Global Trading Analysis Report

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Executive summary

Gaining profits is the core for a company's survival. A company should try to maximise the profits and minimise the loss for its own development. With the records of all the orders made

from various countries (Jan 2018– Dec 2021), the business analysis report aims to minimise the loss of the company. By deeply analysing the Top 5 unprofitable outlets among the global market, the main factor that leads to significant loss will be found out and the corresponding solution will be provided with the examples of the profitable countries.

With a series of deep analytics, most of the losses are from the outlets in Turkey, Nigeria, Netherland, Honduras and Pakistan, being generated by the Bookcases, Phones, Storages, Chairs and Copiers. There are always discounts more than 20% imposed on the products throughout the entire 4 years. In the second half of each year, there are even more sales days and higher discounts, attracting a large group of customers. Sometimes even if there are not lots of customers, the high sales with high discounts can still lead to high losses. In order to address the problem, the solution is to control the discounts within the 14%. The profitability of the neighbouring countries (Germany, Iran, Indonesia, Nicaragua and Democratic Republic of the Congo) validate the effectiveness of the solution.

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Key findings

Key Finding 1: Executive Overview — Top5 unprofitable markets and their Top5 unprofitable products

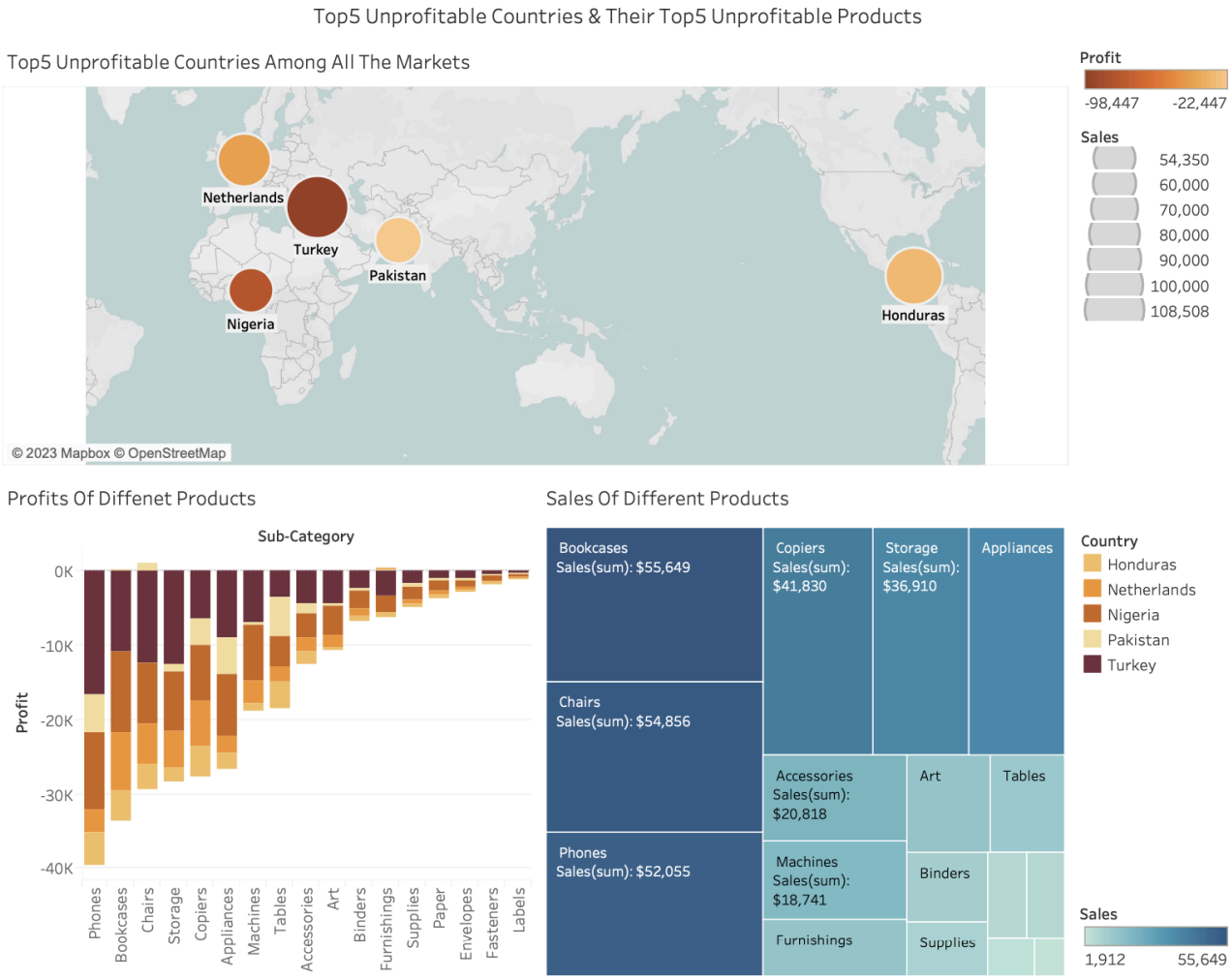

Figure 1: Upper Graph(1.1), Left Bottom Graph(1.2), Right Bottom Graph(1.3)

In graph 1.1, the Top 5 unprofitable outlets are based in Turkey, Nigeria, Netherland, Honduras and Pakistan (descending order) among all the countries. The sum of loss(2018– 2021) of each outlet ranges from -$98k to -$22k, and their respective total sales is between $54k and $108k. It indicates that high sales may not lead to positive profits. The outlet in Turkey loses the most

while having the highest sales among the 5 outlets. It might suggest high sales actually lead to high loss. However, more analysis is required regarding this speculation.

In graph 1.2, almost all the products in the countries gain negative profits over the four years. The Top5 unprofitable products are Bookcases, Phones, Storages, Chairs and Copiers (descending order). Phone is the most unprofitable product, resulting in a total $39k+ loss. These products also have the highest total sales among all the products, ranging from $55k to $36k. It suggests that the more revenue gained from selling youtube the products, the more losses incurred.

The following key findings revolve around the Top5 unprofitable outlets and their Top5 unprofitable products.

