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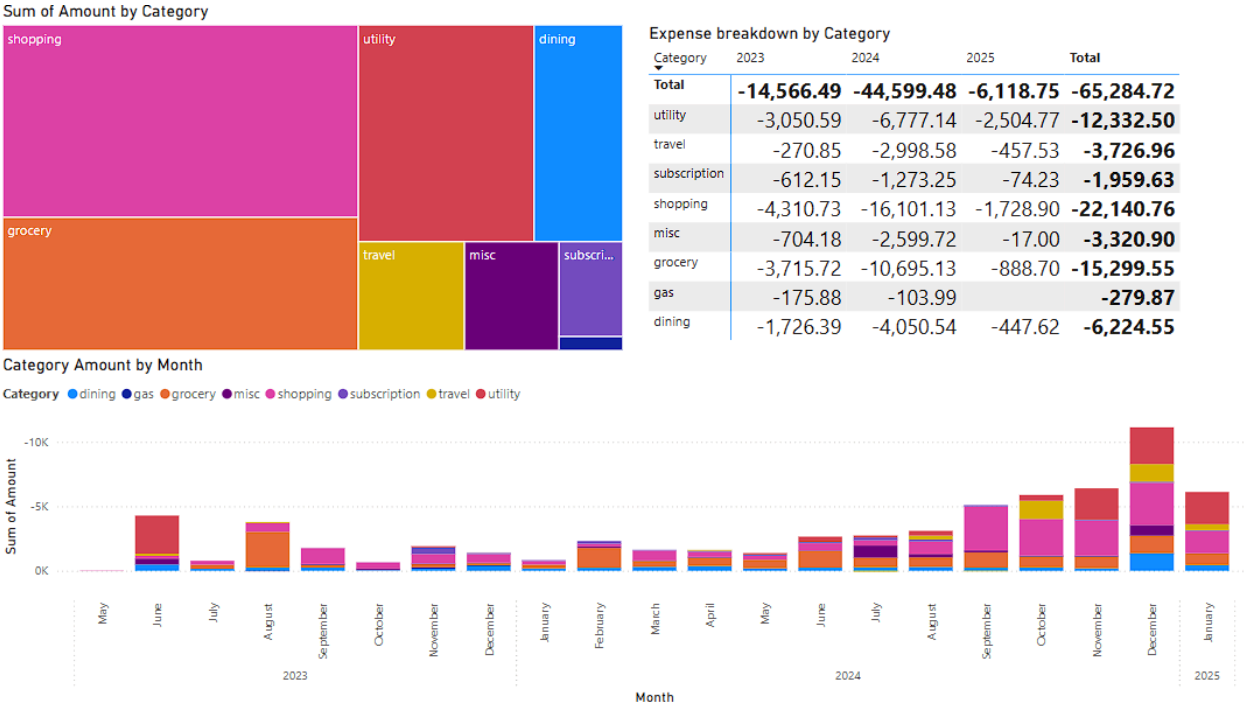
Data Visualization Critiques

