

Capstone Project - Power BI

Axon Sales Data Analysis

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DS037

Introduction

Axon, our client, has provided us with their sales data for analysis as they are facing challenges in examining it themselves.

We have received the data in SQL format and are tasked with creating an interactive dashboard for Axon using PowerBI.

We've utilized DAX queries as needed to visualize the data, and PowerBI is connected to a MySQL database for seamless integration.

326

Sales Orders

8.85M

Revenue

122

Total Customers

27

Sales Countries

7

Offices

Home

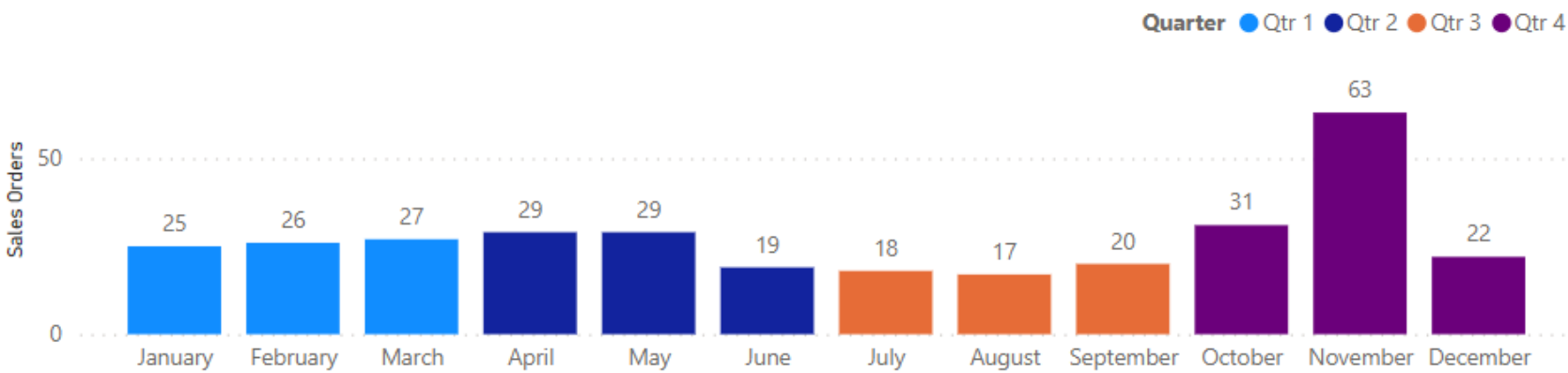
Orders

Customers

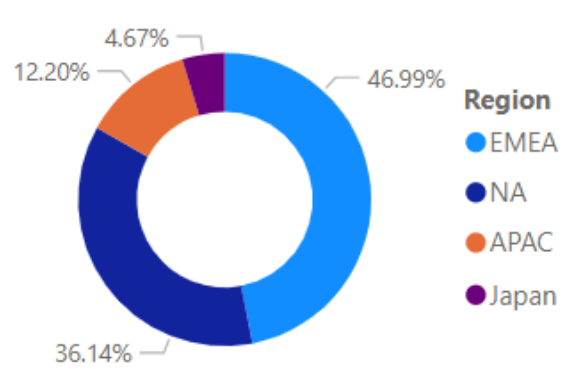
Payments

Stores

Month on Month Orders



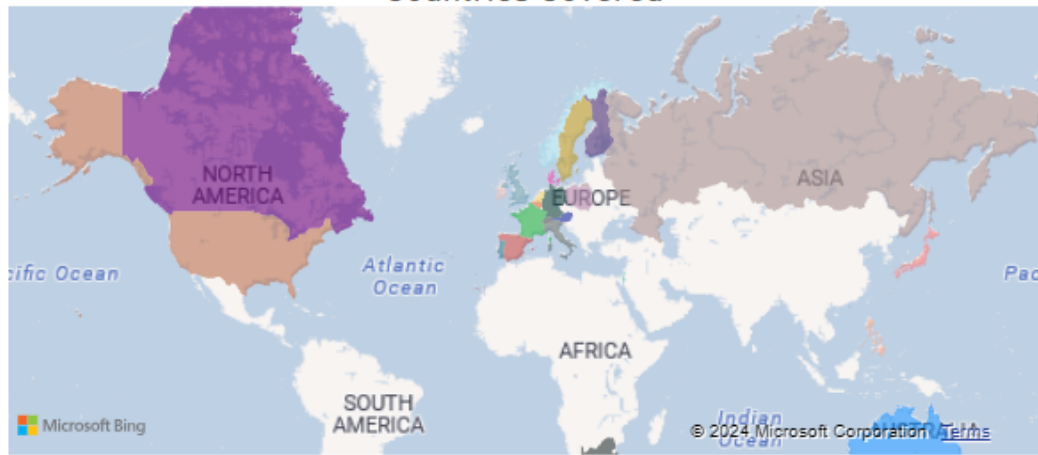
Region Wise Orders



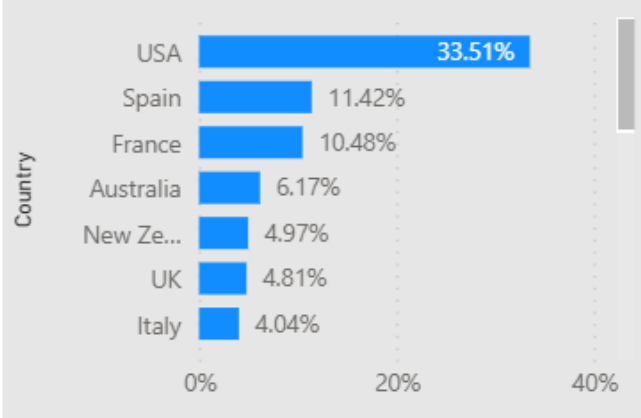
Sales by Product Category

Product Category	Order Percentage%
Classic Cars	33.72%
Vintage Cars	21.73%
Motorcycles	12.11%
Planes	11.25%
Trucks and Buses	10.43%
Ships	8.09%
Trains	2.67%
Total	100.00%

Countries Covered



Orders by Country



Overview

1.A total of 326 orders were received between January 2003 and May 2005.

2.The revenue generated during this period amounted to \$8.85 million.

3.The database consists of 122 unique customers.

4.Operations extend to 27 countries.

5.There are 7 office locations.

Additionally, the overview includes insights into month-on-month order trends, regional distribution of orders, order percentages by product category, the range of countries served, and the distribution of orders received across different countries.

