anomalies, from large amounts of data stored in databases or data warehouses or other information repositories.

#### **3.2 WEKA Tool**

WEKA Tool is an open source data mining tool that provides data mining and machine learning procedures including data loading and transformation, data preprocessing and visualization, modelling, evaluation, and deployment. It is written in the Java programming language. We have used to WEKA Tool generate decision trees.

#### **3.3 Decision Tree**

The decision tree technique involves constructing a tree to model the classification process. Once a tree is built, it is applied to each tuple in the database and results in classification for that tuple. The following issues are faced by most decision tree algorithms:

- Choosing splitting attributes
- Ordering of splitting attributes
- Number of splits to take
- Balance of tree structure and pruning
- Stopping criteria

#### **3.4 Classification and Predictions**

There are two forms of data analysis that can be used for extract models describing important classes or predict future data trends. These two forms are as follows:

- Classification
- Prediction

These data analysis help us to provide a better understanding of large data. Classification predicts categorical and predictions models predicts continuous valued function.

### **IV. PROBLEM STATEMENT**

Given the peoples data, classify their usage of social network sites and also analyze who use the social network sites such as students or workers or others.

### **V. PROPOSED APPROACH**

Data have been collected and associated only with examinations . The overall activities are broadly categorized into the following steps:

- Data collection and Data set preparation.
- Data preprocessing.

### 5.1 Data Collection and Data Set Preparation

We have collected data set from various persons. There are approximately 50 records in this data set. After combining all these data sets the resultant database record contains different attributes. There needs to be a proper cleaning of data, such as, filling in missing values; smoothing noisy data, identifying or removing outliers, and resolving inconsistencies. Then, the cleaned data are transformed into a form of a table that is suitable for data mining model.

### 5.2 Data Preprocessing

The data collected and brought together is very huge and contains a lot of unwanted details. The basic data has the following information.

Attribute list:

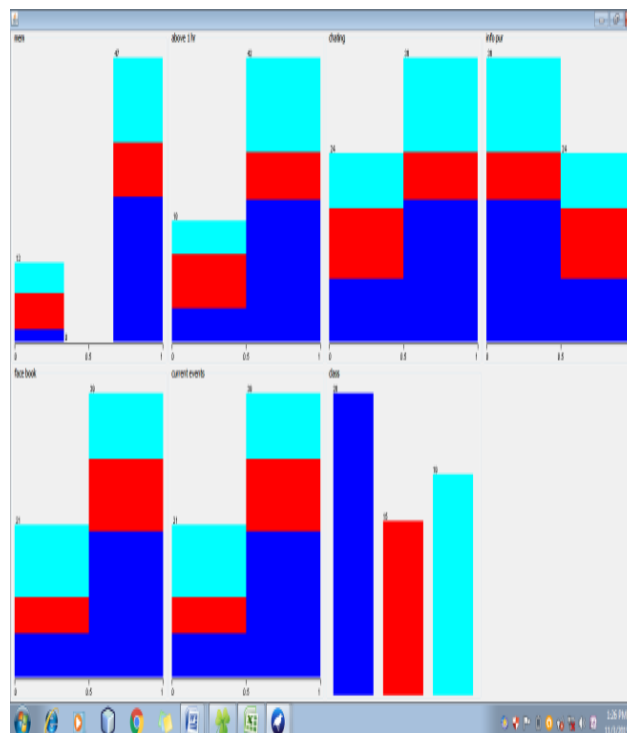
**Table 1: data Structure of the basic data.**

SNO	ATTRIBUTE	TYPE	DESCRIPTION
1	Name	Char	Name
2	Members	Char	Members

## VI. RESULT AND DISCUSSION

This research tried to analyse the Usage of social network sites among students, workers and other people.

### 6.1 Social Network Usage



According to analysis the above graph shown the Students are interested to Use the social network sites mostly than working people and other people.

## **VII. CONCLUSION**

In this paper, we discussed people who are more interest to use the social Network to sharing or getting some information. The survey has taken from students, workers, other people. Over all the result from the survey is more number of students using social network sites. Because the student has used the social network sites for information gathering, sharing and chatting purpose. The students are more interested to use the social network sites than the working people and other people.

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