## A LITERATURE SURVEY ON RECOMMENDATION SYSTEM BASED ON SENTIMENTAL ANALYSIS

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## **ABSTRACT**

Recommender systems have grown to be a critical research subject after the emergence of the first paper on collaborative filtering in the Nineties. Despite the fact that educational studies on recommender systems, has extended extensively over the last 10 years, there are deficiencies in the complete literature evaluation and classification of that research. Because of this, we reviewed articles on recommender structures, and then classified those based on sentiment analysis. The articles are categorized into three techniques of recommender system, i.e.; collaborative filtering (CF), content based and context based. We have tried to find out the research papers related to sentimental analysis based recommender system. To classify research done by authors in this field, we have shown different approaches of recommender system based on sentimental analysis with the help of tables. Our studies give statistics, approximately trends in recommender structures research, and gives practitioners and researchers with perception and destiny route on the recommender system using sentimental analysis. We hope that this paper enables all and sundry who is interested in recommender systems research with insight for destiny.

## **KEYWORDS**

Recommender systems; Literature review, Sentimental analysis

## 1. Introduction

We currently live in an era of information. We are surrounded by a plethora of data in the form of reviews, blogs, papers and comments on various websites. The number of people around the world who use the internet has witnessed an increase of approximately 40% since 1995 and reached a count of 3.2 billion. The increased information flow has opened more avenues, but it has also led to added confusion for the user. Amidst this huge amount of data, the task of making certain decisions becomes difficult. It is rightly said that one should make an informed decision, but too much information can also hinder the decision-making process. Thus, in order to save a user from this confusion and make the experience of surfing the internet a pleasurable one, recommender systems were introduced. Francesco Ricci, LiorRokach and BrachaShapira define the recommender systems as software tools that make relevant suggestions to a user [1], [2]. Depending upon the user profile and the product profile, which are formed using various techniques and algorithms, suggestions are made. More than 32% of consumers rate a product online, over 33% writes reviews and nearly 88% trust online reviews [14]. Thus, reviews play an essential role in affecting the sales of a commodity or a service. Each review posted on the web consists of the user's sentiments (positive or negative) and preferences. Sentiment analysis helps in determining the attitude of the writer by computationally dividing opinions in a piece of text into positive, negative or neutral [11]. Extracting the sentiments in reviews can largely contribute to the quality of the recommender system by incorporating in it valuable information present in the reviews and also help in the understanding that how a particular review affects the consumer DOI:10.5121/acii.2016.3103 25