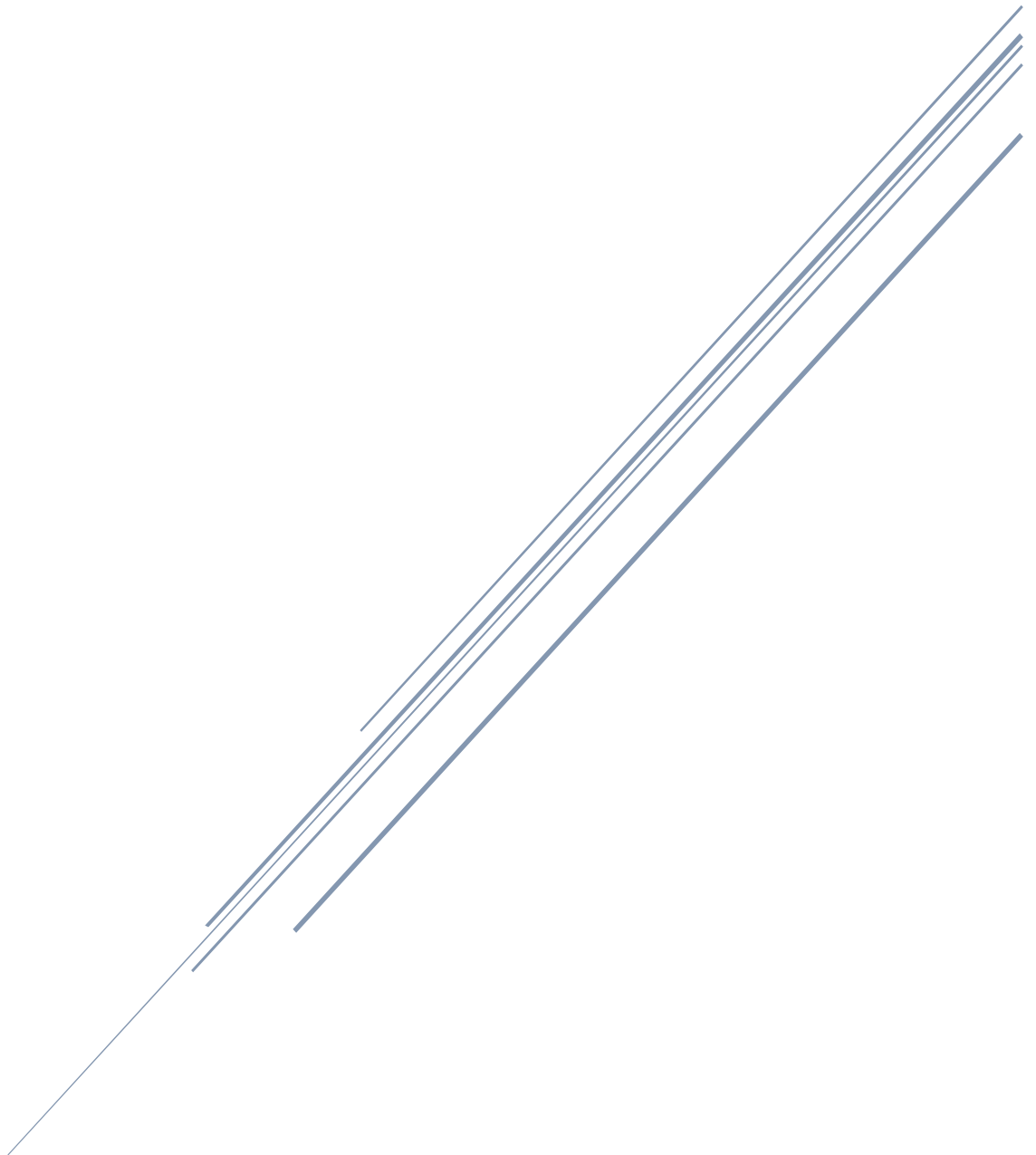


TABLEAU VISUALISATION REPORT

ST2187 Coursework



Name: Erika Sim

UOL Student ID: 210501867

Word Count: 1296

Executive Summary

The organization has collected data and extracted all order transactions made from 2018 to 2021 to analyse performance and report improvements for better decision making. Using Tableau, I, as **Southeast Asia (SEA) Regional Manager**, have made 5 dashboards with up to 3 visualisations to study key performance indicators (KPI) to monitor the region's performance and extracted out insights from it. Based on my analysis, I will also be providing recommendations to the senior management team for better decision making in future developments.

