Precog Task 1: Paper Report

Daksh Thapar (2018137)

Paper Name- How Community Feedback Shapes User Behavior
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This research paper talks about the cognitive effect of rating mechanisms corresponding to various social media platforms on communities and creators of social media content. The authors have hypothesized a concept based on the roots of Behavioral psychology: negative feedback results in a stimulus of 'punishment' whereas positive feedback results in a stimulus of 'reward'. In theory, this would imply that content with negative feedback would help improve the quality of content for the creators, and good content would get positive feedback which would motivate creators to create even better content and increase frequency of posting and content creation. The aim of this paper is to verify this hypothesis using an approach based on Community feedback on social media platforms, by analysing the upvotes and downvotes of posts in 4 communities.

The authors conducted an experiment where they gave a sample of people a pair of upvotes and downvotes to decide which is the most effective method to rate posts. This experiment showed that taking the ratio of upvotes to the total votes is the best metric. If I were to improvise, I would also take into consideration the existing posts on the same topics (or tags) and then compare the ratio of upvotes or popularity counts using views.

The authors also conducted a study to quantify the quality of social media posts. They trained an ML binomial regression model, where the output has a binomial distribution to predict the quality of posts. This approach contained only text (trained) to test the quality and then manual labour to verify the quality of the same text; this manual input led to a considerably small sample size of posts for training (num=171). In my view, we can improvise on this approach by taking the category of the post or its most related tag, and the user data of users who are reliable sources of rating their quality previously and comparing their popularities to compare their qualities. We can also take only those posts with a comparatively high upvote ratio to remove any community bias or partiality in terms of manually determining the quality of posts.

Another study was based to analyse the effects of Community feedback on posts. For this, posts of comparable quality but varying evaluations were taken and then posts of these authors were used to compare the qualities to see the role of bias among authors. The results showed that the positive feedback didn't have much effect on the subsequent posts from the same user whereas the negative feedback statistically led to higher probability of worse posts in the future and increased frequencies.

In my opinion, we can expand and improve these studies of analysing feedback using the ratings and upvotes by also analysing the textual feedback provided by other users in the comments section. We could also take into consideration only those users for feedback who have historically and statistically given more appropriate feedback to previous posts on these platforms, that would ensure reliability of feedback and eliminate the need for manual work of feedback, and thus increase the sample size for posts for better results.