

**Strategic Analytics Candidate Challenge**

**Overview**

Perpay operates an ecommerce Marketplace where users can buy goods and pay for them over time in the form of an installment loan. New users sign-up for Perpay and are given access to browse the Marketplace. From there, a user will move along the loan application funnel to ultimately become a borrower. The steps of the application are:

❖ Start a loan application by checking out on an item(s)

❖ Complete an application by providing some identifying information

❖ Approval/Denial of the loan application

❖ Set up a payroll direct deposit based on the agreed terms of the approved loan application

❖ Loan enters repayment after the first direct deposit payment has been made and the item(s) will be shipped

**Challenge Description**

Using the provided **loan** and **user** datasets, please address the following:

❖ Profile the user and loan data included in these datasets

❖ Propose a set of metrics that can be used to monitor and improve the loan application funnel

➢ What insights do these metrics provide about the funnel?

➢ Would you propose taking any actions, or researching any other issues, based on this data?

❖ Do these datasets seem to agree with one another? Is there reason to be suspicious of the quality of the data?

❖ How many loans enter repayment within 15 days of approval?

❖ Are there any other findings that you found interesting?

**Challenge Deliverables**

Using whatever analytics resources (SQL, Python, R, Excel, etc) you feel comfortable with, please provide a brief slide deck addressing the topics listed in the challenge description. The audience for this deck is an Analytics or Product Manager looking to understand if they should make changes to the loan application funnel. Please provide any code or workbooks you used to arrive at your answers.

Good luck!!