The dashboard analysis consists of:

1. Performance Overview by Region – This dashboard is to analyse our general performance internationally based on region and how we have done mainly on sales and profit. Performance was not as great as the other regions even with high sales.
2. Overview of SEA – This dashboard is made solely to observe our sales and profit by sub-categories as well as the sales distribution by customer segment over the four years. I found out that Tables has the highest financial losses compared to the other sub-categories.
3. Product Overview – This dashboard is to show the half of the sub-category in SEA that had financial losses and how we can improve its overall revenue to our advantage. Finding out that manufacturing and shipping cost did affect Tables and the rest of the sub-categories in its profitability.
4. Recommended Changes – This dashboard shows the adjusted calculations I have made to sales, shipping cost and manufacturing cost. It will give us a brief idea on what to expect for changes that might come.
5. Sales Forecast – This dashboard shows us the possible sales that we might make in the next 12 months (2022). The estimates showed constant sales which would not be good for profitability. It also shows the possible profit trend we may have if the changes are implemented.

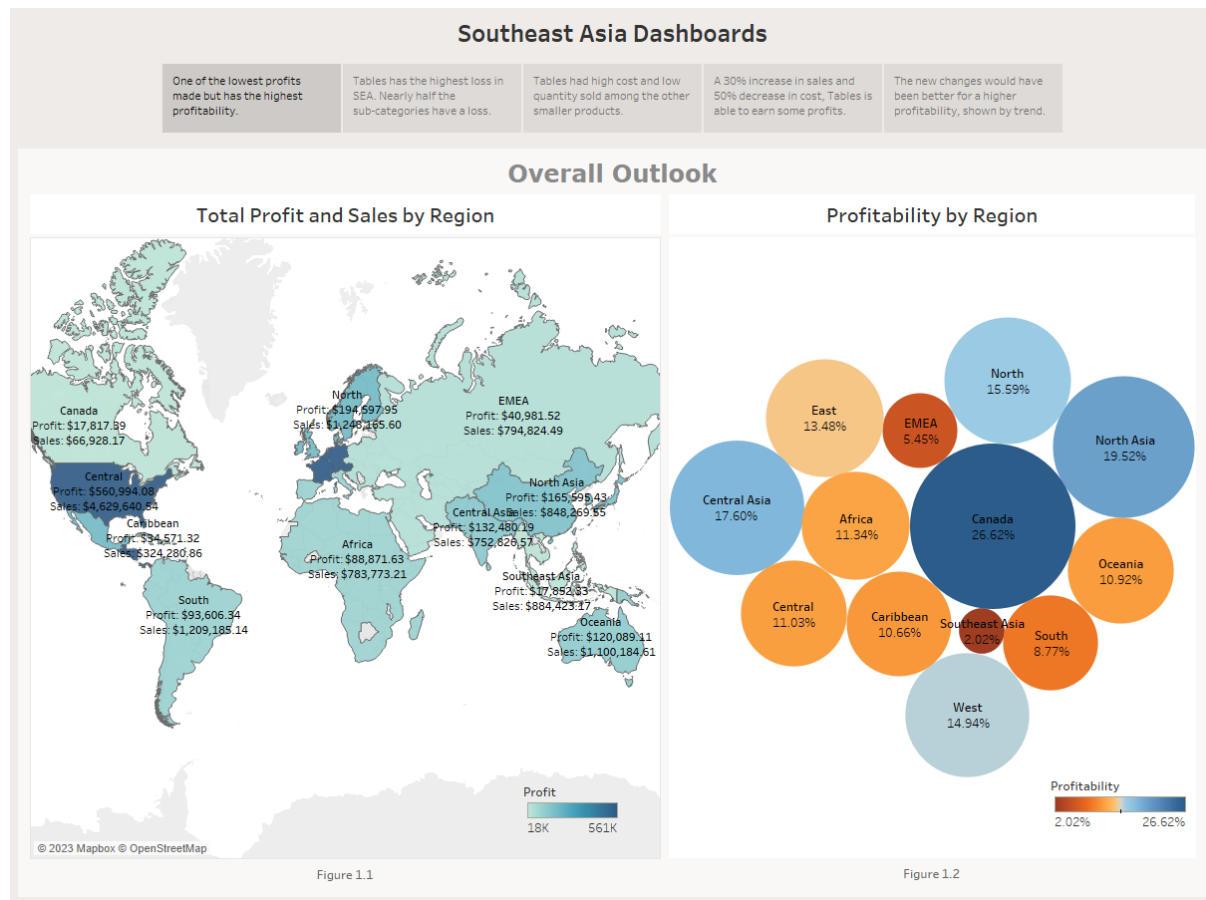
Following up from some of the recommendations provided in each dashboard, I recommend that we do more planning and testing on the possible figures to change the outcome of our sales and profit. Respective teams should investigate upcoming trends of our product sub-categories and what are the common needs of customers now. I hope that this report will be deemed as beneficial for the company to thrive and excel in better business decisions.

