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Restaurant Market Basket Analysis
BrainStation



The aim of this project is to use market basket analysis to provide insights into the Indian restaurant transactions. With an understanding of what customers are buying and finding the relationship between order items, we can differentiate ourselves from the competition and make better decisions.

My main intent is for the marketing team to use this information to guide their promotional strategies with ease and to create a better experience for the customers.

We will be using data that is publicly available on the Kaggle website to complete this work.

Project Summary 01



Market basket analysis shows what combinations of products most frequently occur together in orders. Some insights we were able to gather include:

- Re-evaluate keeping prawn dishes on the menu as the small number of orders may cut into the business cost.
- Promote items during peak hours, 5-8pm
- Focus on combinations with measures of high support and high confidence. Combinations that have a lift higher than 1 can also be significant.

Project Summary 02



There's still some work we can do to do. I'd be interested in exploring the following point as next steps to this project:

- 1. Apply this technique to the restaurant data we have from our competitor to see how we compare and how we can improve.
- 2. Collaborate with the marketing department to explore the effectiveness of past campaigns.
- 3 and 4. Apply model to current data and test the model with other algorithms (such as Eclat and FP-growth).
- 5. Curious to explore ways we can account for items that are bought more than once. For example, are there any implications of a customer placing four orders of garlic naan versus two?
- 6. Categorize the items based item category and diet preferences.
- 7. Create an interactive dashboard for the marketing team

Project Summary 03