Data Processing and Visualization (P02)

DECISION SUPPORT SYSTEMS, 2021-22

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# Introduction

The goal of this project is the development of a data processing and visualization software solution, that provide us information about the data from Adventure works, such as: sales information, customers, products, etc.

In this project we have done data preparation, measures and columns that we thought necessary to perform the data presentation. These measures and columns were created so that we could create several dashboards in Power BI, since this allows us to show data in a better way.

# Data acquisition and preparation

In order to optimize the information that exists in the tables, we have cleaned some unnecessary data. Examples of such **data are those that are *"null****"*, **products that are unavailable**, photos that are **invalid**, **change values** in order to fetch external data. Here are some examples of what has been done:

Remove products with category *"null":*

Change “united states” to “United-States-Of-America” because of external flags:



# Data modelling and processing

To relate tables and be able to show more useful information, measures and columns have been created. We will now talk about each of them:



1. This measure is used to search for the most purchased product and shows the name of that product.



1. *“DISTINCTCOUNT”* was used to count the number of customers without repeating them. This will tell us the total number of customers.



1. This measure indicates the average number of orders placed by customers, basically the average price spent by customers on orders.



1. Não é usada

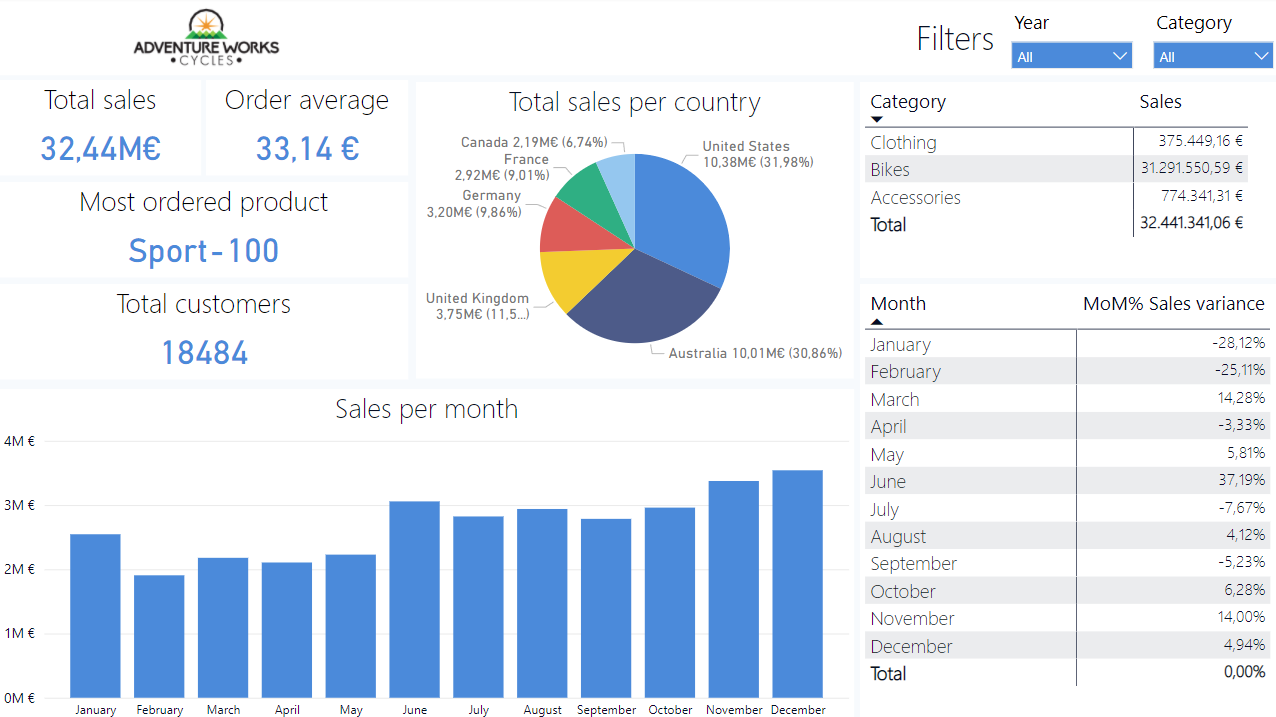


1. Here the total sales made by both internet and resellers are calculated. And it is also calculated the Variance in percentage per month of sales in order to know if the following month had better sales than the previous one.



# Data visualization

<<Identify the goals of the dashboards and the profile of their end users. Add screenshot of the dashboards, a short description of the dashboards and other relevant elements, e.g., slicers, KPIs, influencers, etc.>>



# Conclusion

With the completion of this work, we have gained a better understanding of what can be done when analytical processing and data visualisation is required and how this will be useful in future projects. When put into practice we have a much greater notion of what can be done at a professional level.