Table of Contents

| | |
|---|---|
| Executive Summary | 1 |
| Data Analysis | 3 |
| 1. Performance Overview by Region | 3 |
| 2. Overview of SEA..... | 4 |
| 3. Product Overview | 5 |
| 4. Recommended Changes..... | 6 |
| 5. Expectations | 7 |
| Technical Appendix | 9 |

Data Analysis

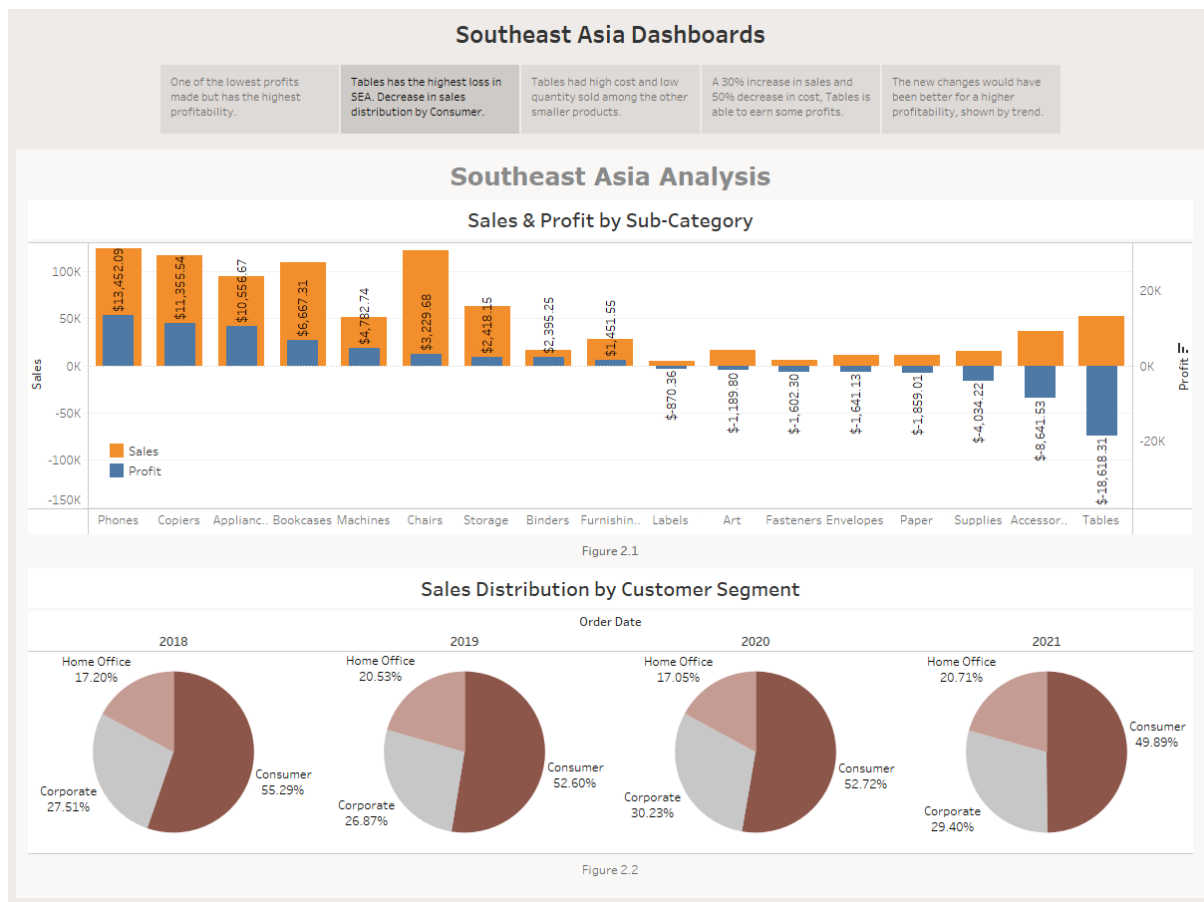
1. Performance Overview by Region



Starting off with the SEA's overall outlook, the overall profit of \$17,852.33 have been shown to be one of the lowest among the other regions although we had exceedingly high sales of \$884,423.17. By region, we can observe in Figure 1.1 that Central has the highest profit of \$560,994.08 and the highest sale of \$4,629,640.54. Comparing SEA's performance to the rest of the region, it can be seen that our sales performance has been doing well but profit made is as low as Canada that has \$17,817.39 in profits with little sales compared to ours. This could suggest that our overall cost and other variables are affecting SEA to attain higher profits.

From Figure 1.2 it shows further showed us the profitability among the regions and highlighting that SEA has the lowest of 2.02%. Compared to Canada who had lower sales than us, it has the highest profitability of 26.62%, a difference of 24.6%. These issues will be highlighted in the following dashboards as to why SEA's profit performance is bad compared to Canada. I recommend that the senior management team together with the sales and marketing team to look into the problems that could be the cause of low performance. It could be from the pricing of our products or the products are not meeting the overall needs of customers. A strategy must be carried out to increase the profit to prevent any further losses for SEA region.

