

Community Recommendation Engine Experiment

Introducing a community-based recommendation engine to the movie rental platform will positively impact user engagement and movie rentals. By leveraging community preferences and interactions, the **recommendation system aims to enhance user satisfaction and increase the number of movies rented.**

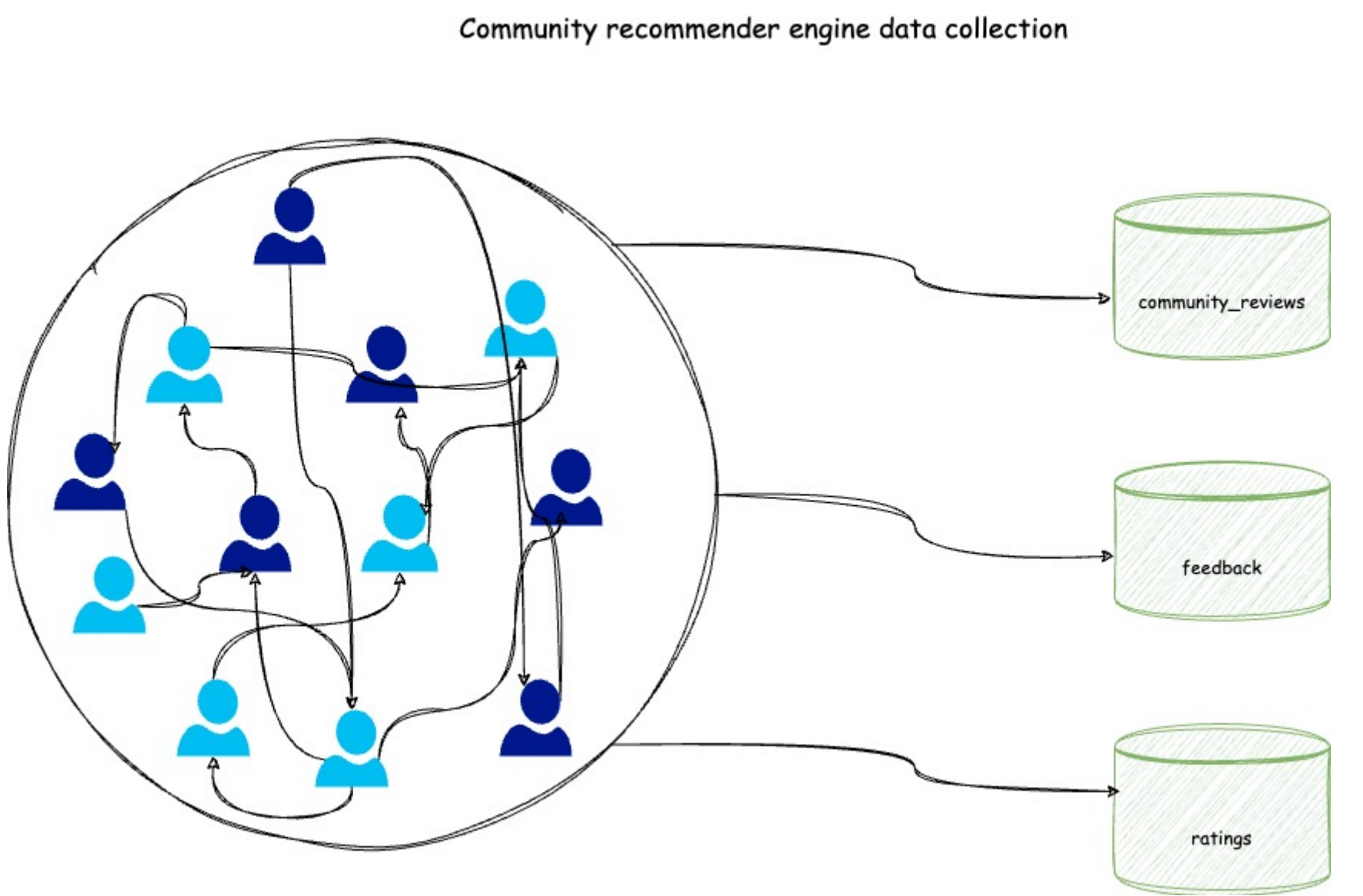
The community recommendation engine takes into account explicit community features and interactions; for example, a user influencing another user; involves a user interaction through community ratings, reviews, discussion, social features, and other collaborative activities.

Experiment Design

I would prefer to make two groups of people,

1. People using existing recommender engine to get recommendations
2. Allow diverse-minded people to build a community among themselves, influence other users, and make some suggestions for movie

Community-based recommendation



1. Based on the interaction in the community one can collect data like ratings, reviews, feedback, experiences, etc. We will try to capture explicit and implicit feedback from the community users
2. We should track the user's participation in the community interaction and measure the depth of interaction, which essentially means similarity/dissimilarity among users.
3. We should also keep track of the number of movies rented/purchased in these two groups, and collecting additional information like rental duration, subscription, etc. would help us to keep track of the profit we are making from a legacy recommender engine v/s community recommender system

A community-based recommender engine's performance also depends on the trust and reliability of the system, allowing users to provide ratings and reviews for the movies while making a recommendation prioritizing reliable those from users with a history of providing reliable feedback.

Evaluation Metrics

1. Community Participation Rate: Percentage of users engaging with community features.
2. Community Interaction Depth: Average number of interactions per user per week in community discussions.
3. Movie Rental Metrics:
 - a. Total Movie Rentals/Purchase: Number of movies rented/purchased by users in both groups
 - b. rental duration: Average duration for which movies were rented
 - c. Monitory benefits: Percentage of community interactions resulting in movie rentals/purchases, also a percentage of retained users
4. Qualitative feedback collected from the users in community interaction