

Summary

- **EMEA and South Asia may be the most profitable markets for a company if the right customer base is selected, as they have high sales figures but questionably low profits.**
- **Not enough country data, not enough countries in the western and eastern region for completeness.**
- **The central region is the most stable and has the highest profit and sales figures.**
- **over the years, the number of sales in all markets is increasing in all categories but it is only the tables that have decreasing profits each year. The highest profits and sales in recent years are phones and copiers, as well as chairs.**
- **there is a difference in categories in the markets (APAC - fittings) while in all other markets the phones are leading.**
- **The most profitable shipping class is medium and the least profitable is same day.**
- **The most profitable is the medium order priority, and the most unprofitable low**
- **Bahia has one of the highest sales figures and the lowest profits figure**
- **San Paulo is the most stable choice in Brazil**

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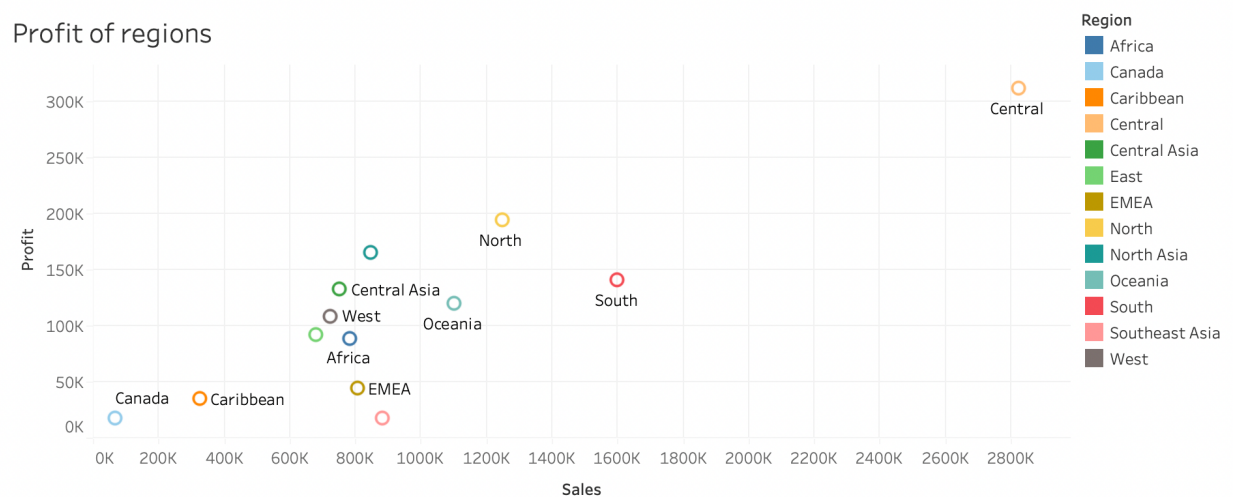
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Dataset description

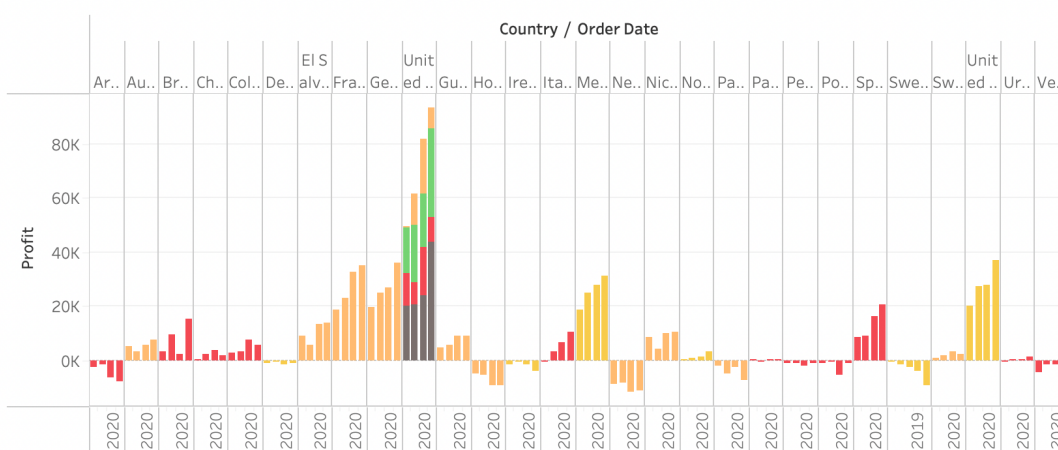
(Analysis of regions profits)

