Final Report

on

“Executive Sales”

MedTourEasy

From: Stefan Lacher, BA

Internship Program: Business Analyst Trainee

April 2021

Acknowledgments

At the beginning I would like to thank the MedTourEasy team for giving me the opportunity to do an internship with you. Also, thank you very much for the instructive time and opportunity to develop in the area of "Business Analyse".

During the internship at MedTourEasy, I was able to complete the “Tableau Fundamentals” training and apply the skills I had learned with the “Executive Sales” project. The internship helped me to expand my knowledge in the areas of data visualization with the help of Tableau.

Thank you very much!

Abstract

This analysis is particularly important for companies. Profit, sales figures and more are analyzed and presented annually and monthly.

In this regard, Tableau was used. The following link takes you to the visualization:

https://public.tableau.com/profile/stefan.lacher#!/vizhome/ExecutiveSales-MedTourEasy/ExecutiveSales

Inhaltsverzeichnis

1 Introduction 1

2 Methodology 2

3 Implementation 3

3.1 Data source connection 3

3.2 Create First Tableau worksheet 3

3.3 Add Filters in Tableau 3

3.4 Create an area chart in Tableau for Sales 4

3.5 Create an area chart in Tableau for Profit 6

3.6 Create a Dashboard in Tableau 8

4 Conclusion 11

5 References 12

6 List of illustrations 13

1 Introduction

As part of the “Business Analyst” internship, a project entitled “Executive Sales” was carried out for “MedTourEasy”. "MedTourEasy" is a healthcare company that offers a platform for second opinions in the healthcare sector (see MedTourEasy.com 2021).

The project is about the visualization of data from a business.

This is particularly important for making decisions in the company. Different categories such as “Cariology”, “Neurology” and “Orthopedics”, subcategories such as “Arthroscopy”, “Spine Surgery” and many others, regions “Central”, “East”, “South” and “West” and the “Corporate”, “Insured” and “Non-Insured” segments were identified.

A data set called “Patients - United States” was used for the analysis (see Dataset 2021).

The aim of this project is to create a visualization of the data, which can then be interpreted.

2 Methodology

As mentioned earlier, Tableau was used for this project. This is used for a very good visualization of data, which is then used to create the dashboard.

Now that the technical perspective has been considered, the procedure is explained below. This project is guided with the help of tasks. These are as follows:

1. Data source connection

2. Create First Tableau worksheet

3. Add Filters in Tableau

4. Create an area chart in Tableau for Sales

5. Create an area chart in Tableau for Profit

6. Create a Dashboard in Tableau

In the next chapter, the procedure and implementation of the tasks that have already been described are explained in detail.

3 Implementation

The implementation is the chapter where the procedure is explained in detail step by step.

3.1 Data source connection

After opening the program, the dataset “Patients - United States” will be loaded. This was made available by MedTourEasy for the subsequent calculations. This data record consists of different sheets such as "Orders", "People" or "Returns". For the following calculations, only the “Orders” sheet is important, so the sheet mentioned is selected.

3.2 Create First Tableau worksheet

The analysis can now begin. In this regard, sheet 1 is selected and renamed “YTS KPIs”. This is also the title of the first sheet. Since two areas are to be compared here, “measure values” is entered in the column and “measure names” in the row. These are displayed with the help of a bar chart, labels on the bars and the axes. What has been described can be seen in the following illustration.

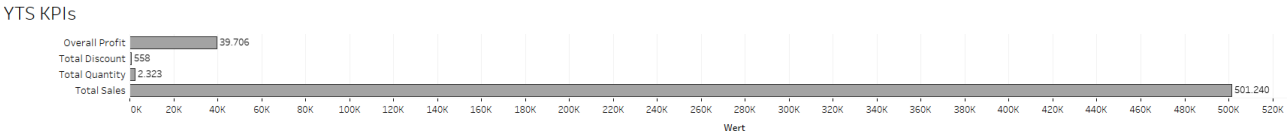

Illustration 1: YTS KPIs

Filters are then created for this.

3.3 Add Filters in Tableau

A distinction is made between the filters according to the variables “Category”, “Sub-Category”, “Region” and “Segment”. These have different characteristics that are important for the analysis of the data. In the case of the filters, when selecting "all", all data should be displayed with all characteristics. For example, if the "Cardiology" feature is selected from the "Category" variable, the bar chart that has just been created should change in this regard. This should be done for all variables and characteristics.

A dropdown menu was selected as formatting to ensure a better overview. The menu with the variables can be seen in the following illustration.