1. Personal data wrangling visualization (My Data)

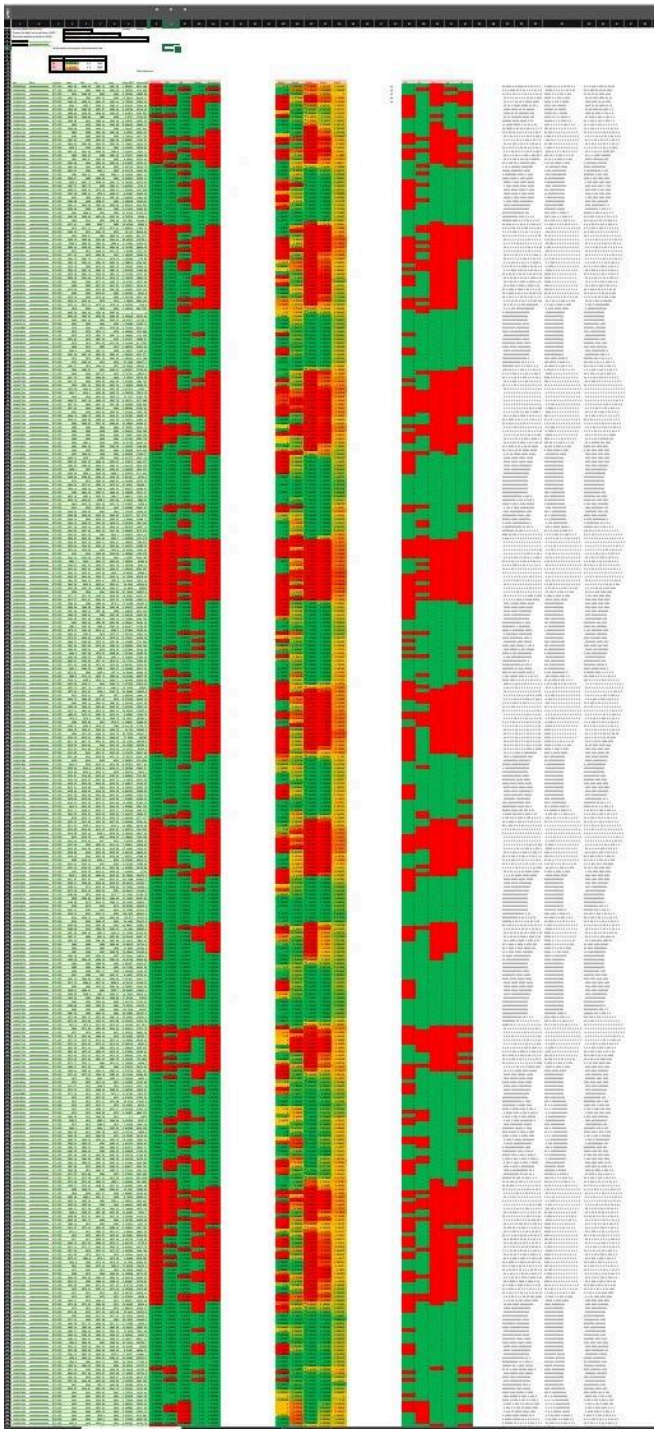


The data is generally accurate, with the exception of a single category that distorts its reliability. The removed category, labeled as "Transfer," appeared incomplete or misleading. This category is intended to label transactions from one account to another, such as credit card payments from a checking account, where no money is actually lost—one account loses money while another gains it. The data likely lacked completeness, as including the Transfer category skewed the spending amounts for two months to an unrealistic level.

The data is presented as a PNG but was created using PowerBI, an interactive dashboard. Clicking on any aspect, category, or amount would highlight that specific data for better clarity. The main data is divided into three visualizations. In the top left, categories are sized by the amount spent in each category over the data's timeframe, providing a visual representation of the largest spending categories.

The graph at the bottom of the image is a stacked bar graph showing each month's expenses. The total length of each bar represents the total amount spent that month, while the individual segments show the contribution of each category. The graph in the top right is a numerical representation of the same information displayed in the bottom graph.