In order to work with the dataset it was necessary to study it first of all, the first thing I did was to print out all the charts I could find and understand that I was dealing with the sale of different goods on all the world markets, having the dates of these sales and deliveries as well as all the detailed information about which goods, how they were delivered, how much, etc.

In my report I want to look at the profitability and what factors affect it based on the data I received, how they relate to each other and how much of the data is enough to research.



Profit of some countries of Central, West, North, South East regions



In the first graph we can see that the most circulating region is the central region, we will look at that later, as for the data we see. I am interested in west, east, north and south regions, because they are

different geographically (and I am interested to see the markets devalue). I was wondering why their values are so different, for example it is immediately obvious that the southern region has the highest sales but the most profitable is the north, although it is only 3 place in sales of these regions.

Interesting fact is that EMEA and South Asia are also outliers, because they have very large sales by the standards of all markets but have one of the smallest profits, surprisingly even lower than Africa. So it's not a good decision to trade in these markets now without good investment, but in future these markets can be a gold ones.

In the second graph I decided to output the profits of all countries in these regions and it turned out that the dataset does not contain enough data for the eastern and western regions, it only includes part of the U.S. and no other data, so these regions have no data value except as a separate estimate of the United States.

what can be observed:

1) U.S is the most profitable by the sum of all values of the regions in which the country is located

