

Greenlight Planet collects data on each payment made by its customers. Those payments are compiled in Looker™ in the Portfolio\_derived "view" which is equivalent to a table in relational databases. An extract of this table is provided.

Details about each customer and the repayment agreement for the lamp bought is compiled in the Accounts "view" for which an extract is also provided.

When purchasing a lamp, a customer pays a deposit ("upfront\_price") and is thereafter expected to make a certain agreed upon daily payment ("price\_per\_day") until the price of the unit is paid in full ("total\_price") after the repayment period has passed.

An important metric we look at is the Follow-on Revenue Realization (FRR), which is the percentage collected out of the total cost of the unit <u>remaining after the deposit has been paid</u>.

Your manager asks you to analyse data and prepare a powerpoint presentation to explain to the head of the sales department for all of Africa what the Data team is looking at. He gives you the following instructions, each one should be presented on its own slide:

- 1. Write and present the formula that allows you to build the FRR
- 2. Write and present the SQL query that allows you to calculate the FRR. You are welcome to use <a href="http://sqlfiddle.com">http://sqlfiddle.com</a> to test the query and join the resulting link in your response.
- 3. Present the collection performance in each Area in which sales are being performed as of the most recent data available.
  - a. In one slide, present options that can be used to measure the collection performance, the one you choose to use and the rationale behind it
  - b. In one or two slides, present and compare the performance between the areas.

In order to improve the performance of our accounts, a Call Center has been put in place to contact customers who are failing to repay, and try to convince them to continue repaying their lamp. The data of the calls made can be found in the "call\_center" view. You manager asks you to include the following analysis to the presentation:

- 4. On one to three slides, analyze and present the impact of the calls performed by the call center on the collection performance.
- 5. We consider a call to be successful if a payment was made within X days of call. Can you figure out a suitable X from the data? (Support your hypothesis with possible visualization)

Ensure that your presentation is clear for a non-technical audience and would keep them interested throughout.