

Two Six Capital Candidate Data Challenge

Overview

This data challenge is an abbreviated version of the data and questions we face in our private equity deals. Our goal is to understand how you interpret and address open-ended business questions using data.

Questions

Please address each of the following questions in your analysis:

- 1. Is the business improving or deteriorating?
- 2. Are there regional differences in the business?
- 3. Is there seasonality in customer behavior?
- 4. Is customer quality getting better or worse over time?

Other business questions, although interesting, are outside of scope for this challenge.

Data

The file data challenge transactions.csv has 5 columns:

- transaction date transaction date in Month/Day/Year format
- user unique customer identifier
- amount gross revenue, i.e., how much a customer spent
- join date date of a customer's first purchase
- region geographical region where the transaction was made

Deliverables

- 1. A report with responses to the above questions. The report should be <u>no longer than 3 pages</u>, figures inclusive. Please include an executive summary (bullet points) with your major findings at the beginning of your report. This report should not include any code.
- 2. A file with the code you used to complete the task. Examples of acceptable formats include .txt, .R, .Rmd, .py, and .ipynb. Feel free to use any languages or tools; R or Python is preferred but not necessary.

Guidelines

- Expect to spend no more than 8 hours on this data challenge.
- It is recommended that you spend some time on data exploration and cleaning.
- Document your approach, including data manipulation, assumptions, and analysis. Explain why you made the decisions and any shortcomings, if helpful.
- There may be multiple metrics or approaches to answer a question; prioritize the ones you find most relevant.
- Figures can be insightful; please apply appropriate formatting to make charts intelligible.
- Please include commentary on how your findings could influence decision-making by the business or an investment team evaluating the business.