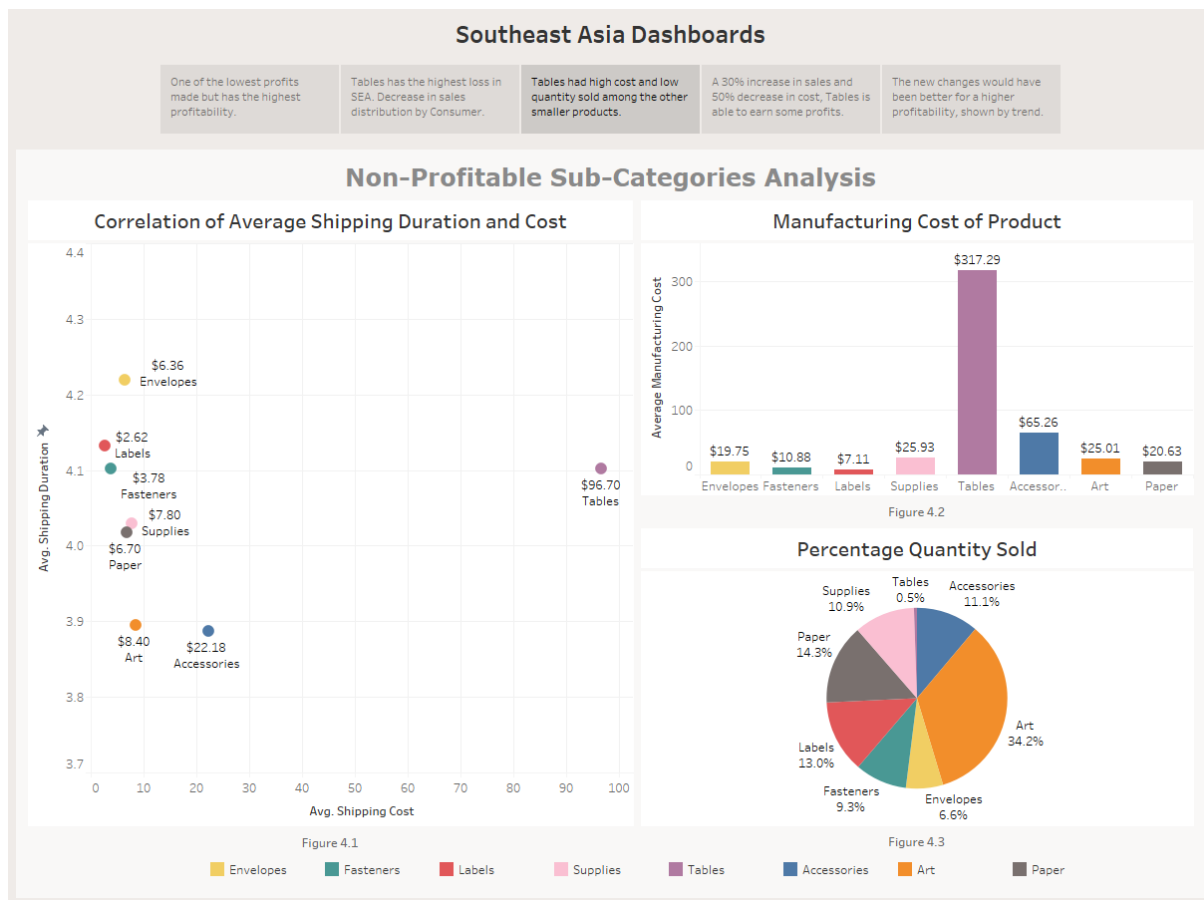
2. Overview of SEA



Continuing from the previous analysis of our Performance Overview, we will deep dive into SEA region to extract out insights on its extremely low profitability. In general, as seen in Figure 2.1, the overall sales and profit are not doing well with nearly half of the product sub-categories having financial losses from its products, with Tables as making the highest profit loss of \$18,618.31. The highest profit made was \$13,452.09 by Phones. Additionally, the profits are barely making an impact on our profitability though our sales for most of our product sub-categories are doing well as the losses are too big. I recommend that the senior management team take a serious note on Tables and investigate the possible causes of loss. We should also find out the cause on the rest of the product sub-categories for its high sales but low profit return. I will also be showing recommended changes in the following dashboards.

As for the sales distribution among customer segmentation in Figure 2.2, Home Office and Corporate segment has been quite consistent taking up 17-20% and 27-30% of sales distribution respectively over the course of 4 years. For Consumers, though they are taking up 50% of sales distribution in SEA, it has been on a slow but steady decline with it hitting below 50% last year at 49.89%. The decline in consumers sales distribution could be due to our pricing of products to cover the cost.

