

# PREDICTING THE FUTURE WITH SOCIAL TRENDS FROM SOCIAL MEDIA: A REVIEW

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## ABSTRACT

*In today's world, each individuals are now addicted to the online social media. Social media sites have been used by millions of people, individuals globally. Every individual expresses his thoughts, daily life events and opinions on social media. In social media, individuals expressions are mostly in the form of non photographic images, text form, growing importance of linguistic text analysis etc. This paper provide an overview of the growing literature on subjective well being which is also known as Happiness. We use different types of approaches, one approach is that to measure wellbeing is to use of objective indicator which is also known as Gross Domestic Product(GDP). In this approach we classify the content of images and correlated with socio-economic indicator. The another approach is to using subjective measure by asking people to report on their happiness and life satisfaction. This paper represent the happiness indicator and create some limitation as measure of wellbeing like social media is not limited to text. Unlike text, the analysis of images does not require specific linguistic database.*

**Keywords:** *Social media, Social media analytics, Socio-economic indicator, Well being*

## I. INTRODUCTION

This Sentimental Analysis likewise called opinion mining, is the field of study that analysis people, individuals appraisal, evaluations, assessments, evaluations, states of mind, emotions and feelings towards entities, for example, items, services, product administrations, event, people, issues, occasions, points, and their qualities. The basic task in estimation of sentimental analysis examination is classify the extremity given content at the report, document, sentence, or features/perspective level—whether the communicated conclusion in an archive, a sentence or a entity feature/aspects include is sure positive, negative, or neutral[7]. Progressed, "beyond extremity" assumption sentimental classifications looks, for example, at emotional states, for example, "sad", "happy", and "angry". Whenever you use the choice, we have to need to know another sentiments. In today reality, business, organizations and different associations dependably want to discover customer/general sentiments about their items, choices and privileges administrations.

Currently at this stage where different kinds of human needs and requirements, information can be found in services online. To Add the developing demand and choice, a significant part of the government, services, military trades, medical guide and private precisely information that should be accessible online. Because of that rapid growth of information and services on the internet, attacks have increased as of late. These types of groups

are viewed as a danger, that can be committed to disable the information systems that should motivate mostly by politician or web social issues. The information of web services that can be added to changed the way online users communicate with another. A few web and internet services that permit individuals to interact or interfere to each other continuously. Most commonly type of communication is the purported social systems, that have based on a small-scale blog organize & permit clear content passages, opinions, loading pictures and files, and interactive user-to-user communication through different types of chat messages. A significant part of the information in social websites demonstrates the opinions and views of many users with respect to a different issues. Many users feelings, opinions or sentiments, in social websites is valuable for forecasting and monitor the different types of occasions, for example, many market tendency which can be identified, different types of political views. The benefit of working with sentiment analysis in social networking is that allows for fast and efficient processing of information.

### **1.1 Challenges of Sentimental Analysis**

The most impact of notions that can be sentiment words, additionally called the sentiment words. The words that are regularly used to indicate the positive or negative types of assessments. For instance, great, brilliant, good, amazing and wonderful are certain slant words, and awful, bad, poor, and unpleasant are negative sentiment words. Sentimental analysis has turned into a big issue. Aside from people who give fake suppositions in audits and gathering exchanges, there are additionally business organizations that are in the matter of composing fake surveys, fake review and false online journals for their customers. A few different instances of fake reviews have been accounted for in the news. It is important to recognize or detect such spamming exercises to guarantee that the feelings on the Web are a trusted source of valuable data.

### **1.2 Techniques of Sentimental Analysis**

**Symbolic Technique:** Symbolic techniques also known as knowledge based approach. In this technique, available lexical resources are used. In this sentiment analysis approach, bag-of-words approach is used. The BOW model focuses on the words list, or says string of words, it cannot check the context of the sentence. This model contains a list of words that have own value when found in the given text. This model totally focuses on the words and take care nothing about the language fundamentals. The difficulty in using a Knowledge base approach is that it requires a large lexical database. This has become harder and harder to provide as the language of social networks is so trend dependent and changeable that lexicon datasets cannot keep up. Therefore, Knowledge based approaches to sentiment analysis are not as popular as they are used to be.

**Machine Learning Technique:** There are different machine learning techniques like SVM, maximum entropy and Naive Bayes etc. This allows the algorithm to remain dynamic in the face of ever changing social network language lexicons. In this methodology, a classification model is developed using a training set, which tries to classify the input feature vectors into corresponding class labels. Use the results from the knowledge based techniques and those of the machine learning techniques to ensure a thorough analysis of the dataset.