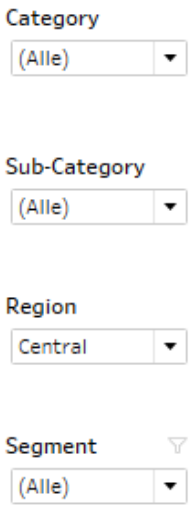

Illustration 2: Dropdown Filters

Subsequently, diagrams are created for sales.

3.4 Create an area chart in Tableau for Sales

In the next step, a new worksheet was created and named “Sales”. This is also the title of the diagrams to be created. The total of the sales should be shown in the rows. There are also two subdivisions of the columns, on the one hand Procedure Date in years and on the other hand Procedure Date in months. Four diagrams are created for each year. A diagram area was chosen for the formatting. The diagram can then be viewed.

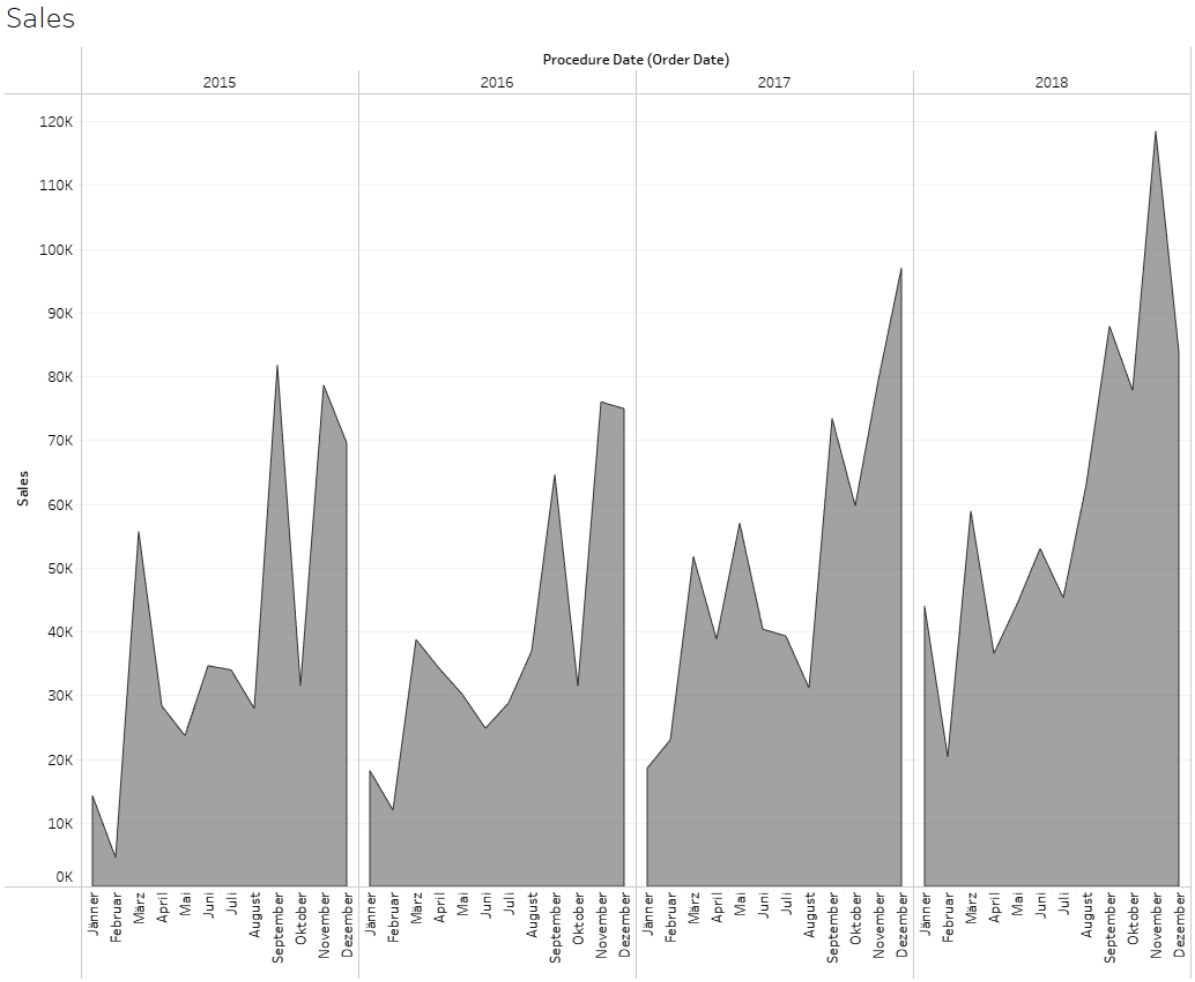

Illustration 3: Sales

Here, the sales for all categories, sub-categories, regions and segments can be viewed. In the first year of 2015, the weakest month with the fewest sales was February and the best month was September with sales of over 80,000 units. 2016 was also the weakest month of February with just over 10,000 sales, but the best month was November with around 75,000 sales. Another picture can be recognized in 2017. It can be said that the worst month was January with fewer than 20,000 sales and the best month was December with almost 100,000 sales. In 2018, the bottom was February with around 20,000 sales and the best month in November with almost 120,000 sales.

