Analytics Challenge

Introduction

We have launched a new product called GeldBoost which allows customers to receive offers to increase value of their incoming banking transactions (by buying a higher value gift voucher whenever they receive money).

How Does It Work?

- Users must sign up and connect their bank accounts to GeldBoost
- When a user receives an incoming transaction in their bank account, an offer is generated by the product
- The user can use the offer to convert some of the money from their incoming transaction into a higher value voucher
    - Clicking on an offer generates a "payment job"
    - Purchasing a voucher using an offer generates a "transfer job" and closes the "payment job"

The Challenge:

Part 1 – Visualizations and Insights

Management has asked the following business questions relating to Geldboost:

1. What is the user base growth over time?
2. What is the login pattern of users? Can you differentiate between active and inactive users based on this?
3. Is there a trend to number and volume (offer amount) of opened Payment jobs (offer clicked) vs closed payment jobs (bought vouchers)?
4. Can you connect all the above and **tell a story** about the user journey from user registration to buying a voucher? Feel free to use more data points to fill in any missing pieces.

Inside the folder titled Part 1, you will find two datasets on our **users** and the **offers** they have received:

1. users.xlsx: Each row contains different fields relating to each user
2. offers.xlsx: Each row contains information about an offer sent to a user. Each user can receive multiple offers.

Key Deliverables:

- In answering the questions above, could you build a dashboard in Power BI?* *We are not expecting a fully-fledged dashboard, with all the bells and whistles that a normal dashboard might have. We encourage you to showcase your skills in distilling complexity and utilize visualizations that tell a story, that is easy to understand for a stakeholder that may not be data-literate.*

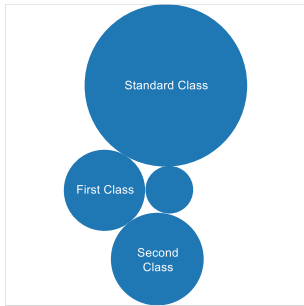- A brief executive-friendly presentation to supplement your designed dashboard and provide further context.

*It would be great if you could use Power BI for this task, but if not, feel free to use any other Visualization tool.
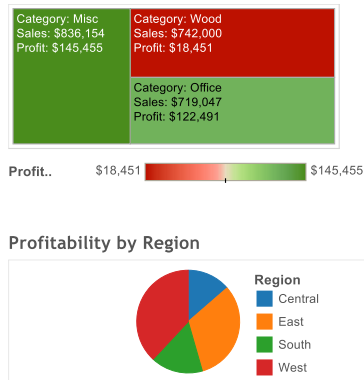
Part 2 – Dashboard Design

In anticipation of a critical board meeting, our Head of Finance tried their hand at building a dashboard. This is the result. In your opinion, what does not work well in this dashboard? How would you improve the design of this dashboard? Provide comments on the choice of charts, and whether they assist or detract from understanding the underlying KPIs.
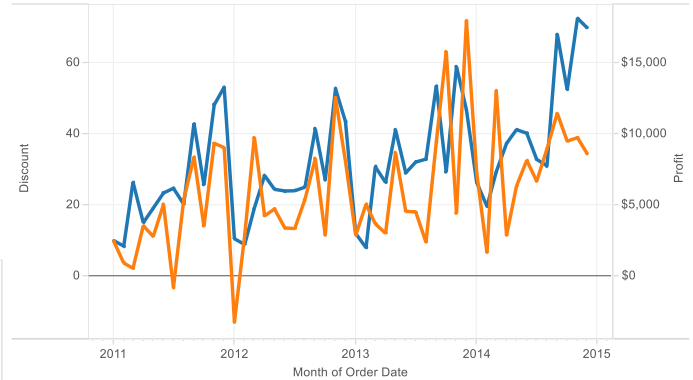
Performance Dashboard

Quantity Shipped by Ship Mode
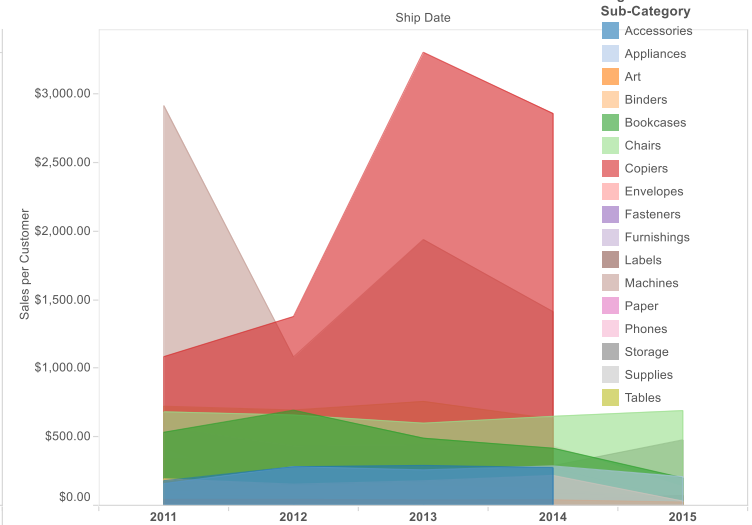

Tree map of Profit and Sales

Category: Misc
Sales: $836,154
Profit: $145,455

Category: Wood
Sales: $742,000
Profit: $18,451

Category: Office
Sales: $719,047
Profit: $122,491

Profit.. $18,451 $145,455

Profitability by Region

Region
- Central
- East
- South
- West

Profit and Discount Over time

Sales forecast by region

Region / Category

Sales Per customer by Sub Category

Ship Date

Legend
Sub-Category
- Accessories
- Appliances
- Art
- Binders
- Bookcases
- Chairs
- Copiers
- Envelopes
- Fasteners
- Furnishings
- Labels
- Machines
- Paper
- Phones
- Storage
- Supplies
- Tables

Part 3 – Visualizations and Insights

Our Head of Product is responsible for increasing the number users with a successful bank connection. They are interested in understanding the user journey towards a successful bank connection and have the following questions.

1. What are the key features for a successful bank connection?
2. Is there a relationship between the number of vouchers purchased and other user behavior?
3. Based on your analysis above, what would you suggest as a new product feature to improve the total number of bank connections and vouchers purchased?

Inside the folder titled Part 3, you will find two datasets on our **users** and the **actions** they have made over a given period:

1. users.xlsx: Each row contains different fields relating to each user
2. actions.xlsx: Each row contains information about a specific action a user has made. A user can make multiple actions.

Final Comments

We respect your time, and do not expect you to spend more than 3 hours on this challenge. We encourage you to showcase your skills in distilling complex information with an emphasis on how you might present this to stakeholders.

Feel free to reach out to us if you have any questions. Thank you for your time and we look forward to your answers to this challenge.