

1 Problem Statement

In this project, you will be analyzing a coffee shop's transaction data in order to improve their customer experience, analyze expenditures, and target customers for the rewards program. You will start by exploring the data and identifying any patterns or trends. From there, you will perform regression analysis to determine factors that influence customer wait times and expenditures.

Based on your analysis, you will recommend improvements to the coffee shop's operations and customer experience. You will also develop strategies for targeting customers for the rewards program based on their spending habits and preferences.

Overall, this project will provide you with a hands-on opportunity to apply regression analysis and data visualization skills to real-world data, while also developing insights that can help a coffee shop improve its business.

2 Data Description

transaction_id unique identifier for each transaction

age age of the customer making the transaction

income income of the customer making the transaction

sex sex of the customer making the transaction

rewards_member whether or not the customer is a rewards program member

occupation the occupation of the customer making the transaction

num_items number of items purchased in the transaction

purchase_method method of purchase (e.g., cash, credit card)

wait_time time spent waiting in line before making the transaction in minutes

purchase_amount total purchase amount of the transaction in USD

store_location location of the store where the transaction took place

transaction_time hour when the transaction took place

day_of_week day of the week when the transaction took place