

FAKE REVIEW MONITORING SYSTEM

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Abstract

As most of the customers buy their product based on the review of the products. In such cases people go through with the rating or review of the products while observing those, people may not be able to find whether the report is real or fake. Some companies exhibit their own review for the demand of product and company rating purpose. To resolve this problem to find out fake review in the website this “Fake Review Monitoring” system is introduced. This system includes with verification process of reviews by the reference of IP address and then separate them into spam and non-spam reviews.

Keywords-*Fake, Review, Products, Online, Shopping, Genuine, Proper, Ratings*

1. INTRODUCTION

One of the very rapid growth areas is ecommerce. Generally, e-commerce provide facility for customers to write reviews related with its service. The existence of these reviews can be taken as a source of information. For examples, companies can use it to make design decisions of their products or services but unfortunately, the reviews becoming most misuse part at certain stages, as these reviews aimed at both popularities raising of a product and quality less product. They share their thoughts on internet.

Before purchasing anything, it is a normal human behavior to do a survey on that product. Based on reviews, customers can compare different brands and can finalize a product of their interest. These online reviews can change the opinion of a customer about the product. If these reviews are true, then this can help the users to select proper product that satisfy their requirements. On the other hand, if the reviews are manipulated or not true then this can mislead user. This boosts us to develop a system which detect fake reviews for a product by using the text and rating property from a review. The honesty value and measure of a fake review will be measured by using the data mining techniques. An algorithm could be used to track customer reviews, through mining topics and sentiment orientation from online customer reviews and will also blocked the fake reviews.



Fig: The Process of Product Review Analysis.

2. LITERATURE SURVEY

It is very difficult to detect reviews whether it is fake or genuine. In order to increase or decrease the sales these fake reviews place an important role in less amount of time. There are three types of reviews that we can observe-

A. Opinionated false reviews: - Opinion based reviews makes lot of difference in the sales of products.

- Positive reviews: -In order to increase the sales of the products by providing the false reviews is simply called as positive reviews.
- Negative reviews: -These types of reviews are posted in order to spoil the sales of the product which regrets the company reputation.

B. Reviews on brands only: - These reviews are not regarding the actual product but affects the company's reputation. These may not help the quality sales of the product.

C. Non reviews: - These reviews are not even eligible to be called as reviews as they are not resembling the product itself. There were some systems earlier developed to tackle the problems of fake reviews,

- Detection of spams using ratings behavior: - While detecting spams, it's need to look at behavior of the ratings, there is an option of spammers spamming the product for no reason, even for no issues raised, at this the rating might be at rescue.
- Spotting a group of fake reviewers: - In this spotting the IP address is mainly used to find out the group of fake reviewers, if a greater number of reviews posted to same product are also considered as spam, as they could be posted to degrade the product sales.
- Online reviews manipulation: -If ratings are in numeric or textual manner, it can be easily captured by spammers, therefore it is need to change the reviews in graphical manner to determine the good and bad in the reviews along with Genuinity.

The system will include some methods like,

- Understanding deviated reviews: - The reviews will make a product to continuous growth but suddenly drop into negativity is simply occupying a deviation in the reviews from the normal reviews.
- IP address detection: -which will make a help to Admin to know that the reviews are from valid users or from any other fake users.
- Sentiment analysis: - It is very important for system to verify whether the review is genuine or fake i.e., positive or negative which will further help to the deviation in the reviews. Even though some reviews are spammed these may not affect the whole reviews towards the product.

Steps:

1. The ADMIN should login and have their respective authorization in system.
2. The USER can login anywhere or anytime once registration process was done.
3. The posted reviews will undergo the process of sentiment analysis, IP address track, and its deviation from overall review analyzed.
4. If any miscalculation is found in the reviews which are analyzed, are then handled by the system admin only.