Key Finding 2: Reason for loss

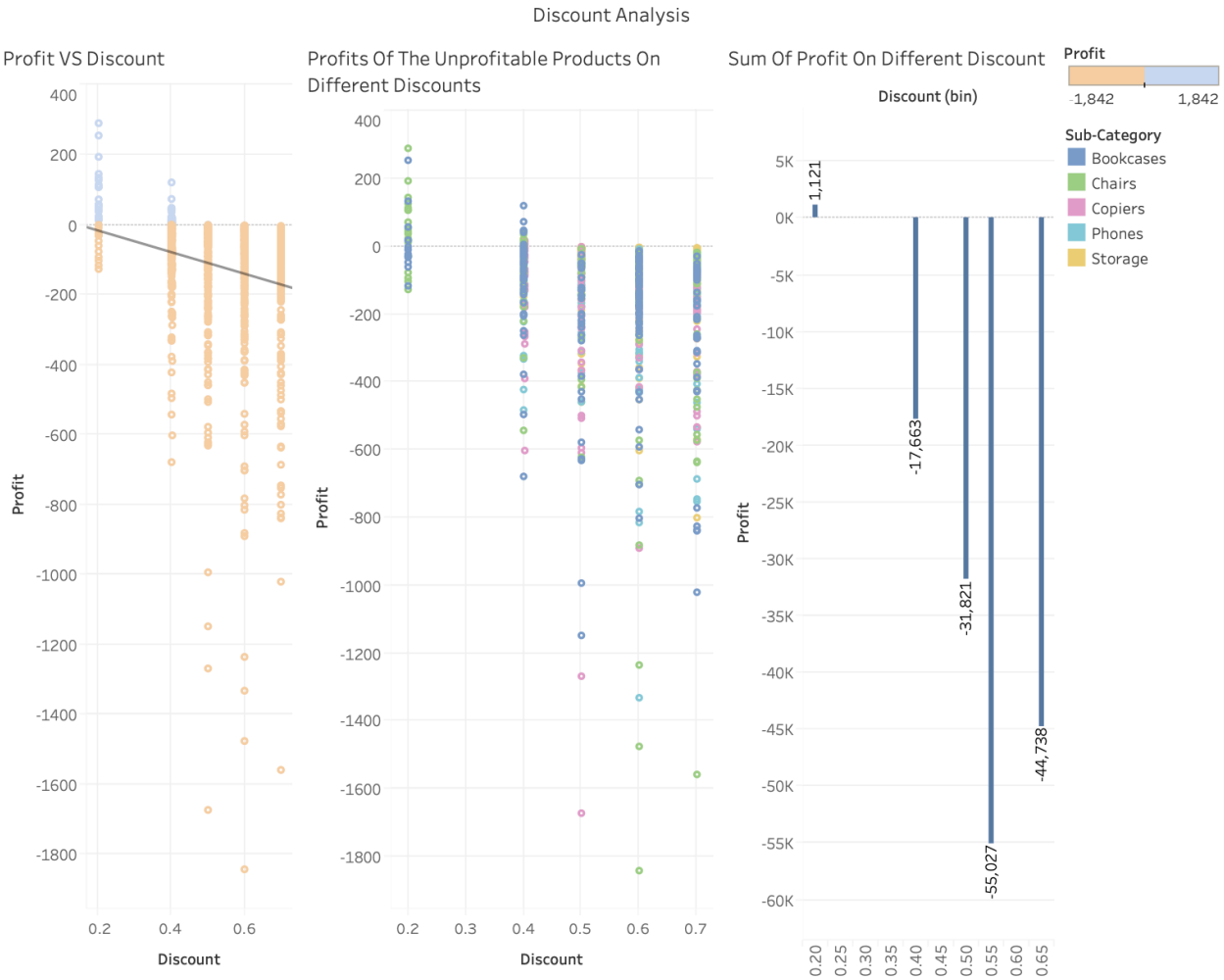

Figure2: Left Graph(2.1), Middle Graph(2.2), Right Graph(2.3)

The first hypothesis is that the high discount rate is the main reason for the significant loss.

In graph 2.1, the amount of orders incurring losses is much more than the profitable orders. The grey trend line suggests that the profit is reversely related with the discount imposed on the products. By calculation with the trend line, only when the discount is within 14% the profits of an order would be positive.

However, almost all the products are sold out with the discount at least 20% and the majority of them are with discounts over 40%.

The graph 2.2 displays that the products with 20% are chairs and bookcases. Although certain orders incurred loss, the two types of products give a total profit of $1121. The orders of products with the discounts from 40% to 65% cause the losses range from $17663 to $55027 Almost all the orders with discounts higher than 40% have negative profits. Generally, the higher the discount is applied, the more loss is incurred.

Therefore, the discounts imposed on the products should be limited within 14% to maintain the positive profits of the orders. The reason for the significant loss in the outlets is likely to be the high discounts imposed on the products.