### **1.3 Measuring Well Being**

We can measure the well being in two different approaches that is objective measure and subjective measure. In objective measure, people wellbeing is accessed by using some certain facts such as economic, social and environmental statistics. On the other hand subjective measure of well being by using the people feelings or life satisfaction. This approach which aims to capture the well being through the measurement of brain waves.

## **II. SOCIAL MEDIA ANALYTICS**

The Social media analytics can be described as the process of collecting data from the social media websites and analyzing that data to make business decisions. Social media analytics is mostly used to mine customer sentiment in order to support marketing and customer service activities. Data analytics can be real-time or offline analysis, including factors such as influence, reach, and relevance of suitable measurements. Time considerations are important to understanding the context of data being analyzed. The importance of social media analytics can be seen as the researchers at AT&T developed an advanced analytics software used to eavesdrop on customers via Twitter to find the complaints about network problems, so that users can be prioritized by extracting time and location of users tweet through Twitter data analytics. According to this priority, the crews will be sent to fix the problems. Organizations dedication to serving the mass with this level of priority makes it more interesting and creates competition among the organization. Organizations have been focusing on research and innovation in analytics based on the resources they already possess.

### **2.1 Measuring Well Being Social Media Analytics by Real Time**

Real-Time analytics denotes the capacity to use all available data and resources when needed. The analysis of data is carried out dynamically and reports are generated with no delay. Mostly real-time analytics is used for geographic location and tracking purposes[3]. Nowadays, people instantly share on social media about situations like natural disasters, hence the real-time analytics of social media may provide life-saving information. Well-being is the 'Good Life' that everybody wants to pursue and is influenced by the basic daily life objective factors like income, job, health.

These factors can be measured directly with the quantitative factors like GDP( Gross Development Product), HDI (Human Development Index) and GPI(Genuine Progress Indicator). However, these factors cannot measure the Quality of Life (QoL) of individuals. The indicator of measuring QoL is the Qualitative Well-Being or Subjective Well-Being. (SWB). SWB can be expressed as how the people experience their QoL, which includes judging life positively and feeling good. The direct and indirect measurement techniques of well-being are given in the Figure 1.

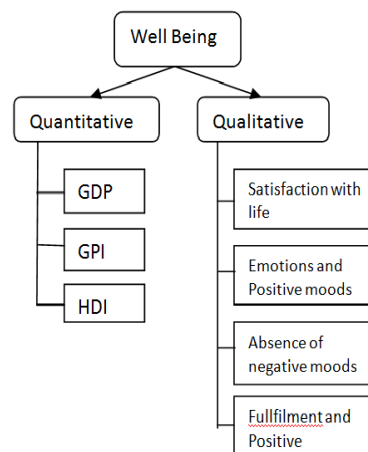


Fig:Well-Being Classifications

## 2.2 Sentimental Analysis of images

In the opinion mining, analysis of textual information areas which may developed, user decision making process, monitor the performance of brand lifestyles, prediction of stock markets, voting forecasts of political, and intelligence gathering. Similarly, the visual information that can be analyzed in different areas for example, reviewing of the feeling, image information retrieves and the progress is moderately behind. In the research work, the demonstration of the images lies around 35 % that can be updated and share links on twitter which makes to a interesting and active area to investigate features that can create visual data mining process. A picture is justified which consist of many hundreds and thousand words.

Most likely the text mining approach various research has done with respect to feel and emotions in pictures and images, has greatly depend upon been critical yet challenging. The awareness of social networks sites, images turn into a convenient way for information diffusion among different users online. To Plan a lead visual content-based sentiment analysis, we have expressed current approaches which incorporate employing low-level features which means of facial expression detection user intent resources and understanding images utilizing attribute learning types. The various Sentiment and opinion analysis method which contain low-level characteristics have the limitation that provide its undesirable for abnormal state utilize.

## III. PREDICT THE WELL-BEING BASED ON TWITTER FROM NON PHOTOGRAPHIC IMAGES

Humanists may have to utilize the history types of pictures as which contain the information related to the behaviour, opinion, fashion, lifestyles and another various different details of particular tradition, periods and places such as such visuals demonstration the objects of interests of data, various examples includes social scenes of data, various city places and people lifestyles of various tradition. Many years may have to gain that researchers shown the various characteristics of the large scales of social media are correlated with number of different socio economic indicators characteristics which may be prediction of the huge volume of different

social patterns and media. Various cases incorporate influenza patterns, achievement of movies, and measures of social prosperity of populaces. Interestingly, this strategy concentrates on images [1].

