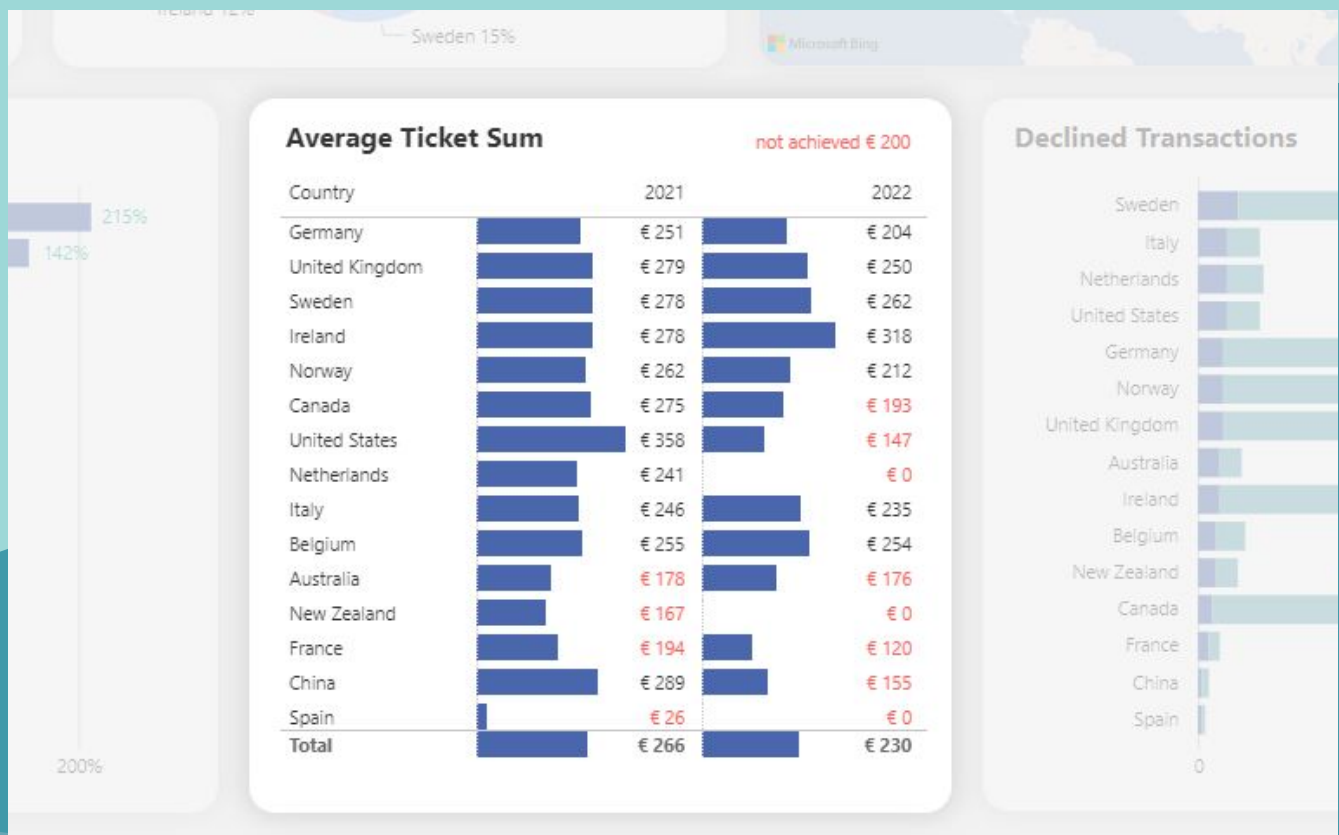# SPRINT #6
POWER BI: VISUALIZATION AND REPORTS

student:
**Leo Kalugin**

Date: 15/01/2025

LEVEL 1 EXERCISE 1

The company needs to evaluate sales performance internationally. As part of this process, you are asked to choose a chart that details average sales broken down by country and year in a single visual presentation. It is necessary to point out the averages that are less than 200 euros per year.