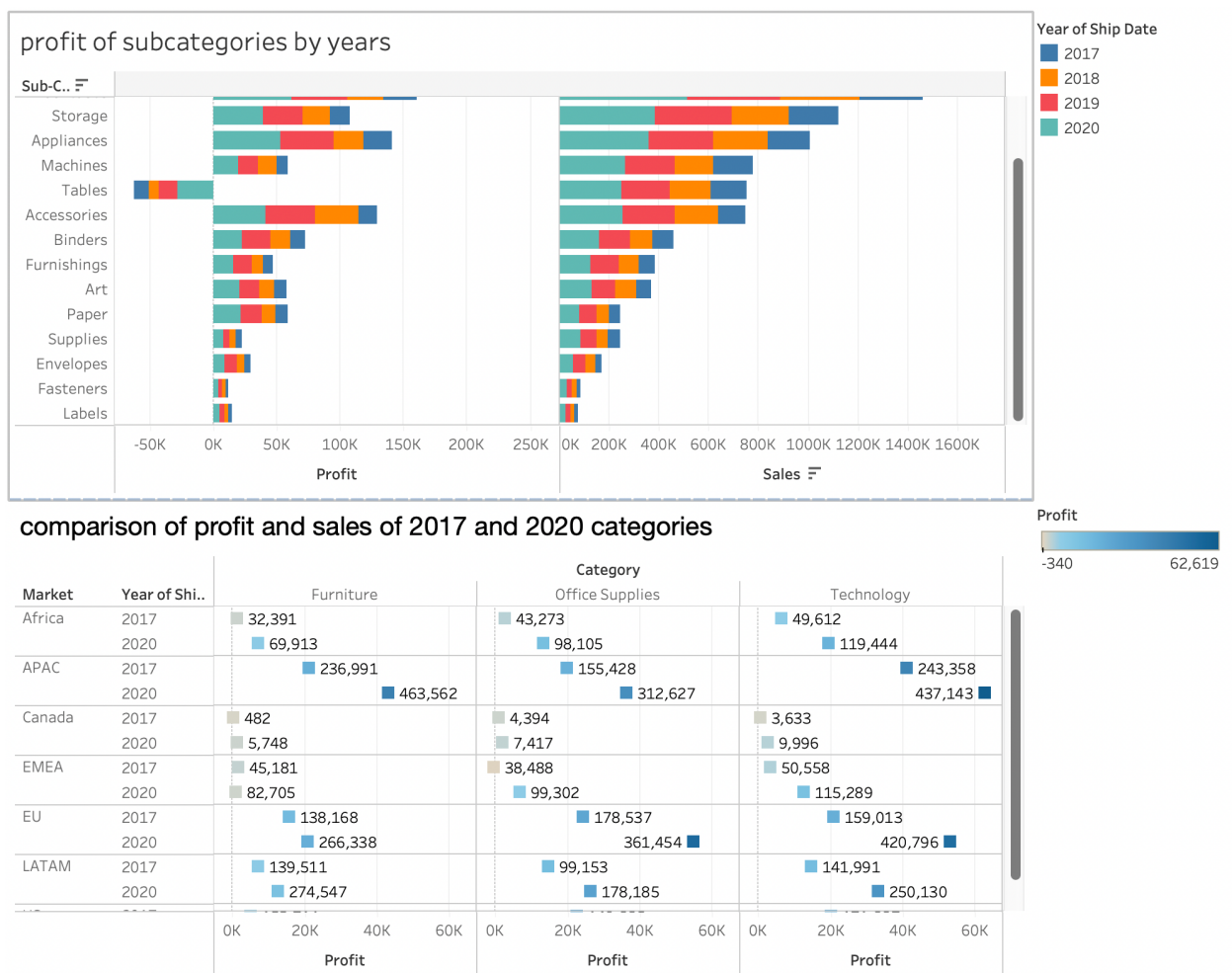
2) even though the data in the first graph is skyrocketing in the central region and very different from the others, **we see not only very profitable countries such as France and Germany but also Denmark, the Netherlands, Panama, which are quite loss-making, so not all countries in the central region are profitable in the plus**

3) Few countries are represented in the southern and northern region and none other than U.S. in the eastern and western regions

In overall for this, the best solution is to diversify trading between several markets and choose the best performance with minimal loss of profits.

Analysis of profits by sub-categories

As can be seen from the graph the trends are changing from year to year and the consumption increases, so in 63 items and in 2020 in 97 items and such a trend is observed in all subcategories, however we can notice one of the outliers - tables, their sales also increase every year, but the profit is steadily decreasing below zero every year and the **best selling are phones and copiers, as well as chairs**.



Below I decided to look at how these trends are observed in all world markets down the years, so you can give your guesses for the next few years and see which categories are losing relevance over the years.

