Recipe Recommender Assignment EDA

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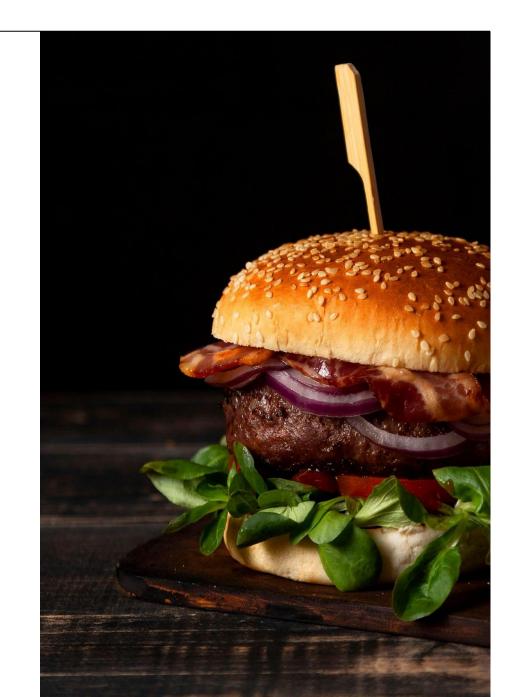


Objective

To design and implement a robust recommender system for food.com that enhances user engagement and drives by providing revenue personalized recipe recommendations based on preferences and user browsing behavior.

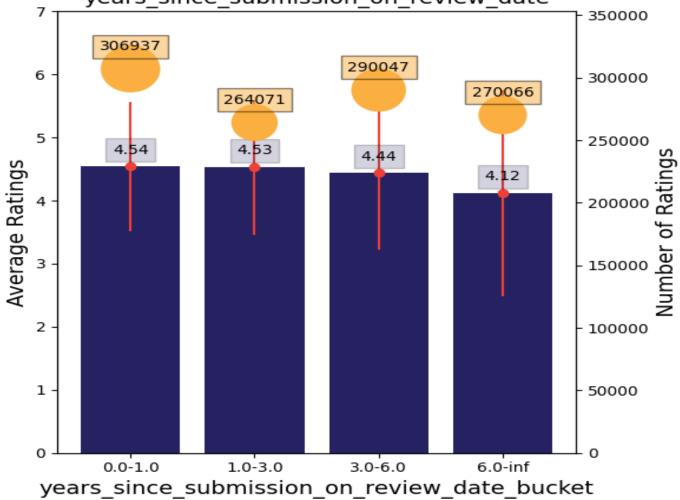
Key Points

- 1. **Enhance User Engagement:** By recommending relevant recipes, we aim to increase the time users spend on the website, leading to higher engagement levels.
- 2. **Drive Revenue Opportunities:** Improved user engagement can result in more business opportunities such as collaborations, promotions, and partnerships, ultimately driving revenue growth.
- 3. **Importance of Recommendation Engine:** Recognizing the pivotal role of a recommendation engine in shaping user experience and impacting revenue generation.
- 4. **Time Efficiency:** Acknowledging the time-consuming nature of building a recommender system from scratch, emphasizing the need for efficient exploration of data and feature creation.
- 5. **Focus on Data Exploration:** Emphasizing the importance of thorough data exploration to identify relevant features and insights crucial for building an effective recommender system.



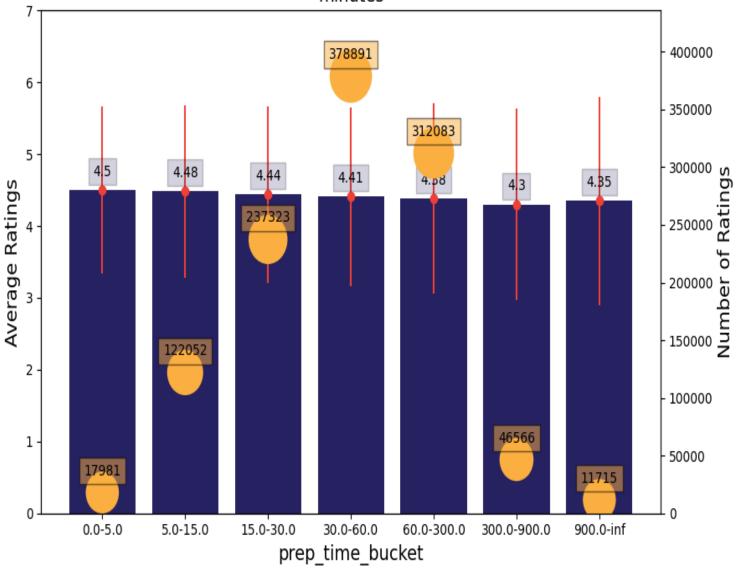
EDA

Bucketwise average ratings and number of ratings for years_since_submission_on_review_date