Average Ticket Sum — not achieved € 200

Country	2021	2022
Germany	€ 251	€ 204
United Kingdom	€ 279	€ 250
Sweden	€ 278	€ 262
Ireland	€ 278	€ 318
Norway	€ 262	€ 212
Canada	€ 275	€ 193
United States	€ 358	€ 147
Netherlands	€ 241	€ 0
Italy	€ 246	€ 235
Belgium	€ 255	€ 254
Australia	€ 178	€ 176
New Zealand	€ 167	€ 0
France	€ 194	€ 120
China	€ 289	€ 155
Spain	€ 26	€ 0
Total	€ 266	€ 230

Declined Transactions

Sweden
Italy
Netherlands
United States
Germany
Norway
United Kingdom
Australia
Ireland
Belgium
New Zealand
Canada
France
China
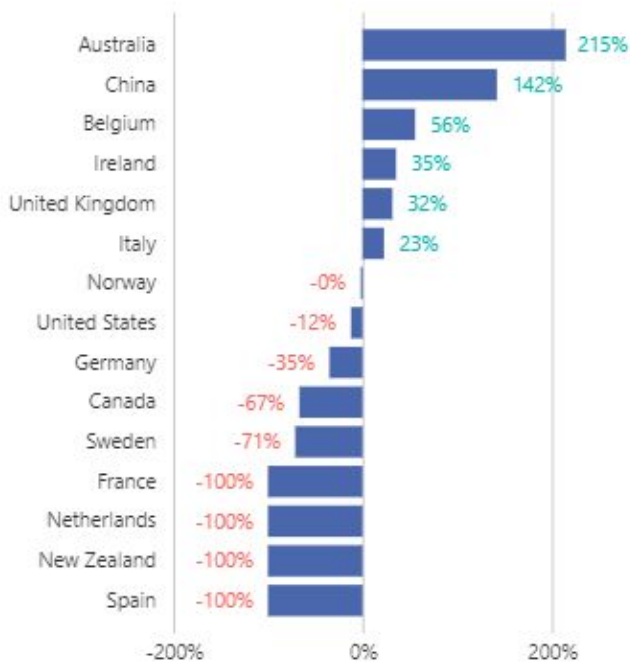Spain

LEVEL 1 EXERCISE 2

The company is interested in obtaining an overview of the transactions carried out by each country. Your task is to create a visualization that identifies the percentage of sales by country.
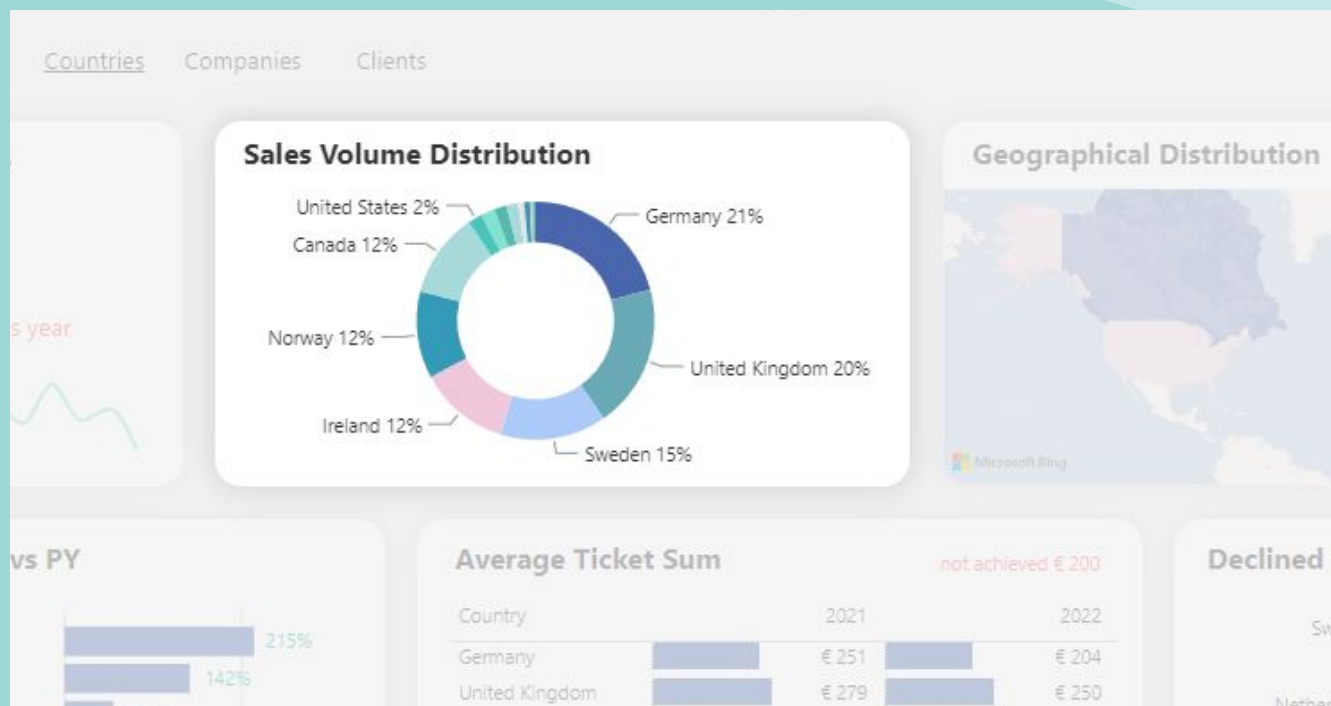
LEVEL 1 EXERCISE 3

