# Bayer Business Intelligence Analysis

Focus: Manufacturer 1

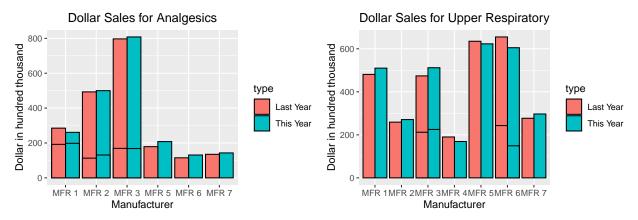
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### Background

For this report, there are two types of categories: analgesics and upper respiratory. Manufacturers include MFC 1, MFC 2, MFC 3, MFC 4, MFC 5, MFC 6 and MFC 7 with many different brands. Based on the data, we have dollar sales as well as dollar sales in the last year. The report is separated into three parts: 1.General glimpse for the whole market, 2.Manufacture 1 (MFR 1)'s performance compared to the market, and 3.Market share in this year and last year.

### 1. General glimpse for the whole market

We could make separate histograms for analgesics and upper respiratory with colors indicating different years.



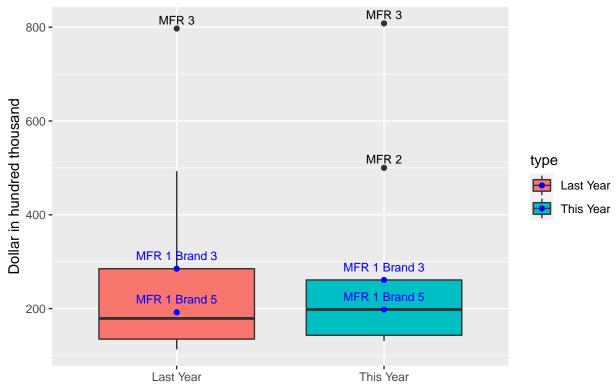
Based on the plot, we could have a general sense that dollar sales for upper respiratory are better than it for analgesics. And for analgesics, dollar sales in this year for most of the manufacturers increase compared to it in the last year. But for upper respiratory, dollar sales in this year for roughly half of the manufacturers decrease compared to it in the last year. We could research more about the decreasing trend in dollar sales for upper respiratory to capture the future trend and make adjustments for better adapting the market.

- For analgesics, MFR 3 has the highest dollar sales in both this year and last year, followed by MFR 2. MFR 1 did better than half of the manufactures, and MFR 1, MFR 2 and MFR 3 have two different brands for analgesics.
- For upper respiratory, MFR 5 has the highest dollar sales in this year, while MFR 6 has the highest dollar sales in the last year, followed by MFR 1 and MFR 3.
- MFR 1 did better than roughly 75% of the manufactures. MFR 3 and MFR6 have two different brands for upper respiratory.

