J.P. Morgan Chase & Co. provides payment processing products to businesses. Our focus here is small-to-medium sized businesses (less than $20M annual revenue).

What are payment processing products? These products include any payment systems that merchants use to conduct credit card transactions (for example, Point-of-Sale terminals, wireless card readers, etc. You can find more information on our products at: <https://www.chase.com/business/payments>

One of the big focus area for SMB Marketing team is to improve attrition among our existing customer base. Attrition is measured in two ways

1. Hard Closure – a customer closing their account explicitly (excluding any fraud related reasons for closure)
2. Soft Closure – a customer has a account in active status but has not been actively using the product for credit card transactions in the last 4 months or more.

We will be sharing the following data for a list of US based customers (without any identifiable information)

1. Monthly transactional history
2. Business firmographics
3. Some JPMC specific attributes
4. Indicator if the business has a hard closure or soft closure

Analytic Path and Objective

1. Review the dataset and ask questions
2. Derive and transform variables if it is helpful
3. Identify variables (feature, attributes, signals) that can significantly explain the impact on hard closure and soft closure
4. Quantify the relative impact of each attribute that matters (rank them)
5. Develop the final model with the identified attributes/signals that can predict hard closure and soft closure separately.
6. Follow any approach and if possible create meaningful groupings of merchants that have higher probability to attrite, profile them and share recommendations
7. Build a business-friendly presentation
8. Final presentation with the SMB Marketing leadership

Analytic Methodology

You are free to make assumptions and to speculate as the project progresses. We will be free to answer your questions as you go and will also be available for milestone meetings.

There are no restrictions on the statistical/analytical approach, in fact, you can apply any (or multiple) approaches for your analysis. You can use any software, programming language or visualization tool.

The Business-Friendly Presentation

1. Analyze the data and deliver a thoughtful and actionable 30-minute presentation to an audience of both analytic and non-analytic leaders
2. The presentation should include your understanding of the problem, thought process, assumptions taken, approach (statistical techniques used), insights and final recommendations
3. Please submit your code along with the presentation.