Design a visual indicator in Power BI to analyze the difference in sales between the years 2022 and 2021 in each country. The company is interested in understanding how sales have varied in different countries during this period and wishes to identify any significant decreases or increases in sales.


Monthly Sales Growth vs PY

Country	Growth
Australia	215%
China	142%
Belgium	56%
Ireland	35%
United Kingdom	32%
Italy	23%
Norway	-0%
United States	-12%
Germany	-35%
Canada	-67%
Sweden	-71%
France	-100%
Netherlands	-100%
New Zealand	-100%
Spain	-100%

Average Ticket Sum

Country	2021
Germany	€ 251
United Kingdom	€ 279
Sweden	€ 278
Ireland	€ 278
Norway	€ 262
Canada	€ 275
United States	€ 358
Netherlands	€ 241
Italy	€ 246
Belgium	€ 255
Australia	€ 178
New Zealand	€ 167
France	€ 194
China	€ 289
Spain	€ 26
Total	€ 266

LEVEL 1 EXERCISE 4

Create a visualization in which the number of rejected transactions in each country can be counted to measure the effectiveness of the operations. Remember that the company expects to have less than 5 declined transactions per country.
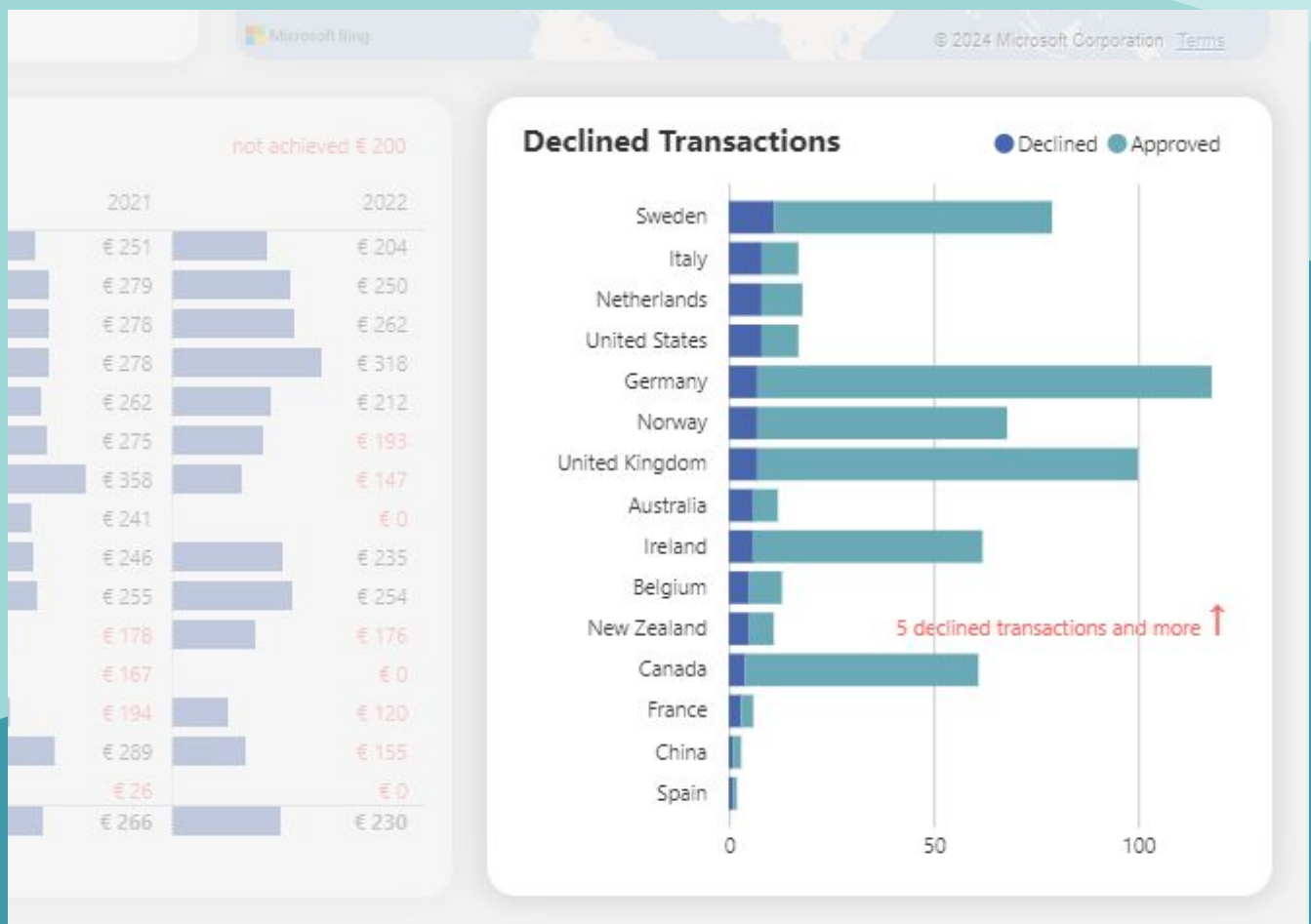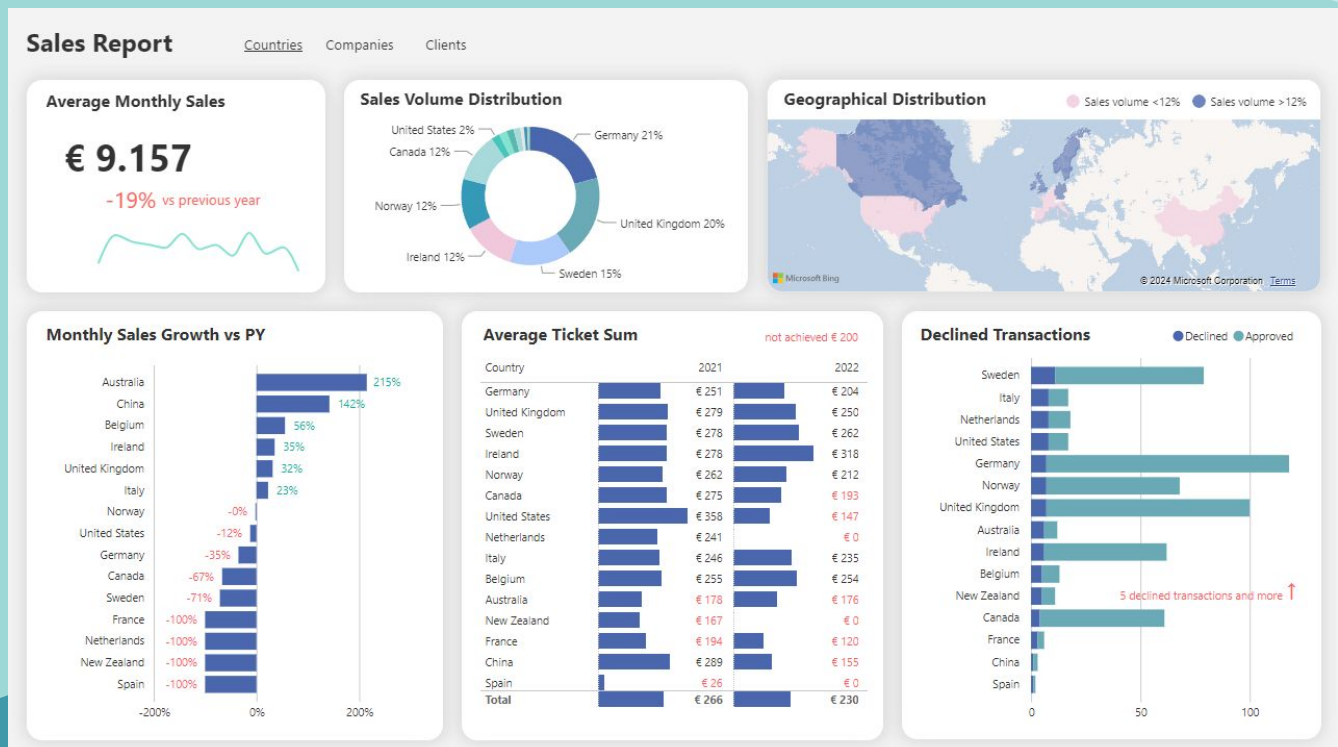
LEVEL 1 EXERCISE 5