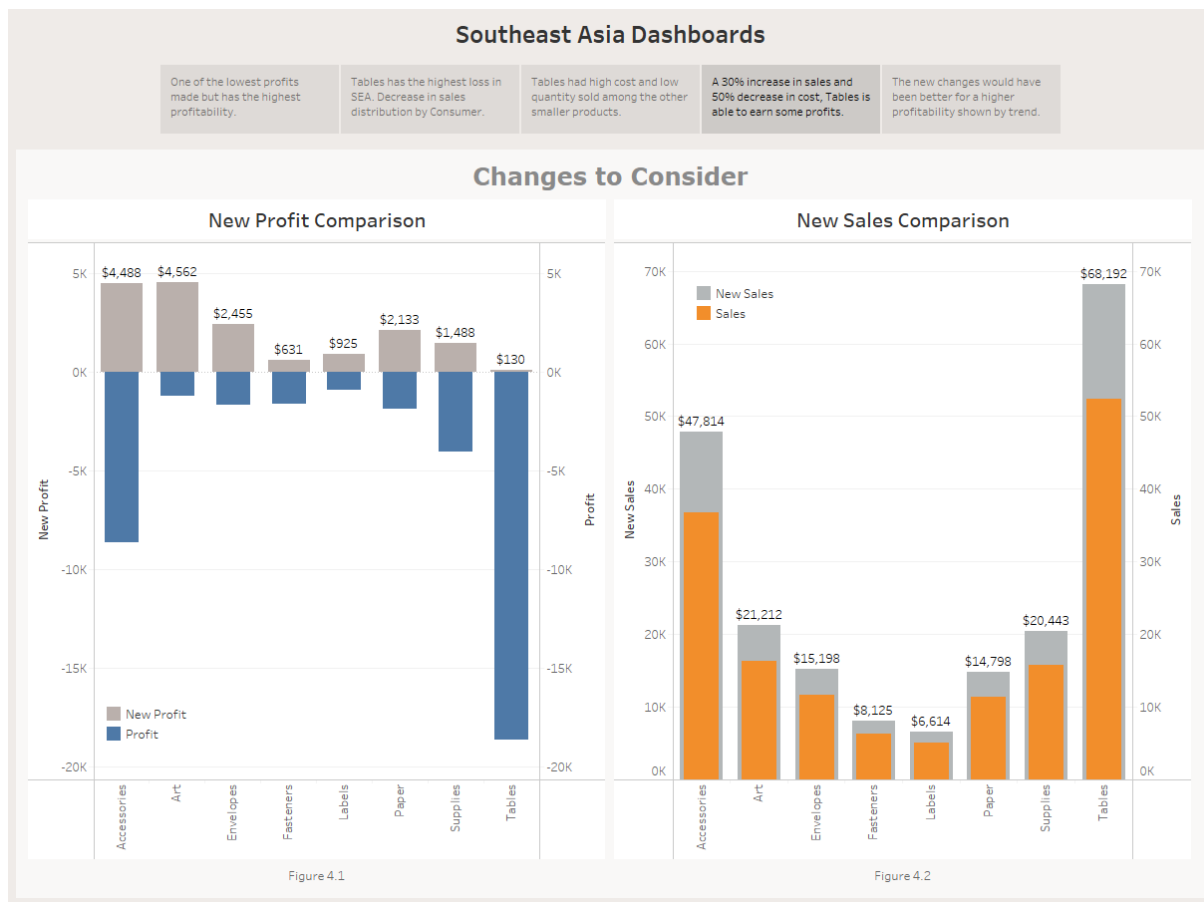
3. Product Overview



In this dashboard, we will investigate the half of the sub-categories that has a financial loss, mentioned in the previous dashboard, of what could be the cause of their low profit and sales. In Figure 4.1, most of the product sub-categories has a low average shipping cost and low shipping duration. The only exception is Tables that has an average shipping cost of \$81.08 even when its shipping duration is the same as the rest of the product sub-categories. That is exceptionally costly knowing that its percentage of quantity sold among the rest of the product sub-categories are only 0.5% seen in Figure 4.3.

To add on, it has the highest average manufacturing cost of \$317.29 while the others were below \$100. This could particularly be the cause of the high negative profitability of Tables since its sales could not catch up to these costs. I highly recommend that the senior management team engage the sales team to make changes to both the logistics and manufacturing cost for it. For logistics, they could either change to an external logistic provider or have an arrangement to get discount when a particular amount is met. For manufacturing cost, they could find a new supplier to manufacture Tables at a better price. In the next dashboard, it will be showing my suggested changes to the cost and sales.