Key Finding 3: Further analysis of reason for loss

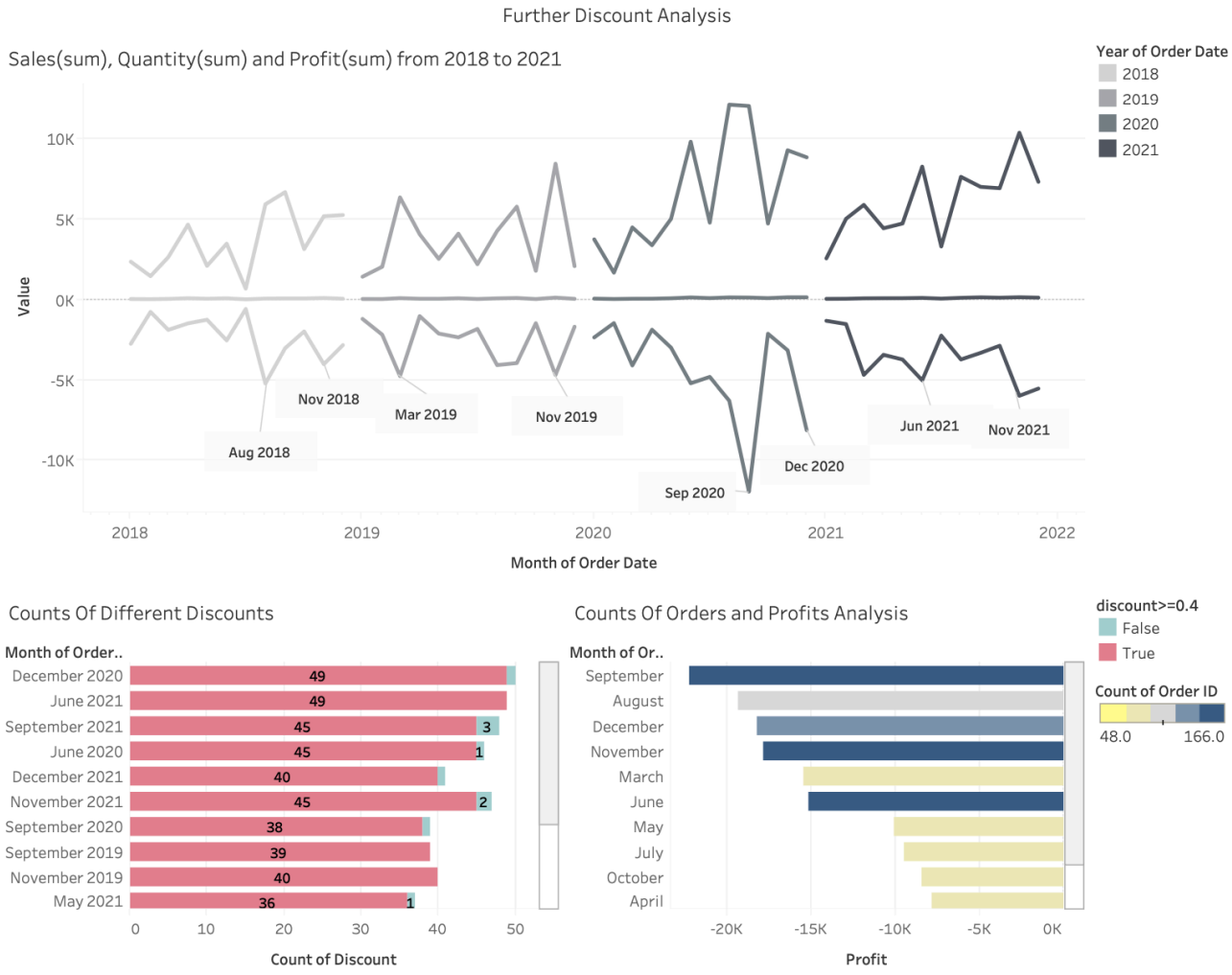

Figure3. Upper Graph(3.1), Left Bottom Graph(3.2), Right Bottom Graph(3.3)

From key findings 2, we can figure out the high discount rate leads to the significant loss. To understand the complete story, more analytics evolving around discounts are conducted.

In graph 3.1, by comparing the sales (upper line), quantity (middle line) and profits (lower line) of the products from 2018 to 2022, it is observed that quantity affects sales or profit very insignificantly because the lines of sales and profits fluctuate while the line of quantity remains

steady. A more important observation is that the profit decreases when the sales increase and there are usually more losses in the second half of every year.

In the relatively more unprofitable time point, nearly all the discounts imposed on the products are over 40%. The highlighted time points on graph 3.1 are the months that have lots of high discounts except March 2019. For example, December, where 49/50 percent of total discounts are more than 40%, is the second most unprofitable month in 2021.