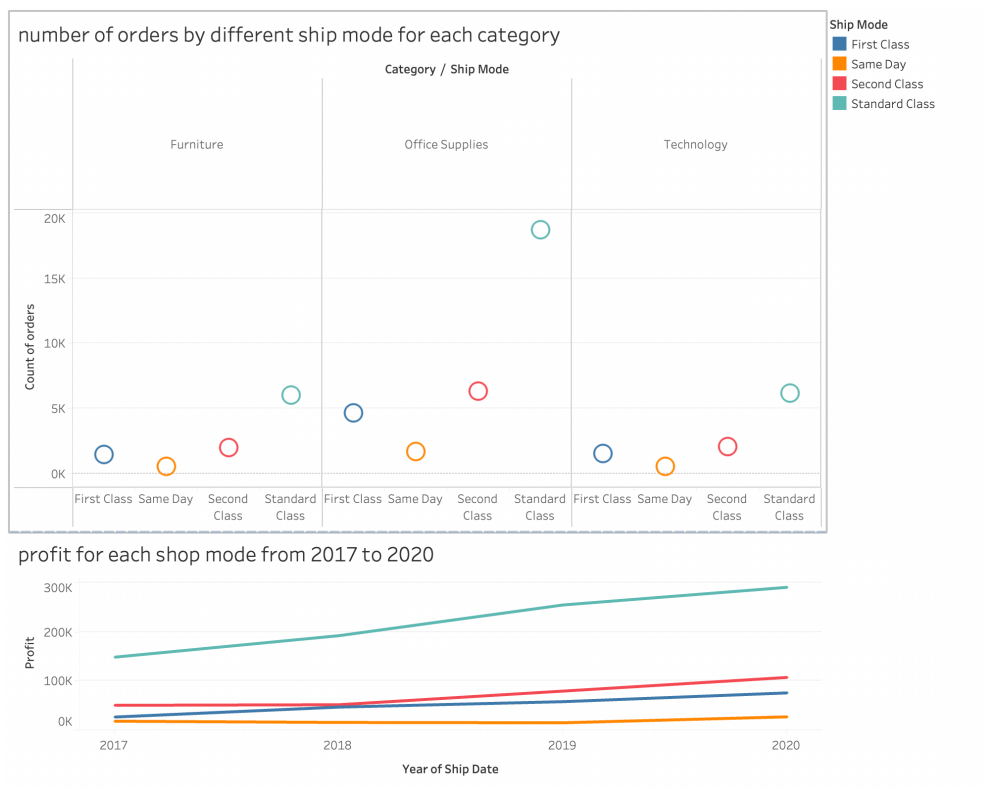
You can see that all categories are thriving over the years and increasing their sales and profit margins, except Furniture, in the US and EMEA market in 2020 it has lost its profit almost twice but sales trends as well as other categories are increasing over the years and means that either the market is oversupplied,

because the **APAC market on the contrary sells more fittings even than phones** (Top 1 world in sales).

This is because of the different countries in terms of money status and average income of the middle class, the APAC market has lower needs than the American market. Another thing about the phone market is that Canada has the lowest sales differential since 2017 compared to 2020 among all markets.