### 2. Manufacture 1 (MFR 1)'s performance compared to the market

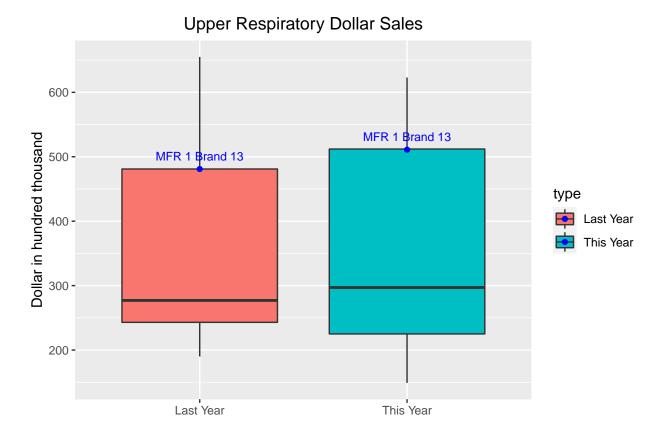
#### **Analgesics:**





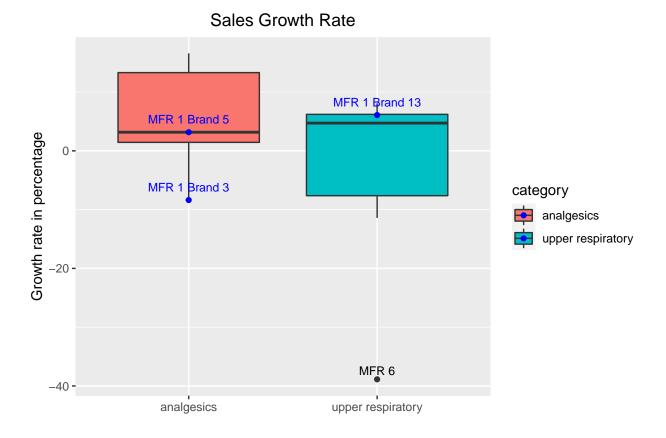
- In general, MFR 1 did a great job since no matter for which brand or year, the dollar sales are above the median compared to the whole market.
- For MFR 1, dollar sales for brand 3 are larger than it for brand 5. So, MFR 1 could research more about the differences between two brands to improve the performance for brand 5.
- MFR 3 and MFR 2 did a weigh better job than the rest of the market, MFR 1 could study from them and improve two brands.
- For MFR 1, brand 5 sold more in this year while brand 3 sold less compared to it in the last year, MFR 1 could research the reasons for increasing trend for brand 5 to increase dollar sales for brand 3 and keep the increasing trend for both two brands.
- The gap for the whole market in this year decreases compared to it in the last year. MFR 1 could study more about the trend for the whole market and adapt to it in the future. For this year, the market for analgesics seems to be more competitive than the last year.

#### Upper Respiratory:



- MFR 1's dollar sales for upper respiratory are above 75% of the manufacturers no matter for this year or last year and did a great job.
- The 75% percentile for dollar sales for the whole market in this year increases compared to it in the last year but the gap or difference between manufacturers in dollar sales for this year increases. And it's beneficial to think about the reason behind the fact so that MFR 1 could improve the performance while avoiding the decreasing trend.
- For MFR 1, the dollar sales for upper respiratory in this year is larger than it in the last year, and if MFR 1 could investigate the reason for increasing sales, it might be useful for later successes.

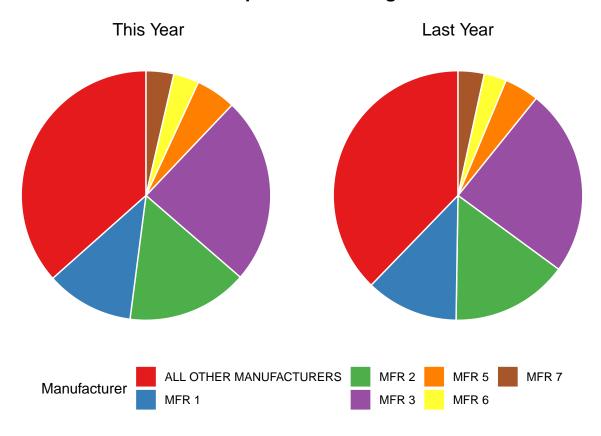
#### **Growth Rate**



- For both analgesics and upper respiratory, more than half of the manufacturers have positive growth rate in dollar sales.
- In general, the median growth rate for upper respiratory is larger than it for analgesics. If MFR 1 could research the reason for why the growth rate is larger for upper respiratory, they could have more successful strategies or design more products which cater to the market demand.
- Based on the plot, we could confirm the findings from previous sections that brand 5 for analgesics and brand 13 for upper respiratory have positive growth rate, while brand 3 for analgesics has negative growth rate. So, MFR 1 needs to investigate the reason for negative growth rate and learn from it to avoid it in the future.
- It's also beneficial to learn cases from MFR 6 to avoid such a large negative growth rate in the future.

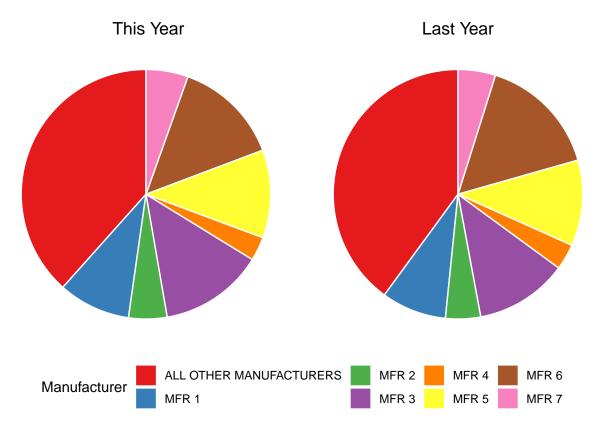
## 3. Market share in this year and last year

# **Sales Proportion for Analgesics**



- The market share for analgesics in this year and last year are pretty similar.
- All other manufacturers has the largest market share for analgesics and that makes sense since the category might include many manufacturers together.
- MFR 3 has the second largest market share for analgesics, followed by MFR 2 and MFR 1. Learning from MFR 3 might be beneficial for MFR 1.

## **Sales Proportion for Upper Respiratory**



- The findings of market share for upper respiratory are pretty similar to what I found in market share for analgesics.
- Except for all other manufacturers, the market share for the rest of manufacturers are pretty even, which might indicate that the market is competitive for upper respiratory. Learning from other manufacturers or dig into the reasons for competitive market might be beneficial for MFR 1.