Besides lots of discounts are imposed, the amount of order is also a significant factor of the high loss. From graph 4.3, we can see the most unprofitable months are in blue which means there are more than a total of 110 orders in each month, while more than half of the months have less than total 100 orders. For example, September is the month which has the second most amount of orders (144) over the past 4 years and it also appears three times on the top 10 most counts of discount more than 40%.

Therefore, the high loss is arised from both the large sum of orders and high discount rate. It is likely there are many sales days in the second half of every year. When the high discounts imposed on the products attract a large group of customers, the sales increase. Since most discounts are over 40%, nearly all the orders are unprofitable. The high sales hence result in high losses.

Key Finding 4: Anomaly(March) Analysis

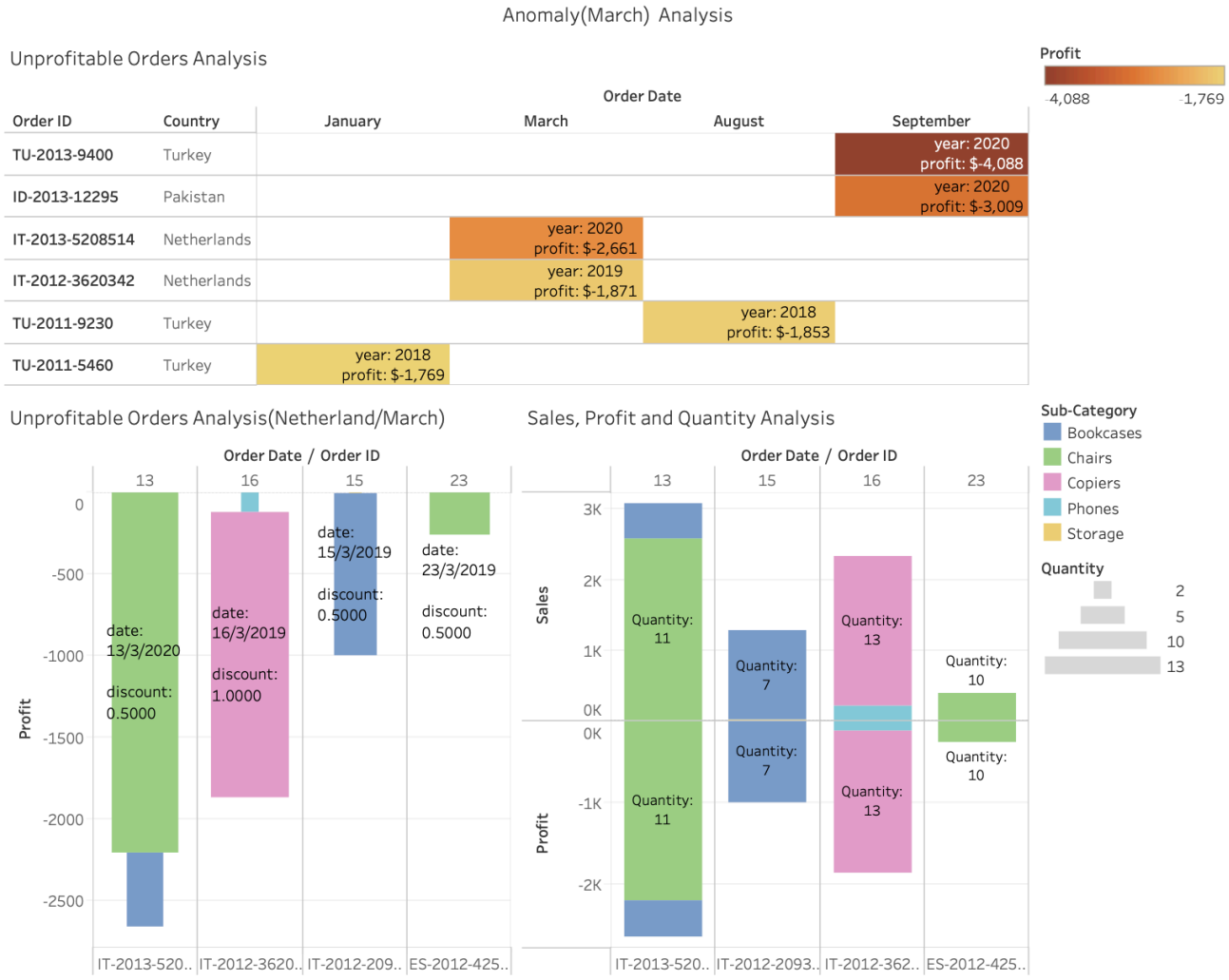

Figure 4. Upper Graph(4.1), Left Bottom Graph(4.2), Right Bottom Graph(4.3)

An anomaly can be observed from Key Finding 3. In March, there are neither lots of counts of discounts more than 40% nor customers, but the amount of losses in March over the four years is the 5th highest.

In graph 4.1, two orders from the outlet in the Netherlands significantly contributed to the losses in March. They are made in 2019 and 2020 respectively, resulting in a total of more than $4k losses. Moreover, they are the 3rd and 4th highest loss orders over the four years.

In graph 4.2, the outlet in the Netherlands imposed a 50% discount on all the products in both 2020 and 2019 (The data given shows that 100% discount is imposed on copiers, it means the copiers are free. However, since there is also revenue gained from selling copiers (in graph 4.3), we believe copiers also have a 50% discount). The top few highest losses orders are between 13th to 23th March.

The size of the bars suggests the quantity of the products purchased. Although IT-2013(…) and ES-2012(…) have the same size in purchasing chairs, the losses of ES-2012(...) is far less than IT-2013(...). The reason can be found out in graph 4.3. The sales and the profits of each order are approximately symmetrical, suggesting more sales leads to more losses with high discounts. Based on this report and data given, quantity affects the sales and profits very insignificantly. It is likely IT-2013(...) purchased 11 expensive chairs while ES-2012(...) purchased 10 cheap chairs. Although the revenue gained from the two orders are different, the loss is proportional to the revenue respectively.

Therefore, the 50% discounts in the Netherlands in March leads to high losses. It suggested that with the high discount but only a few orders, the loss can still be high as long as the sales of the orders are high enough. The discount imposed is a more significant factor of high loss than the number of customers.