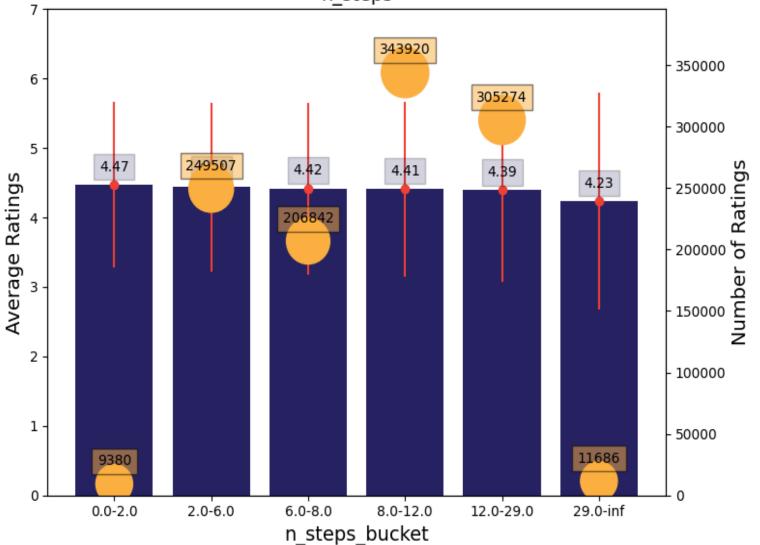
- It appears that the average rating tends to be slightly lower for reviews submitted more recently (0 to 3 years).
- However, the number of ratings is also significantly higher in these buckets, so it is possible that these reviews are from more active users.

Bucketwise average ratings and number of ratings for minutes



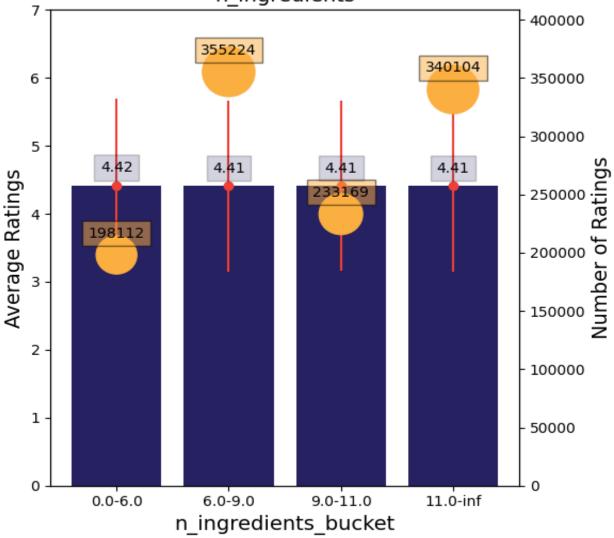
- There seems to be a trend where the average rating is slightly higher for interactions with longer preparation time (greater than 30 minutes).
- The number of ratings is also significantly higher for shorter preparation times (less than 30 minutes).

Bucketwise average ratings and number of ratings for n_steps

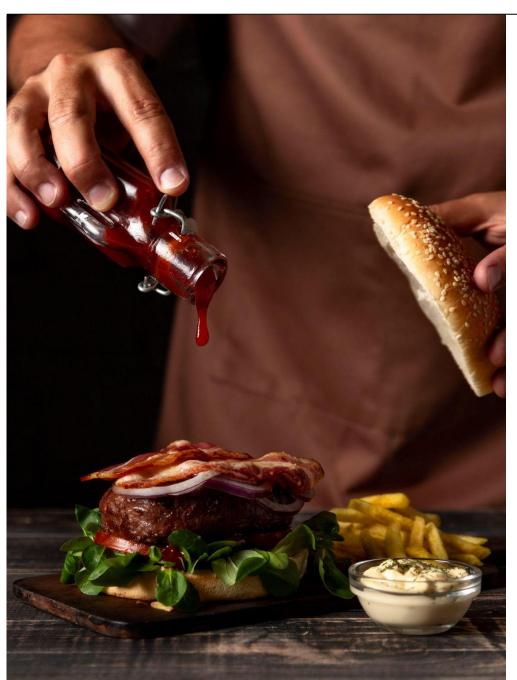


- The average rating seems to be fairly consistent across all ranges of n_steps.
- The number of ratings is significantly higher for interactions with fewer steps (less than 8).
- There appears to be a steady decline in the number of ratings as the number of steps increases.

Bucketwise average ratings and number of ratings for n ingredients



- The average rating appears to be slightly lower for recipes with more ingredients (greater than 6).
- The number of ratings is significantly higher for recipes with fewer ingredients (less than 6).



Outcome

A well-designed recommender system that leverages user preferences and browsing behavior to provide personalized recipe recommendations, contributing to increased user engagement and revenue generation for food.com.



Thank You!