Ship mode analysis

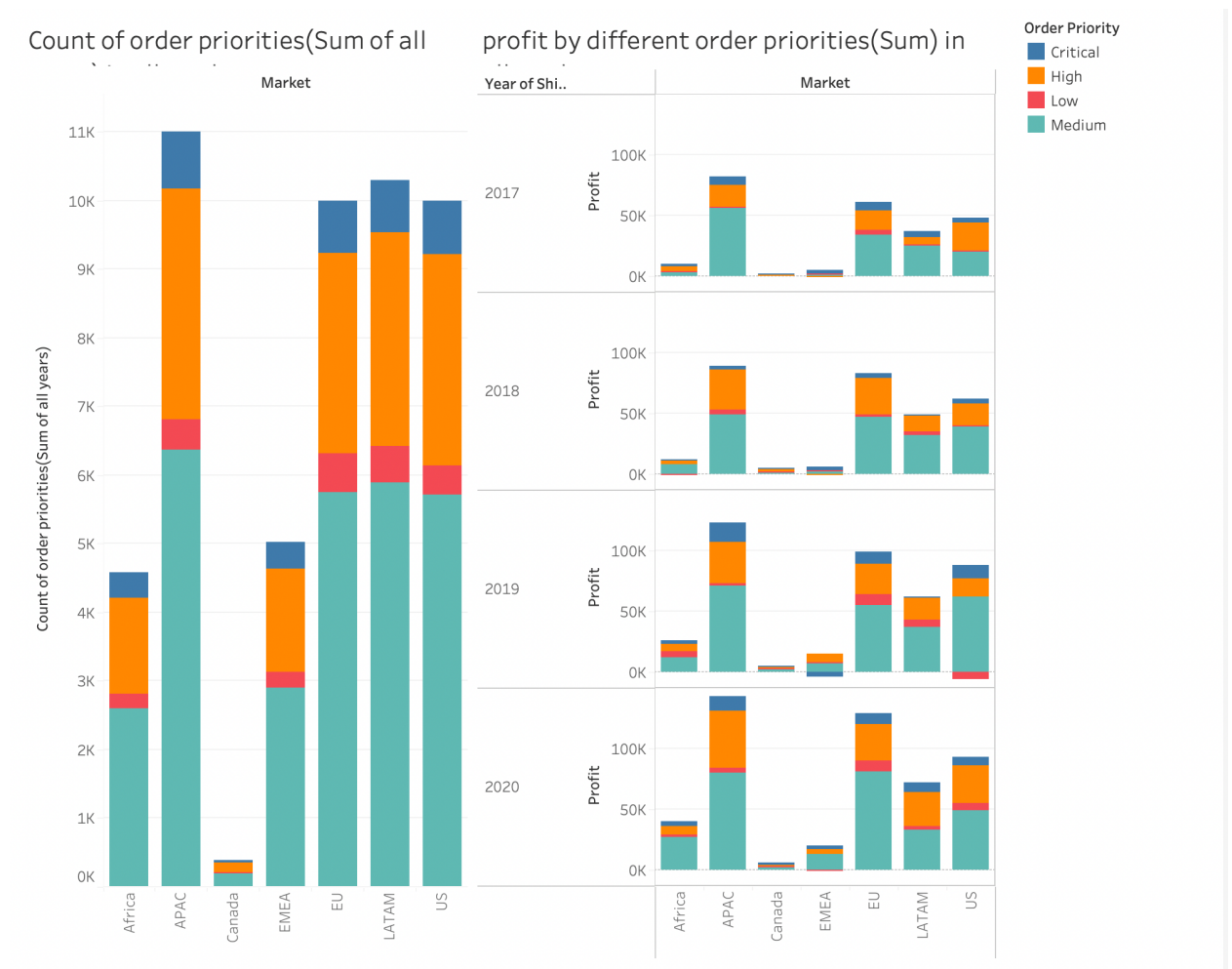
After looking at the markets and categories in detail, let's move on to ship mode, the first graph shows the distribution of categories by how often they are delivered in different ways and the most popular is the **standard class, which brings in the most revenue**. It **does not cost as much as the high class** and it is better when the clientele is focused on one delivery class. This way, a company can focus on improving one method, start to work in a more customer-oriented way and this will benefit both companies and customers. It can also be seen that the most unprofitable and unpopular method is same-day delivery, which is likely to be very narrowly focused and has a higher cost for both the buyer and the company. So this method needs to be carefully considered.



Order priority analysis

order priority is the next factor that affects company profits, you can see that in all world markets **more than half of the profits in all years come from medium priority and high** and least of all from low and critical. This is due to human factor, no one likes to wait too long for their order, and there are few people who need to buy urgently, but it is an additional expense for both the client and the company. It's preferable to keep to the medium priority (Live queue) for more profit.