However, since the characteristics of the variables are also important when analyzing sales per month and year, the filters already discussed are also used in this case. If the worst values of the values of the category variable are considered,

it can be said that the worst month for all three was February 2015 and the best for Cardiology was November 2018 with 37,000 sales, Neurology November 2018 with 50,000 sales and Orthopedics December 2017 with 38,000 sales was. So it can be said that Neurology generates the most sales. Looking at the regions, it can be said that East sold the least of all regions in February 2015 with 200 sales, but sold the most in November 2018 with 45,000 sales.

The visualizations for the characteristics of the sub-category and segment can be viewed in the dashboard. The dashboard can be opened under the following link.

https://public.tableau.com/profile/stefan.lacher#!/vizhome/ExecutiveSales-MedTourEasy/ExecutiveSales

3.5 Create an area chart in Tableau for Profit

In the next step a new worksheet was created and named “Profit”. This is also the title of the diagrams to be created. The total of the profits should be shown in the lines. There are also two subdivisions of the columns, on the one hand Procedure Date in years and on the other hand Procedure Date in months. Four diagrams are created for each year. A diagram area was chosen for the formatting. The diagram can then be viewed.

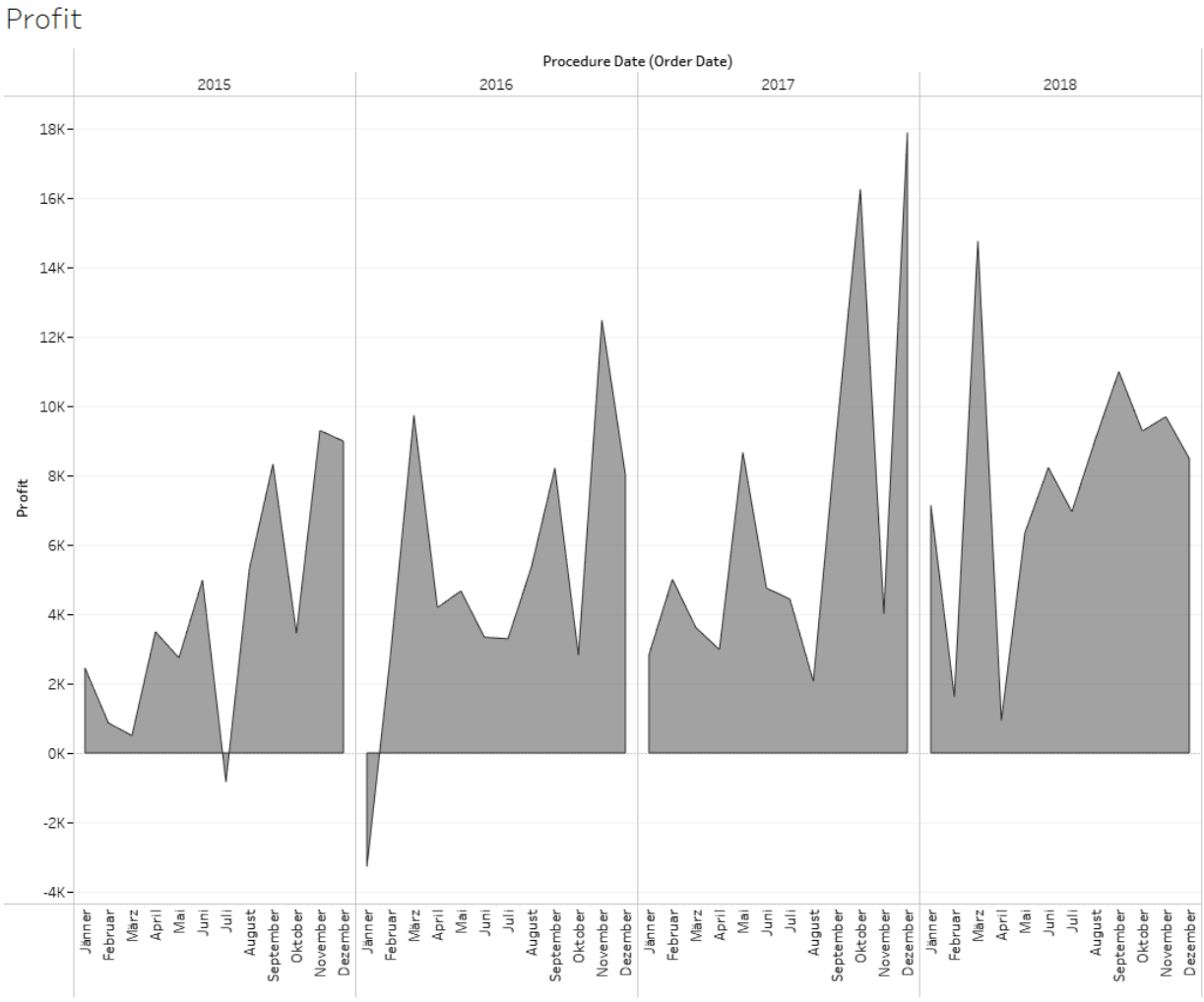

Illustration 4: Profit

The profits and losses for all categories, sub-categories, regions and segments can be viewed. In the first year of 2015, the weakest month was July with a loss of $ 841 and the best month was November with a gain of over $ 9,000. 2016 was the worst month with a loss of around $ 3,000 in January and the best month with a profit of $ 12,000 in November. In 2017 and 2018 only profits were made. While 2017 was the worst month with a profit of $ 2,000, 2018 was the worst month of April with a profit of $ 900. The best months of the two years were December 2017 and March 2018.

However, since the characteristics of the variables are also important when analyzing the profits and losses per month and year, the filters already discussed are also used in this case.

Looking at the category, it can be said that Cardiology was the worst month in January 2016 with a loss of 3,000 dollars and November 2016 was the best month with a profit of 3,000 dollars. Neurology made a loss in April 2018 and made $ 12,000 in profit in October 2017. Orthopedics posted a loss of $ 2,500 in July 2015 and a profit of $ 11,000 in December 2017.

When looking at the regions, different things can be seen. While Central made the most losses in July 2015, East made the most losses in November 2017, South in October 2018, and West in April 2018. Most of the gain can be seen in October 2017 at Central, November 2018 at East, February 2017 at South, and March 2018 at West.