2. Stock Market History

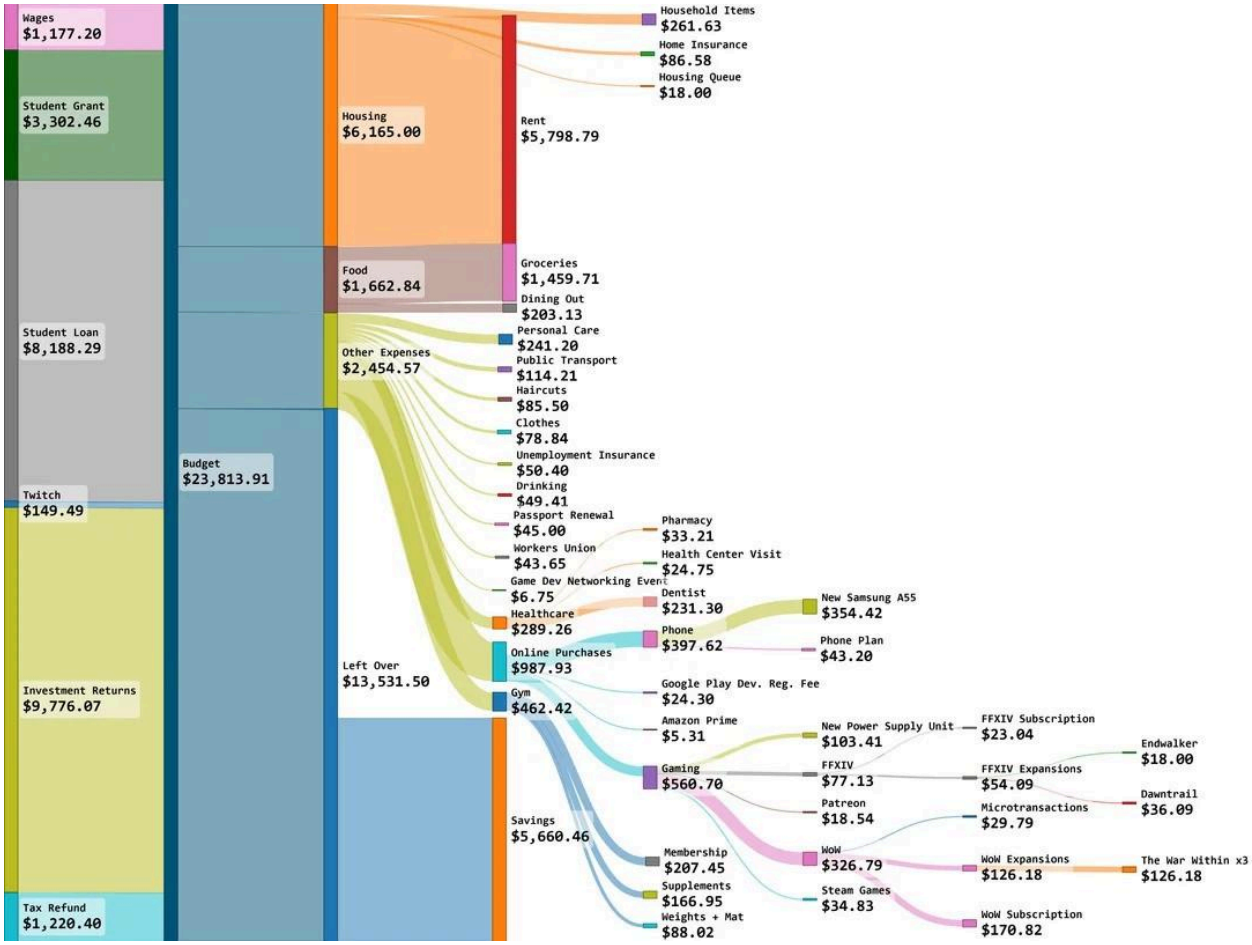


This visualization depicts the upward and downward trends of the stock market over several months and years. Its main goal is to show that "the stock market breathes," as stock prices go up and down in a standard recurring fashion. This has been done in a simple Excel file with colored cells indicating positive or negative growth. While it nicely depicts the "breathing" of the market, it is very difficult to view the actual data, title, or anything else. This, of course, is an alternative visualization to a standard line graph over time.

While the use of colored cells to indicate growth trends is creative, it falls short in terms of clarity and accessibility. The lack of clear labels and titles makes it challenging for viewers to understand the specific data points and the overall context. Additionally, the reliance on color alone to convey information can be problematic for individuals with color vision deficiencies, further limiting the visualization's effectiveness.

In comparison to a standard line graph, this visualization lacks the precision and ease of interpretation that a more traditional approach would offer. Line graphs provide a clear and continuous representation of data over time, making it easier to identify trends and patterns. While the intention behind this alternative visualization is commendable, it ultimately sacrifices clarity and usability for the sake of novelty.

3. Budget breakdown



The Sankey diagram in question attempts to depict the expense breakdown of a person's income and budget. While it effectively shows the flow of money from income to various expenses, it lacks a title and timeframe, which are crucial for context. Without these elements, viewers are left guessing about the period the data covers and the overall purpose of the visualization. This omission significantly reduces the diagram's clarity and usefulness.

Another issue with the diagram is its confusing representation of income and saved money. The diagram lumps together large blocks of money and only breaks down an unspecified percentage of the budget. This approach makes it difficult to understand how much money is being saved versus how much is being spent. The lack of clear differentiation between these categories undermines the diagram's ability to provide a comprehensive view of the individual's financial situation.

Additionally, the ribbons in the Sankey diagram are not extended enough to clearly distinguish them from the previous money group. This lack of distinction makes it challenging to follow the flow of money from one category to another. Furthermore, the labels are somewhat small, making it difficult to read the graph without zooming in digitally or physically. This issue detracts from the diagram's accessibility and overall effectiveness as a visual tool.