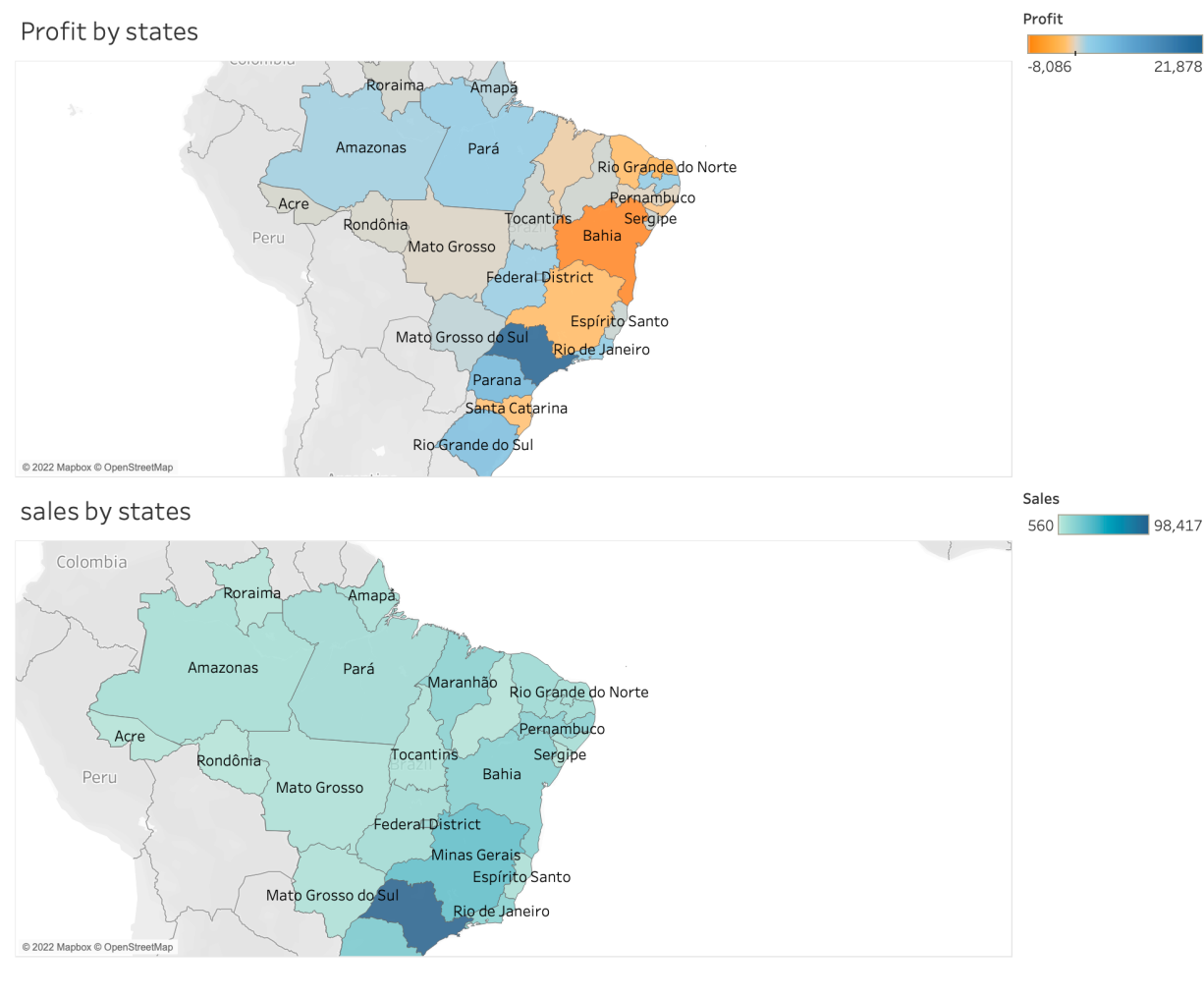
An example of mistakes made by companies on the US market can be seen in 2019 when low and critical priorities caused losses



You can also see that Canada is the lowest turnover market, even if there are a lot of profits and good sales, unfortunately the volume is low and you might not notice it at first glance.

profit/sales analysis by Brazilian states

My final analysis would be that you should not simply rely on the data and indicators that I have shown above. It is also worth considering the internal characteristics of the countries and their economies, the distribution of cities and regions within them.



To give a simple example, the region of Bahia in Brazil, has one of the highest sales figures in the country, but at the same time is the **lowest profitable region** and all because the main product of this state is wood products (mainly furniture) and as we saw from the charts above it does not always trade well and not profits in a positive way. From this example you can understand that it is worth to go deeper into the economic and industrial component in order to see and understand the full picture. On the other hand, the state capital is Sao Paulo. at a glance it would be hard to understand why we can't make good profits in both Sao Paulo and Bahia, but **Sao Paulo has the highest sales and profits** and Bahia only sales

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