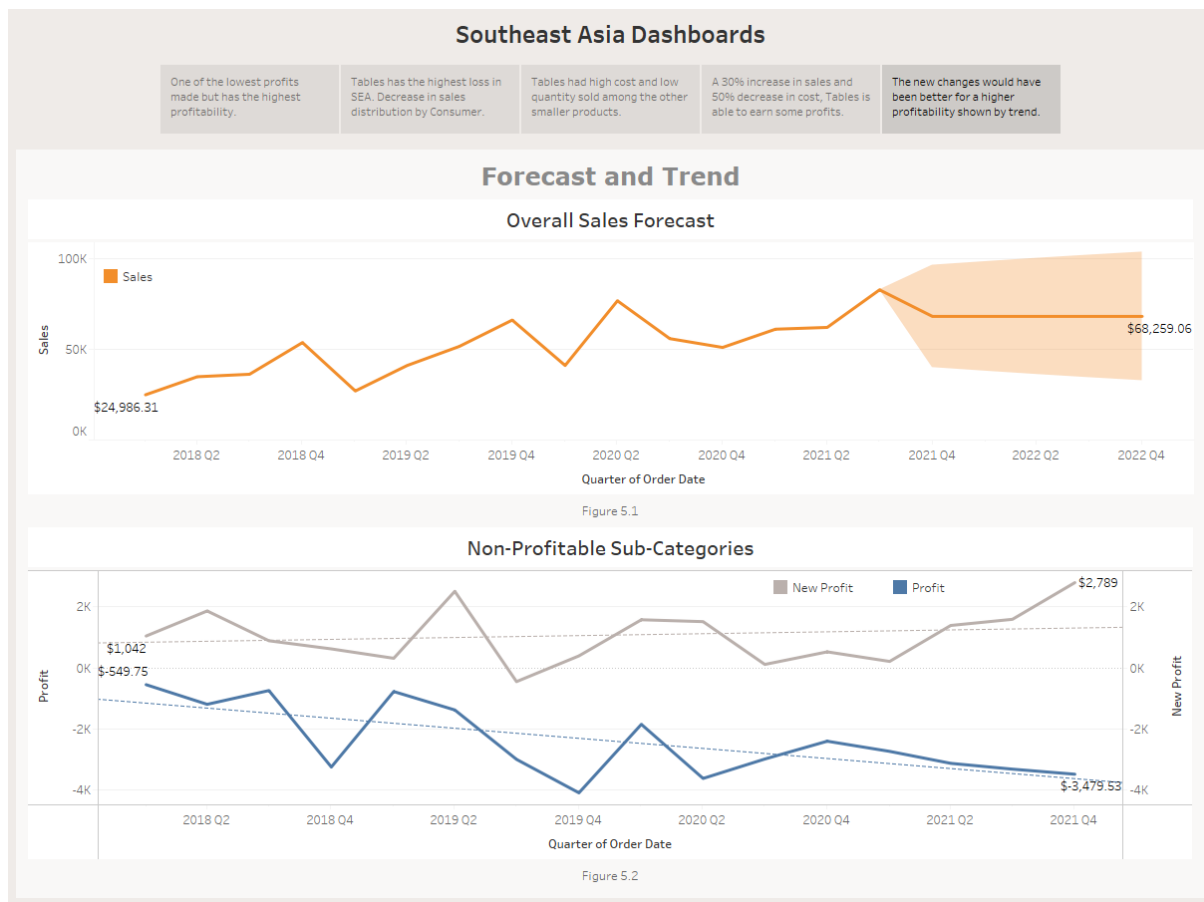
4. Recommended Changes



In this dashboard, we will go into details of the recommended percentage of changes to total cost and sales and how it could have been if we did it for future developments. The new profit is a calculated field that can be seen in Appendix 1. The calculations are based on the idea to decrease the shipping cost and manufacturing cost of these products by 50% and increase the overall sales. Initially, I adjusted the percentage of sales to be increased by 10% but the profit for these sub-categories were still at a loss seen in Appendix 2. Hence, I decided to increase the figure to 30% so that there will be profits made across all sub-categories seen in Figure 4.1. From here, we can observe that if we were to make the changes cost and sales, it is possible to make a profit compared to a financial loss for half of our product sub-categories. It is shown from Tables where it could make a profit of \$130 and Accessories, which had nearly \$9,000 in financial loss, to a profit of \$4,488.

In figure 4.2, we can see the overall change in sales from what we initially had if we were to aim for that 30% increase in sales. Although Tables still has one of the highest sales made among the group, the profits are still considerably low. I recommend the senior management team to work with the sales team to further investigate on Tables along with the numbers I have given to see if it is feasible as a future implementation.

5. Expectations



Ending the analysis with our expectations for future developments, we will first look at the overall sales forecast for the next 12 months. From Figure 5.1, it could be seen that SEA's sales will initially have a steady decrease towards the end of 2021 before becoming constant at \$68,259.06 for the remaining 12 months. A general increase in sales trend can be seen but it may last in the long term with that consistency over 9 months. Though the forecast is only an assumption we should still take serious consideration as it is still a decline in overall sales. This is where the sales and marketing team must start planning for improvements in sales as well as advertising the products that we would increase consumer purchases overall.