The company seeks to understand the geographic distribution of sales to identify specific patterns and opportunities in each region. Select the best view to display this information.
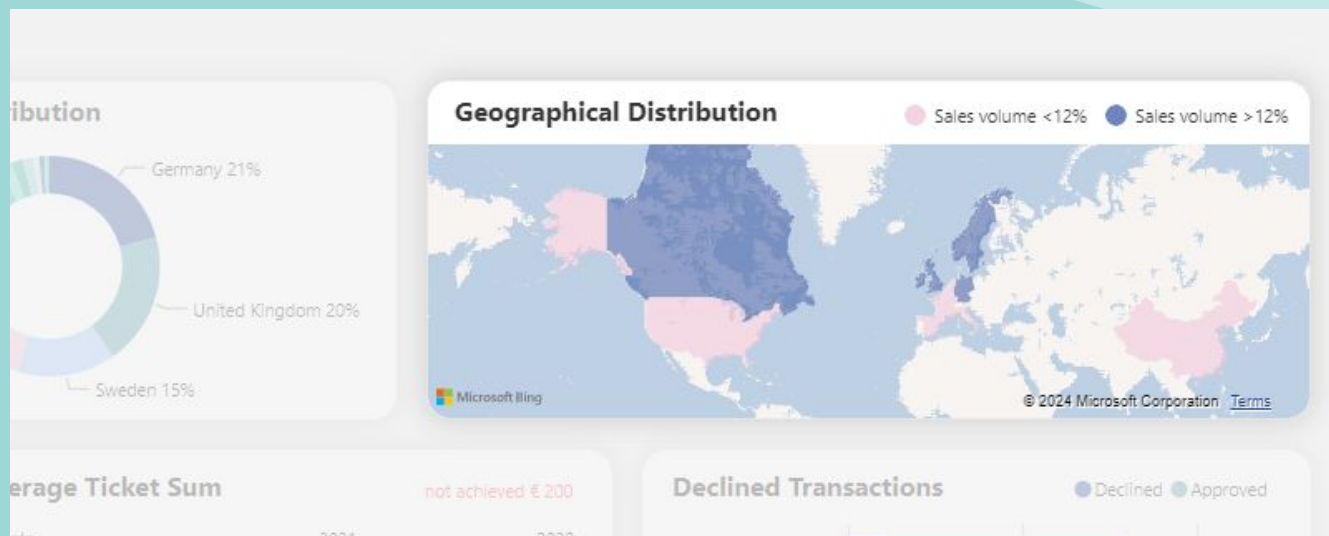
LEVEL 1 EXERCISE 6