Here, too, there are many other numbers that can be looked at. These can be analyzed in the dashboard under the following link.

https://public.tableau.com/profile/stefan.lacher#!/vizhome/ExecutiveSales-MedTourEasy/ExecutiveSales

3.6 Create a Dashboard in Tableau

After all the illustrations have been created, the next step is to create the dashboard in Tableau using the worksheets. The title in this regard is Executive Sales and all the representations already discussed are taken into account in this dashboard. The selection of the characteristics of the variables is particularly interesting, since with the help of this all illustrations adapt and one thus immediately has a comparison between, for example, profit and sales. The dashboard can be viewed in more detail below.

Illustration 5: Dashboard

After the dashboard has been displayed, it will be briefly explained. “YTS KPIs” is presented under the heading “Executive Sales”. The overall profit, total discount, total quantity and total sales are shown here. Below this, the four diagrams of the Sales area are illustrated. The months can be viewed for the respective years. The same can be seen for the four diagrams below with regard to profit. In addition to the three illustrations and the title, the dropdown menus for the variables and filters are located on the right-hand side of the dashboard.

In order to be able to take a closer look at the dashboard and thus set the filters for the different areas, access is via the link below.

https://public.tableau.com/profile/stefan.lacher#!/vizhome/ExecutiveSales-MedTourEasy/ExecutiveSales

4 Conclusion

In summary, it can be said that this analysis is particularly important for companies. Profit, sales figures and much more are analyzed and presented annually and monthly in the Dashboard.

This project analyzed the data between 2015 and 2018. Different areas were considered, such as sales, profit and many more.

With the help of filters, this data can be viewed from different perspectives. For example, the different regions with “Central”, “East”, “South” and “West” should be mentioned.

In the future, it would make sense to update and re-analyze the data over time.

5 References

MedTourEasy.com 2021: MedTourEasy. Connecting Patients Worldwide. https://www.medtoureasy.com/ (accessed on 27.04.2021).

Dataset 2021: Patients – United States. https://drive.google.com/file/d/1XsNol-NdHhudke8RjIaOd2Ws_yctniA3/view (accessed on 27.04.2021).

6 List of illustrations

Illustration 1: YTS KPIs 3

Illustration 2: Dropdown Filters 4

Illustration 3: Sales 5

Illustration 4: Profit 7

Illustration 5: Dashboard 9