

CHAPTER 1

INTRODUCTION

This chapter gives brief idea of the project that is developed the contents of this chapter are Overview which provides the overview, Fundamentals informs about basics, Objectives provides main objectives, Proposed system explains about the system which is developed.

1.1 Overview

The stock market is a network which provides a platform for almost all major economic transactions in the world at a dynamic rate called the stock value which is based on market equilibrium. Predicting this stock value offers enormous arbitrage profit opportunities which are a huge motivation for research in this area. Knowledge of a stock value beforehand by even a fraction of a second can result in high profits. Similarly, a probabilistically correct prediction can be extremely profitable in the amortized case. This attractiveness of finding a solution has prompted researchers, in both industry and academia to find a way past the problems like volatility, seasonality and dependence on time, economies and rest of the market.

1.2 Fundamentals

Stocks: The **stock** (also **capital stock**) of a corporation is all of the shares into which ownership of the corporation is divided. In American English, the shares are commonly known as "stocks". A single share of the stock represents fractional ownership of the corporation in proportion to the total number of shares. This typically entitles the stockholder to that fraction of the company's earnings, proceeds from liquidation of assets (after discharge of all senior claims such as secured and unsecured debt), or voting power, often dividing these up in proportion to the amount of money each stockholder has invested. Not all stock is necessarily equal, as certain classes of stock may be issued for example without voting rights, with enhanced voting rights, or with a certain priority to receive profits or liquidation proceeds before or after other classes of shareholders.

Sentimental Analysis: **Sentiment analysis** (also known as **opinion mining** or **emotion AI**) refers to the use of natural language processing, text analysis, computational linguistics, and biometrics to systematically identify, extract, quantify, and study affective states and subjective information. Sentiment analysis is widely applied to voice of the customer materials such as reviews and survey responses, online and social media, and healthcare materials for applications that range from marketing to customer service to clinical medicine.

1.3 Objectives

The objective of this project is to show how sentimental analysis can help improve the user experience over a social network or system interface. The learning algorithm will learn what our emotions are from statistical data then determine the mood. After that it will change our social interactions accordingly on our social network sites or other interfaces like desktop or system services or web-pages. Suppose you are bored or sad ,in the case of social networks one thing the computer could do is to be more suggestive of things that lighten your mood and change interactions like backgrounds color's ,icons services. The site could automatically try suggesting interactions with people and applications that would help improve the mood, while hiding others that might make it worse. The project aims to implement these in the social network community as well as services and interfaces of our systems, while making our lives better and our experience richer and efficient.

1.4 Problem Statement

“To build an Application to predict Stock trend based on Investors reviews using Opinion Mining.”

1.5 Proposed System

The system explores the task of automatic identification of investor opinions with the help of their reviews on companies about stocks from stock market forum and predicts the stock market movement whether goes up or down.

1.6 Motivation

Both consumers and producers highly value “customer’s opinion” about products and services. Thus, Sentiment Analysis has seen a considerable effort from industry as well as academia.

Consumer’s Perspective: While taking a decision it is very important for us to know the opinion of the people around us. Earlier this group used to be small, with a few trusted friends and family members. But, now with the advent of Internet we see people expressing their opinions in blogs and forums. These are now actively read by people who seek an opinion about a particular entity (product, movie etc.). Thus, there is a plethora of opinions available on the Internet. From a consumers’ point of view extracting opinions about a particular entity is very important. Trying to go through such a vast amount of information to understand the general opinion is impossible for users just by the sheer volume of this data. Hence, the need of a system that differentiates between good reviews and bad reviews. Further, labeling these documents with their sentiment would provide a succinct summary to the readers about the general opinion regarding an entity.

Producer’s Perspective: With the explosion of Web 2.0 platforms such as blogs, discussion forums, etc., consumers have at their disposal, a platform to share their brand experiences and opinions, positive or negative regarding any product or service. According to Pang and Lee (2008) these consumer voices can wield enormous influence in shaping the opinions of other consumers and, ultimately, their brand loyalties, their purchase decisions, and their own brand advocacy. Since the consumers have started using the power of the Internet to expand their horizons, there has been a surge of review sites and blogs, where users can perceive a product’s or service’s advantages and faults. These opinions thus shape the future of the product or the service. The vendors need a system that can identify trends in customer reviews and use them to improve their product or service and also identify the requirements of the future.

Societies Perspective: Recently, certain events, which affected Government, have been triggered using the Internet. The social networks are being used to bring together people so as to organize mass gatherings and oppose oppression. On the darker side, the social networks are being used to insinuate people against an ethnic group or class

of people, which has resulted in a serious loss of life. Thus, there is a need for Sentiment Analysis systems that can identify such phenomena and curtail them if needed.