We have to research the character extracted the information from Tweeted non photographic kind of images can predict a number of socio economic indicator characteristics. Various content of these images is classified utilizing the cutting edge Neural Network convolution benefit of goggle net classifier and further the incremental category is chosen that is called "images of writings reviews" that are typically non-photographic images which contain the screen shots of websites and the various message data conversations. There are mainly two features of image recognition of non photographic images which are: to sharing rate every year per city or the sharing rate every hour over a 24-hour time commonly shared more than 1 year in each and every commonly city. These features we have to find that they are related with social self reported which give idea from Gallup type studies, about the median housing prices, salary, and education field of ranges and to final result that gives commonly types of social media non photographic pictures which may be utilized to predict social characteristics of image detection.

#### **IV. VISUAL SENTIMENTAL ANALYSIS FOR IMAGES**

This analysis type of architecture which may can prediction of various sentiment that can be breaking down image data of different information, At these days individuals are uploading the different types of images in social networks in millions amount. The example include that Twitter, Facebook, you tube, and instagram. These images have some data in show the emotions of individuals in online social networks. Many sentiment analysis which contain the images having consideration in the field of online multimedia big data research. Many researchers may focus on examining and investigating the sentiment of the textual contents [2].

In this research paper we create model to prediction of sentiment of visual information. Visual Sentimental Analysis architecture may have to utilize to predict the visual sentiments by using the transfer learning approach. Various parameters which have learned that can considerable various convolution neural networks to prevent cure of over lifting of data from various data models. The Twitter image dataset and study various types of model to guarantee that the performance which should done prefer over the present state of the art. We can perform for monitor the emotional states of persons which are suffering from mental cause disorder. Various researchers might want to apply our model for dissecting sentiment from visual information. At end result, researchers need to scattered supervised and unsupervised approaches for the visual contents in different types of framework learning.

#### **V. THE REALISTIC ANALYSIS OF DATA WAREHOUSING AND DATA MINING APPLICATION IN EDUCATION DOMAIN**

To construct data warehouse and to extract the important contents and mining open source tools. This analysis than can be explained the need of data warehouse & business intelligence for an educational campus, realistic data may be used in this type of analysis for the use of experiments. In this research paper we have to find the hidden patterns from the huge amount of data for different educational campus which can be made the decision making. [3]

The different types of approaches may be used in data mining and data warehouse which may include the use of clustering and classification having large number of information. To improve decision making process which can be implemented in different form on the basis of classification & clustering data. The individual may find it difficult to access the information from the different location which can be removed.

The technique of Data mining on the basis of education campuses may involve various categories such as Manager, workers, Students and Infrastructure. The worker database which consist of information of individual users information on the basis of career growth. To provide the data of different student's information regarding his/her academic and non academic involvement. These features are designed based on psychological study and experiments. We have to study regarding all the approaches which contain the decision can be made with different types of information for the final result.

## **VI. SUMMARY AND CONCLUSION**

In this work, the paper are reviewed the research papers of social media focused on individuals subjective well-being. The trend of social media is very popular and people share their feelings on social media, provides large data related to subjective well-being. The researchers used that data to study the well-being of individuals. The higher accuracy of results and predicted outcomes was very impressive, thus gained a lot of attraction. More researchers are now attempting to get into new insights of social media analytics focusing on subjective well-being. As the data is changing rapidly, so many scientists faced different challenges such as high noise, real-time analysis of data, etc. The real-time prediction of subjective well-being from social media may be the hot topic of future research. The real-time predicted happiness of people will be shared with friends and family. Hence, it may provide a better environment as people will adjust their mood levels according to the other individuals behavior. We have to concentrate on data, which may appears frequently different image text information, screenshot of images, screen shots of text conversations. The greater range of SWB which may suggest that the many people to share the content on social sites like text messages, images and different types of emotions over the instagram and twitter with greater percentage. The analysis relates on statistical formulation of a number of things into a cluster, with a socio economic indicators measures for a whole city such as average income, average housing price, and average education level which can statistics computed from hundreds of thousands of images shared in that city.

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