Peer Recognition Increases Content Generation but Reduces Content Novelty

Platforms that depend on user-generated content spend a great deal of effort crafting policies and mechanisms that can yield a steady stream of useful content. In this work, we consider the effects of awards offered by peers, a feature that platforms often provide to enable users to recognize the quality of peers’ contributions. We set out to conduct a large-scale field experiment on Reddit, one of the biggest social news aggregation and discussion platforms in the world, evaluating the effect of peer recognition on content generation as well as content novelty. Leveraging the plentiful textual content and its innovative peer recognition mechanism, Reddit Gold, we purchased and then randomly assigned Reddit Gold to approximately 900 posts on Reddit, anonymously, over the course of two months. Collecting and analyzing users’ behavioral trace data and content postings in the post-treatment period via Reddit’s API, our results first suggest that users increase their content production upon receiving peer recognition. Interestingly, however, the content that users post becomes more similar to their awarded content, and thus declines in its novelty. And this result is consistent across different text mining measures of content novelty, including TF-IDF, Latent Semantic Analysis, as well as Doc2Vec. We conclude that peer recognition is a double-edged sword. On the one hand, peer awards do indeed foster increased engagement and content production among users, but the additional content that results is less novel than content that arrives in the absence of recognition.