Key Finding 5: Projected results after resolution

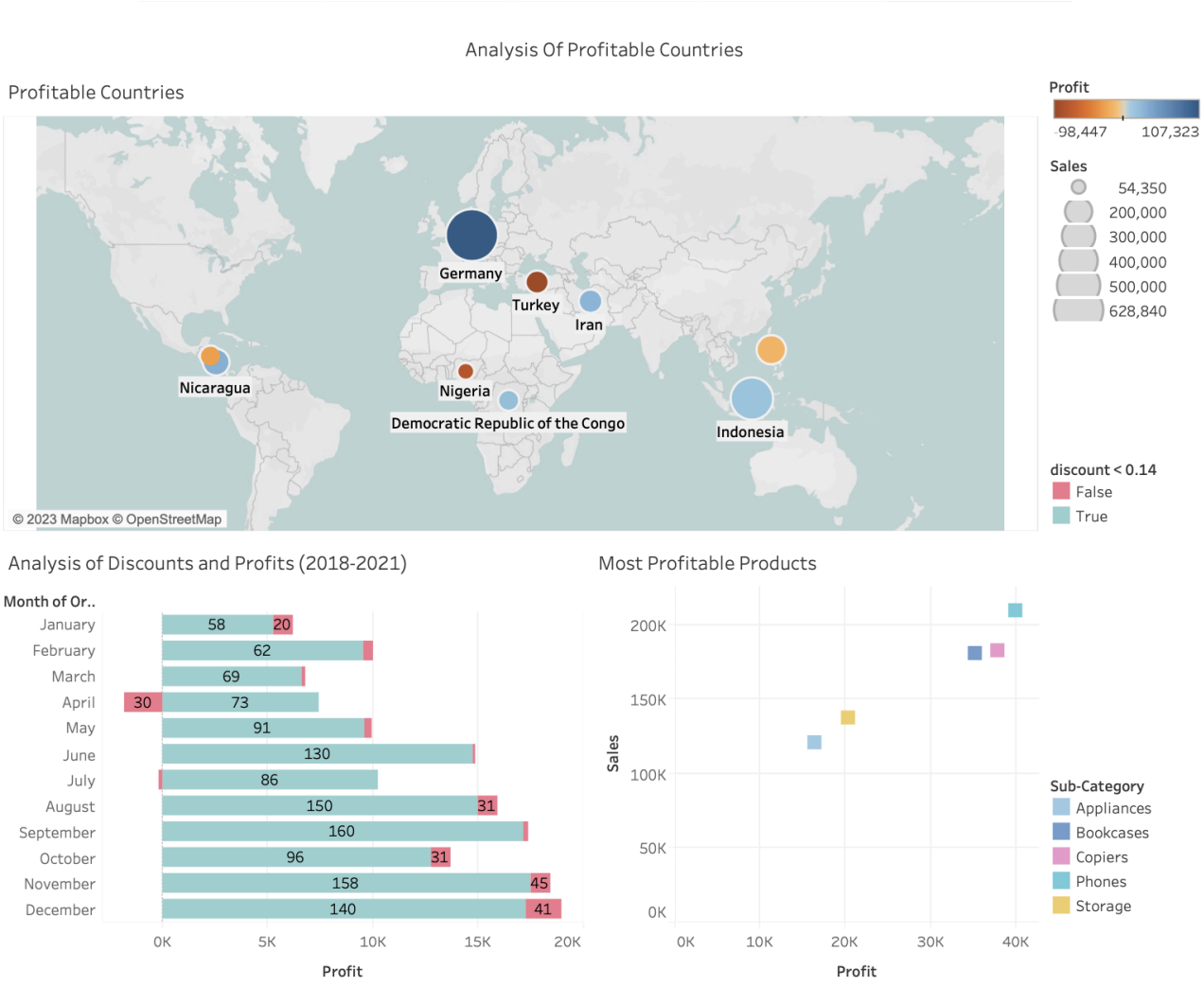

Figure 5. Upper Graph(5.1), Left Bottom Graph(5.2), Right Bottom Graph(5.3)

Based on the previous analyses, the solution for minimising the loss in the top5 unprofitable outlet is to ensure the discounts imposed on all the products, especially phones, bookcase, chairs, storages and copiers, not to exceed 14%.

5 profitable outlets which are geographically close to the unprofitable countries are selected in order to verify the effectiveness of the suggestion. They are based in Germany, Iran, Indonesia, Nicaragua and Democratic Republic of the Congo. Their geographical locations ensure that they are highly similar to the unprofitable outlets and hence the current selling results of the profitable countries are the projected results of the unprofitable countries with the solution implemented. .

In graph 5.2, each bar is filled more by turquoise than pink, indicating that on the contrary to the unprofitable countries, in every month, the majority of the discounts imposed on the products in the profitable outlets are within 14%. In the second half of every year, although there are more discounts, most of the discounts imposed are less than 14%. The proper discounts rate results that all the months have positive profits ranging from $6k to $18k. For example, 140/181 percent of the total discounts imposed on the products within 14% in December. It brought approximately $18k of profit.

Moreover, the top5 profitable products in the profitable countries are phones, copiers, bookcase, storage and appliances (descending order), while the top 5 unprofitable products in the unprofitable countries are Bookcases, Phones, Storages, Chairs and Copiers (Descending Order). We can conclude that bookcase, phones, copiers and storage are the key products that can significantly affect the profitability of the outlet in a country. The outlets in the countries impose high discounts on these products will incur high losses, on the contrary, the high profits.