Your boss has asked you to prepare a presentation for your team detailing the information on all the graphs viewed so far. To comply with this request, you must provide an interpretation of the views obtained. The presentation can be made with general information or by selecting a particular element, such as, for example, the results of Spain.

Sales Report

Countries   Companies   Clients

Average Monthly Sales

€ 9.157

-19% vs previous year

Sales Volume Distribution

- United States 2%
- Canada 12%
- Germany 21%
- Norway 12%
- United Kingdom 20%
- Ireland 12%
- Sweden 15%

Geographical Distribution

Sales volume <12%   Sales volume >12%

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Monthly Sales Growth vs PY

Country	Growth
Australia	215%
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Belgium	56%
Ireland	35%
United Kingdom	32%
Italy	23%
Norway	-0%
United States	-12%
Germany	-35%
Canada	-67%
Sweden	-71%
France	-100%
Netherlands	-100%
New Zealand	-100%
Spain	-100%

Average Ticket Sum

not achieved € 200

Country	2021	2022
Germany	€ 251	€ 204
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Australia	€ 178	€ 176
New Zealand	€ 167	€ 0
France	€ 194	€ 120
China	€ 289	€ 155
Spain	€ 26	€ 0
Total	€ 266	€ 230

Declined Transactions

Declined   Approved

Sweden
Italy
Netherlands
United States
Germany
Norway
United Kingdom
Australia
Ireland
Belgium
New Zealand
Canada
France
China
Spain

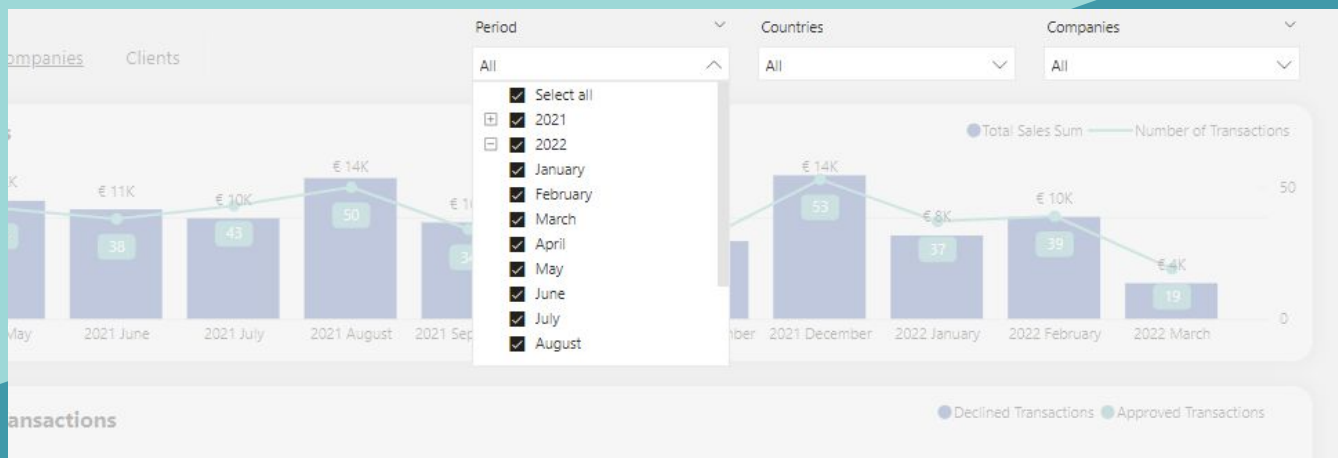5 declined transactions and more ↑

0   50   100

LEVEL 2 EXERCISE 1

Your task is to implement an interactive filter that allows you to select the sales for each year.

