Prompt (Work Items)

Imagine that you've been contracted by a small online business, Quilty, to help them report on sales trends. Quilty delights their customers by delivering beautiful handmade quilts at an affordable price. The two dozen varieties of offered quilts vary in size, color, pattern, and price.

Quilty's owners recently decided that their hastily thrown-together payment system was no longer sufficient to support the growth of the company, so they decided to switch to [Stripe](#) as their payment processor. In making this switch, the owners of Quilty hope to provide a better purchase experience for customers, eliminate manual work in payment processing, and expand reporting capabilities.

Up until this point, Quilty's sales data has left much to be desired. All sales transactions are recorded on a piece of paper, until the end of each week when the owner has time to enter the weekly sales totals in a Google Sheet that is used for revenue reporting.

1. In a Google Doc, write an email to Quilty's owners describing, *in business terms*, the additional reporting capabilities that would be made available by Stripe's data.
2. Make a recommendation on what should be done with the old revenue reporting process. Should Quilty stop manually recording transactions? Should Quilty delete the Weekly Sales Google Sheet and drop the historical data from the warehouse?
3. Wireframe a chart/report/dashboard that previews the additional insights that Stripe data enables.

Write a paragraph or two reacting to the provided resources from this week's content arguing for and against dimensional modeling

Dear Quilty Owners,

I hope this email finds you well. As discussed in our recent meeting, I have researched the additional reporting capabilities that Stripe can offer your business.

Firstly, Stripe will provide you with detailed information on the payment methods used by your customers. You will be able to see how many payments were made using credit cards, debit cards, or other payment methods. This information will help you to better understand your customers and their payment preferences.
Secondly, Stripe will provide you with detailed transaction information such as the date, time, and location of each transaction. This will allow you to see when and where your sales are happening and enable you to identify any patterns or trends.

Lastly, Stripe provides reporting on chargebacks and refunds. This information will help you to understand how many customers have disputed a transaction, and why, so you can take steps to reduce the risk of disputes in the future.

Also based on the limitations of the old revenue reporting process, I would recommend that Quilty stop manually recording transactions and rely solely on the new system that incorporates Stripe.
The old method of recording transactions is not ideal for several reasons. First, it is prone to human error, as it requires manual data entry and calculation. This can result in inaccuracies in the revenue reporting, which can lead to incorrect business decisions.
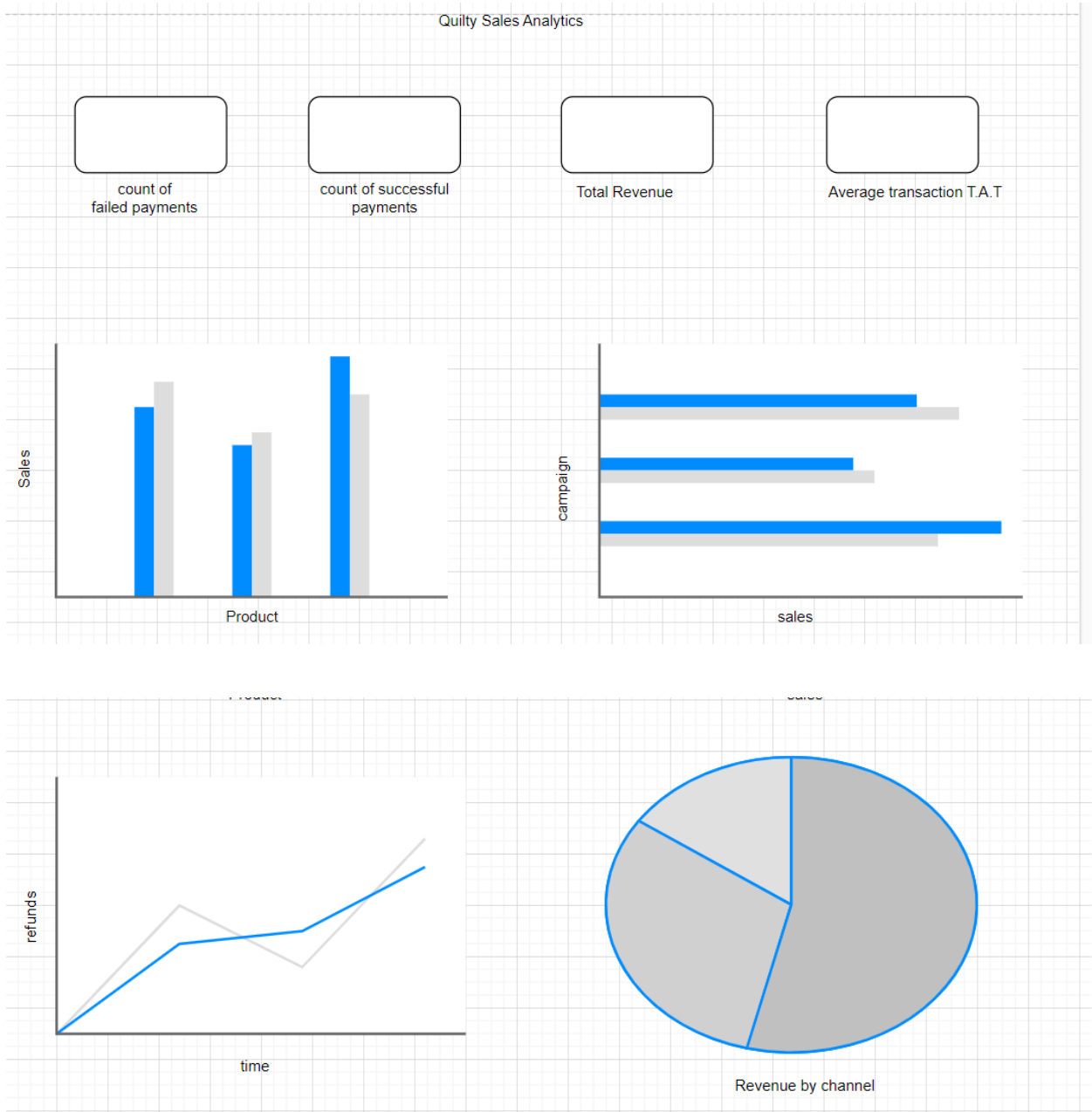
Secondly, the old system is time-consuming and inefficient. This manual process is laborious and can result in delays in the reporting of revenue, which can hinder the ability to make timely business decisions.

Finally, the old system is not scalable. As Quilty continues to grow and expand, the volume of transactions will increase, making it increasingly difficult and time-consuming to manually record and enter each transaction into the Google Sheet.

Therefore, I recommend that Quilty stop manually recording transactions and rely solely on the new system that incorporates Stripe. This will ensure that revenue reporting is accurate, timely, and scalable, which is crucial for the continued success of the business.

Please let me know if you have any questions or concerns.

Best regards,

Quilty Sales Analytics

count of failed payments	count of successful payments	Total Revenue	Average transaction T.A.T

Sales / Product

campaign / sales

refunds / time

Revenue by channel

Bonus 1:

When comparing dimensional modeling to other approaches like a single flat table, I still lean towards a hybrid approach that takes the best of both worlds. While a single table approach may work for simple datasets, it can quickly become unwieldy and difficult to maintain as the data grows. On the other hand, dimensional modeling can provide clear hierarchies and relationships between entities, making it easier to analyze complex datasets. However, it can also add complexity and require additional effort to build and maintain. Therefore, I think it's important to consider the specific needs of the project and strike a balance between simplicity and complexity. A hybrid approach that utilizes dimensional modeling for certain entities and a flatter structure for others may provide the best of both worlds.