In Figure 5.2, the trend of actual profit for the product sub-categories that had financial losses could be seen having a steep decline all the way till the end of 2021. As for the new profit visualisation, I assumed that we did the changes stated in [Recommended Changes](#) dashboard throughout the 4 years. The difference could be seen as there is a slight increase in trend dictated by the dotted lines. The overall change of profit using the calculations of new profit is deemed to be extremely advantageous for us. Therefore, I highly recommend the team to take my suggestion into heavy consideration as all our goals is to increase our profitability for SEA.

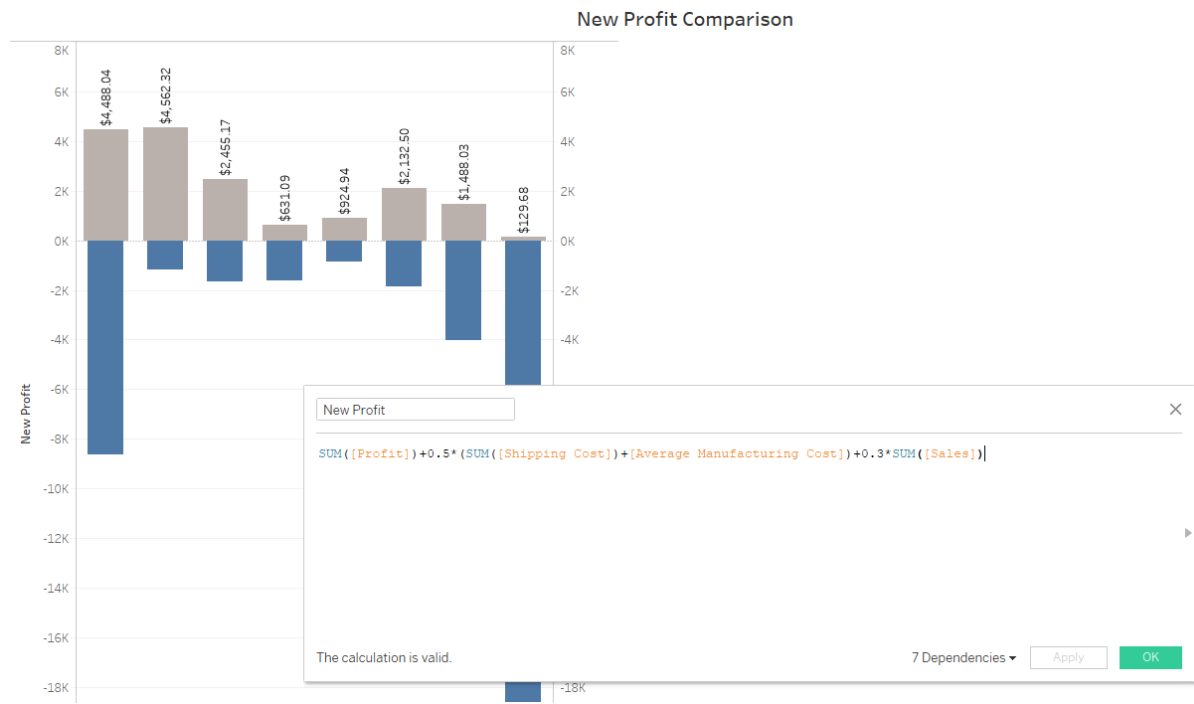
Conclusion

To conclude, SEA region has not been performing well and it is required of us to start making changes. As stated in these analysis, the main concern would be the cost of the product sub-categories. Starting the change from there would be a step forward for SEA that would allow us to reach for higher goals such as an increase for sales. I believe that once the change has been implemented, many other goals would be accomplish within this 12 months. SEA will be able to acquire higher profitability and revenue.

Technical Appendix

Appendix 1

Calculation of New Profit



Appendix 2

Initial decision to increase sales by 10%

