

Opinion Mining: A Research in Agriculture

Nayan. S. Patel^[1]

Assistant Professor

*B. N. Patel Institute of Paramedical and Science,
(Science Division)
Sardar Patel University,
Anand - 388001, Gujarat, India.*

Dr. Dipti. B. Shah^[2]

Professor

*G.H.Patel P.G. Department Of Computer Science &
Technology,
Sardar Patel University,
Vallabh Vidyanagar – 388120, Anand, Gujarat, India.*

Abstract: more than 70% of indian population is based on agriculture profession and since independence many past governments do so many efforts for improving standard of living for agricultural people especially in rural area. But the situations of indian farmers are not improving as expected. Since last few years india progress towards digital india so now there is a need to improve the situation of farmers by applying information technology for retrieving opinions from general public especially who are engaged in agriculture profession.

Keywords- opinion mining, data mining, web crawler, word sense disambiguation

I. INTRODUCTION

Opinion mining is the field of computer science in which tools of software that analyzes people's opinions, sentiments, evaluations, attitudes, and emotions from written language. It is one of the most active research areas in natural language processing and is also widely studied in data mining, Web mining, and text mining. In fact, this research has spread outside of computer science to the management sciences and social sciences due to its importance to business and society as a whole [4].

The growing importance of sentiment analysis coincides with the growth of social media such as reviews, forum discussions, blogs, micro-blogs, Twitter, and social networks. As a result there is a huge volume of opinionated data recorded in digital form for analysis [4].

Opinions on all the world wide entities are available on the web. There are many ideas on World Wide Web about various fields like politics, sports, education, marketing, history science etc. Opinions are expressed in the form of natural language [4].

All the social media like Twitter, MySpace, LinkedIn, Face book, YouTube and many others have gained so much reputation that they cannot be ignored[1].

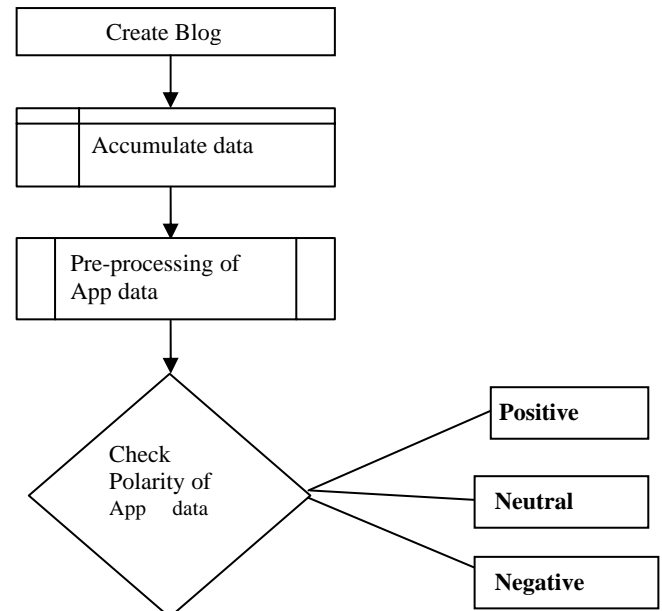
II. INTEGRATION OF ICT AND AGRICULTURE SOCIETY:

Today India goes toward digital so now there is demand of integration of our society to Information technology by web, mobile, internet etc. Today the usage of various Social networking sources like Twitter, Blogs, Whatsapp, Facebook etc. has been raised up. People from all over world express their open opinion at anytime, anywhere on any subject. Opinions are generally information, views, ideas about person, product or on anything [4]. Still maintaining authentication of an opinion or its evaluation is an issue, and that will leads to demand for implementation

of analysis. High-performance evaluation and fast processing computing systems are capable of performing evaluation of opinion or idea or sentiment of any individual. This research is directed towards opinion mining in field of the agriculture, where farmers put their opinion on any related topic of agriculture and at the same time others farmers can view and analyze those opinions. There is a need for developing alternatives of agriculture's evaluation with growing demand of digital India.

III. APPROACH FOR OPINION MINING

The following figure - 1 indicates the process of extracting knowledge from capture data. The data can be extracted through web crawler then it is to be pre processed so that can be analyzed for the knowledge purpose and retrieve the opinion in the form of positive, negative or neutral form.



IV RESEARCH PROBLEM

There is a wide scope of research in the field of opinion mining. It may be classified in long term and short term research. Presently many researches on data mining, web mining, web analytics have become really high up. For any business sector to stay active, it has become necessary to make judicious decisions based on a tremendous amount of data from ample of sources. But the quantity and quality of data available from web sources such as blogs, social

media and discussion forums are copious with sentiments, opinions; therefore, current research is directed towards the area of opinion mining [1]. In a current scenario government put lots of scheme for agriculture like Rashtriya Krishi Vikas Yojana, Pradhan Mantri Krishi Sinchayee Yojana, Watershed Development Projects etc. But the problem is still farmers of remote area is not satisfied with current scheme in spite of spending crore's of rupees. Our research is directed towards given problem in which blog or web site pass information of various schemes and users or farmers put their opinion with the help of ICT technology.

Evaluation of opinion mining is not an easy task mainly for two reasons. First, opinions are often subjective, and it is not always clear what was intended by the author. Second, it is usually hard to evaluate polarity such as the ones we produce for words when we do not have the whole context of the sentence the specific words were included in. Furthermore, we must note that sometimes the people write an opinion in Weblogs that is not theirs and they are just reproducing the opinion of others. In order to properly evaluate this kind of opinion it is important the authors to mention the source of the original opinion [2].

There may be some limitations in a field of given research. The accuracy can be increased if there is included some WSD (Word Sense Disambiguation) program with this approach, so that the exact sense of each term can be Identified and exact synset score can be taken. Furthermore, the framework has been only applied to a specific blog. In order to better benchmark it, it must be applied to other agricultural blogs also [2]

V CONCLUSIONS

The discussion given in this paper has briefly overviewed our current technology for sharing of information of agriculture complaints and their solutions to a predefined manner. Analysis of this information can be useful to farmers as well as government also. This research also point out scheme maker to find out problems of end users that they are unaware of and tell them how serious these problems can drop merits of government schemes. So in concluding statement we say that there is high demand of integration of ICT and agriculture in India for optimum utilization of government schemes, money, and time.

ACKNOWLEDGEMENT

We would like to thank Prof. Dr.C.K.Patel Sir Director of B.N.Patel Institute of Paramedical and Science for giving us an opportunity to work and provide us a helping hand. We would also like to thank C.U.Shah University for encouraging us in such a research activities.

REFERENCES

1. Rushabh Shah and Bhoomit Patel " Procedure of Opinion Mining and Sentiment Analysis: A Study"
2. "StavrosValsamidis*a,Theodosios Theodosioua, Ioannis Kazanidisa, Michael Nikolaidisa"A Framework for Opinion Mining in Blogs for Agriculture.
3. "Samhaa R. El-Beltagy*, Ahmed Rafea_, Said Mabrouk_ and Mahmoud Rafea "An Approach for Mining Accumulated Crop Cultivation Problems and their Solutions".
4. "Nayan S Patel and Dr. Dipti B. Shah :“Mobile Computing Opinion Mining and Sentiment Analysis”.