LEVEL 2 EXERCISE 2

Management is interested in further analyzing sales for the month. Therefore, you are asked to make the necessary adjustments to display the information in this way.
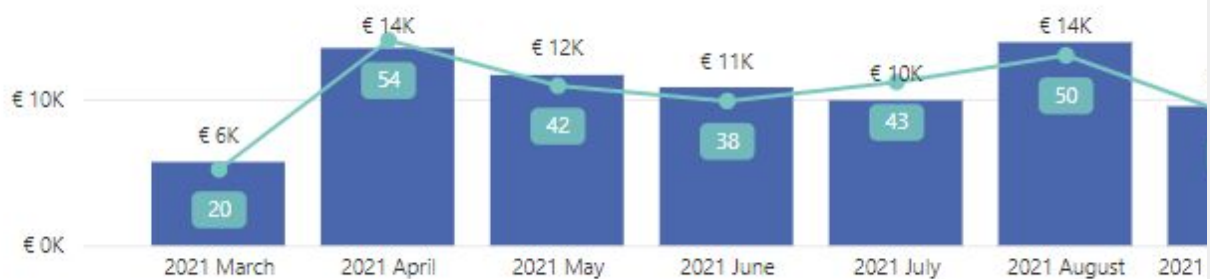
LEVEL 2 EXERCISE 3

View the total sales and the number of transactions completed. You can create two separate views if needed.
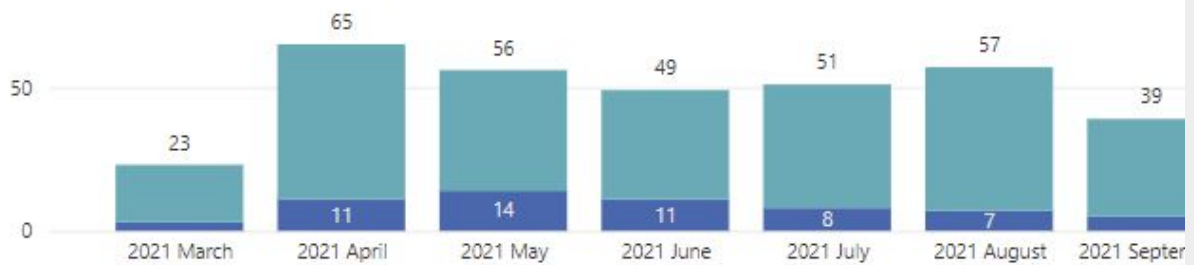
LEVEL 2 EXERCISE 4

Create a visualization that allows you to effectively and clearly observe the quantity of sales made and the quantity of rejected transactions.

LEVEL 2 EXERCISE 5

Select a view that reflects the descriptive statistics of the companies that made transactions. Remember to show the total for each statistic.

Company Name	Country	Total Sales	Approved	Declined	Average Ticket	Standard Deviation	Products	Max Product Price	Max Product Name	Min Product Price	Min Product Name
Nunc Interdum Incorporated	Germany	€ 25.267	104	1	€ 243	€ 150	261	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Ut Semper Foundation	Sweden	€ 16.122	58	1	€ 278	€ 139	144	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Malesuada PC	Ireland	€ 14.886	51	1	€ 292	€ 138	130	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Enim Condimentum Ltd	United Kingdom	€ 14.578	56	1	€ 260	€ 143	135	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Lorem Eu Incorporated	Canada	€ 13.916	53	1	€ 263	€ 130	125	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Arcu LLP	Norway	€ 13.763	55	1	€ 250	€ 133	137	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Non Institute	United Kingdom	€ 8.911	30	0	€ 297	€ 134	72	€ 195,94	Winterfell	€ 26,51	duel tourney
Eget Ipsum Ltd	United States	€ 482	1	1	€ 482	€ 0	4	€ 169,96	riverlands north	€ 63,33	north of Casterly
Sed Id Limited	United States	€ 478	1	1	€ 478	€ 0	1	€ 63,33	north of Casterly	€ 63,33	north of Casterly
Total		**€ 129.506**	**500**	**87**	**€ 259**	**€ 143**	**1236**	**€ 195,94**		**€ 9,24**	