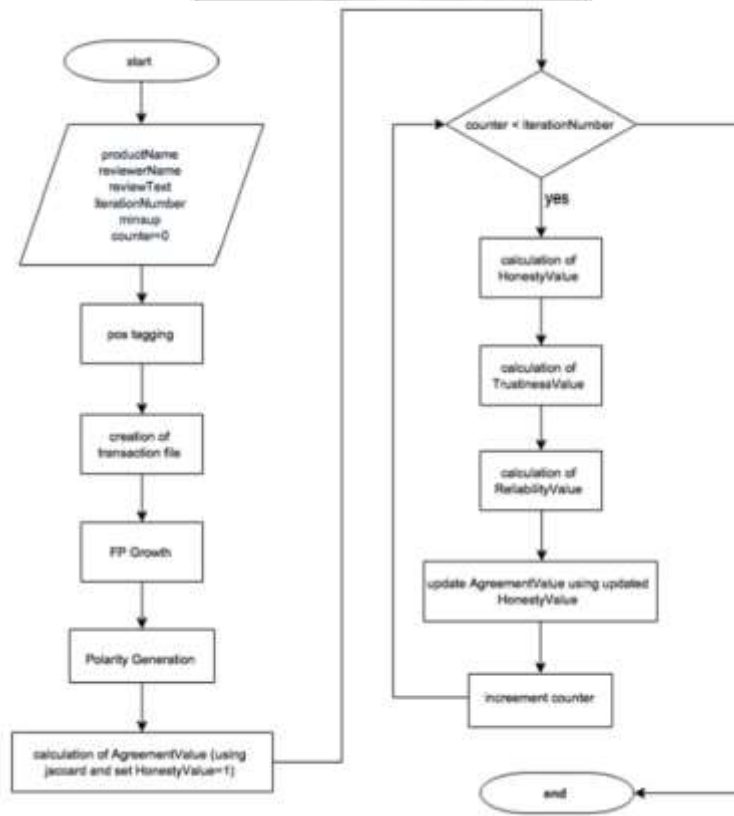
3. ITERATION MODEL

The rapid growth of the internet influenced many of our daily activities. One of the very rapid growth area is e-commerce. Generally e-commerce provide facility for customers to write the related reviews towards the product.

Here the Honest value of a review, the trustiness value of the reviewers and the reliability of product will be measured by utilizing the data mining techniques.

The result from the experiment shows that the proposed system has a better accuracy compared with the result from Iterative Computation framework (ICF) method.

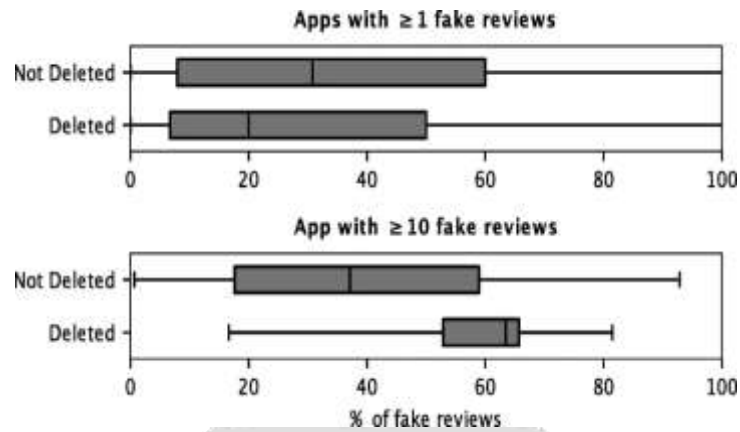
Iteration Computation Framework:



4.FUTURE WORK

The restriction of requirement of product name in particular product review can be removed though it might be a tough task. The admin has to manually block the IP of the spammer account by identifying its pattern, automatic blocking can also be achieved in the future scope of the system.

Apps with fake reviews are on average three times less offered as paid, when compared to the regular apps. Developers may invest their money for buying fake review. So that we need to analyze the monitorization of apps in the fake review data set.



5. CONCLUSION

Our software will help the user to pay for the right product. Our software will do analysis and then if any fake review is found from any IP address consistently then admin will block the IP address. In this way it monitors the fake review made on any product. And user can be sure about the products availability on the application and reviews too.

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