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Ticket	Standard Deviation	Products	Max Product Price	Max Product Name	Min Product Price	Min Product Name
	€ 150	261	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 139	144	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 138	130	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 143	135	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 130	125	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 133	137	€ 195,94	Winterfell	€ 9,24	Tarly Stark
	€ 134	72	€ 195,94	Winterfell	€ 26,51	duel tourney
	€ 0	4	€ 169,96	riverlands north	€ 63,33	north of Casterly
	€ 0	1	€ 63,33	north of Casterly	€ 63,33	north of Casterly
	€ 143	**1236**	**€ 195,94**		**€ 9,24**	

LEVEL 3 EXERCISE 1

In your company, they want to deepen the analysis of the characteristics of the users who participate in the transactions, as well as the products sold. You've been asked to create relevant views to strategically improve ad campaigns and increase sales. After creating the charts, you must present the user information with ID 96 with a brief description of the data through a slide show. Make sure to optimize the readability and understanding of the visualizations through appropriate adjustments. The views you must include are:

- Personal information of users;
- Amount of transactions made and rejected. The company expects each user to have at least 10 transactions per year, and to have less than 2 declined transactions per year;
- Identification of the cheapest and most expensive product purchased by each user, together with its price;
- Geographic distribution of users;
- Average purchases made;
- The user must have the option to select if they wish to view the information of one year only.

Sales Report   Countries   Companies   Clients

Period: All   Countries: All   Companies: All

TOP-Clients Sales Distribution

Client Name	03.21	04.21	05.21	06.21	07.21	08.21	09.21	10.21	11.21	12.21	01.22	02.22	03.22
Blaze Duke													
Brennan Wynn													
Burke Graham													
Camilla Roach													
Chloe Keith													
Drake Walsh													
Hedwig Gilbert													
Iola Griffith													
John Cotton													
Kenyon Hartman													
Kim Mooney													
Lewis Melendez													
Lynn Riddle													
Martha Roth													
Neil Powers													
Ocean Nelson													
Slade Poole													
Zephania Collins													

Clients Geographical Distribution   ● Total Sales Sum

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Client Name	Country	Total Sales	Approved	Declined	Average Ticket	Standard Deviation	Products	Max Product Price	Max Product Name	Min Product Price	Min Product Name
Lynn Riddle	United States	€ 11.452	39	0	€ 294	€ 134	89	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Hedwig Gilbert	Canada	€ 9.682	38	38	€ 255	€ 161	105	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Ocean Nelson	Canada	€ 9.638	39	13	€ 247	€ 134	90	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Brennan Wynn	United States	€ 6.616	25	0	€ 265	€ 137	65	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Kenyon Hartman	Canada	€ 5.683	24	24	€ 237	€ 157	54	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Slade Poole	Canada	€ 4.936	22	0	€ 224	€ 131	53	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Kim Mooney	United States	€ 3.478	17	0	€ 205	€ 138	41	€ 195,94	Winterfell	€ 9,24	Tarly Stark
Neil Powers	United States	€ 1.409	5	0	€ 282	€ 102	11	€ 172,78	skywalker ewok	€ 9,24	Tarly Stark
Lewis Melendez	United Kingdom	€ 920	2	0	€ 460	€ 34	5	€ 167,20	Tully maester Tarly	€ 28,01	Winterfell Lannister
Total		**€ 129.506**	**500**	**87**	**€ 259**	**€ 143**	**1236**	**€ 195,94**		**€ 9,24**	