Order Analysis

Year ▼

All ▼

307

Orders Shipped

6

Orders in Process

4

Orders On Hold

3

Orders Disputed

6

Orders Cancelled

Home

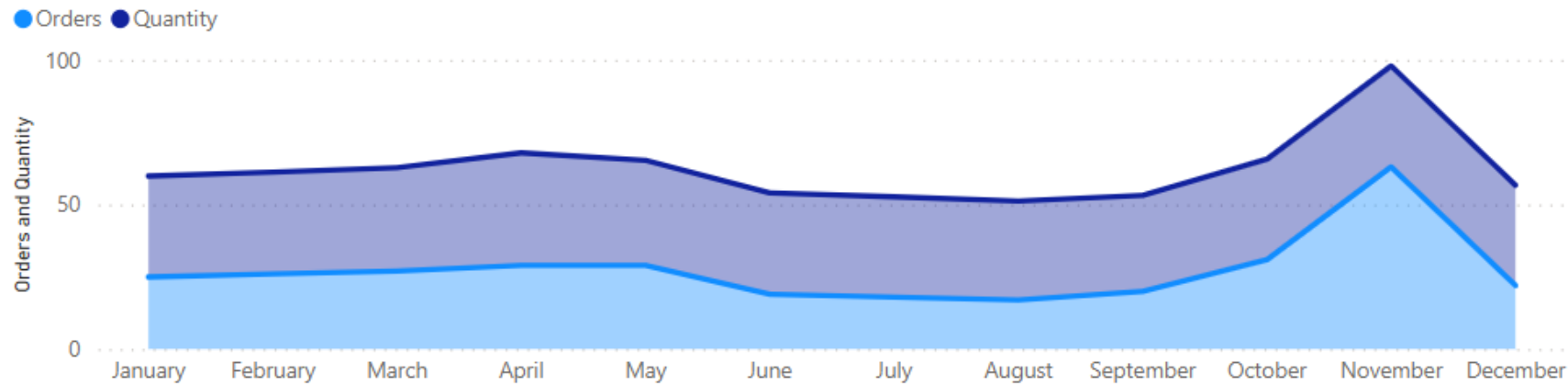
Orders

Customers

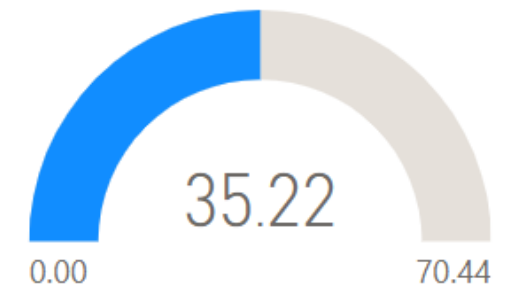
Payments

Stores

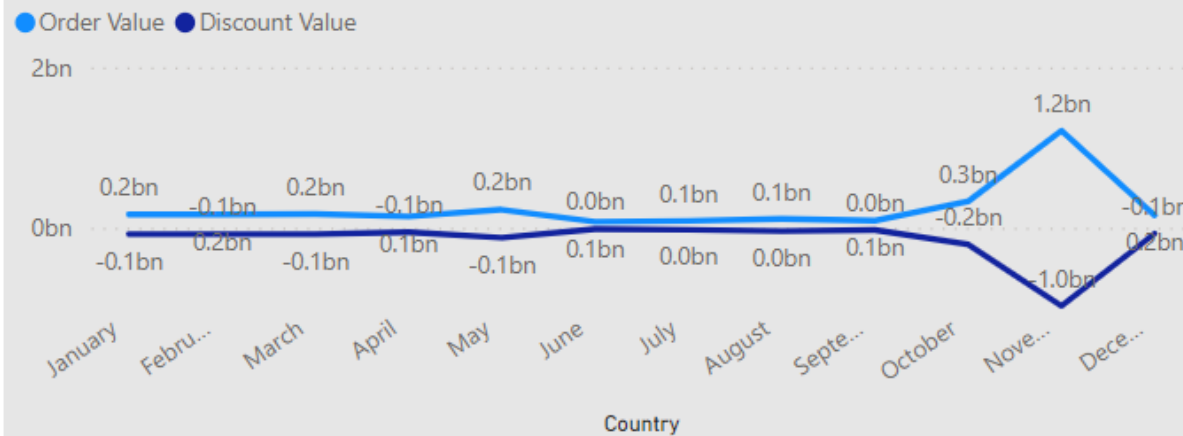
Quantity and Order by Month



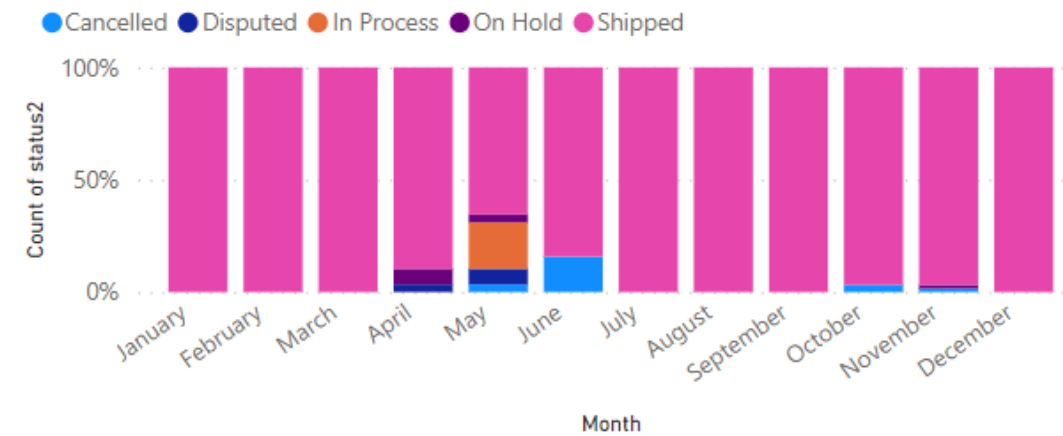
Avg Monthly Quantity



Orders by Country



Order Status by Month



Order Analysis

In the order analysis section, the following insights are provided:

- 1.Out of the 326 received orders between January 2003 and May 2005, 307 have been successfully shipped.
- 2.Currently, there are 6 orders in progress, and 4 are on hold.
- 3.The shipped orders also include 4 resolved orders.
- 4.Among the orders, 4 were placed on hold, 3 are disputed, and 6 were cancelled.

Additionally:

- The average monthly quantity ordered by customers is calculated.
- Month-on-month order-wise quantity trends are analyzed.

Furthermore, the visualization "Orders by Country" compares order value with discount value, providing insights into the discounts offered by month.

Customer Analysis

Year

All

68K

Avg. Customer Credit Limit

32K

Avg. Order Value

359

Avg. Discount Value

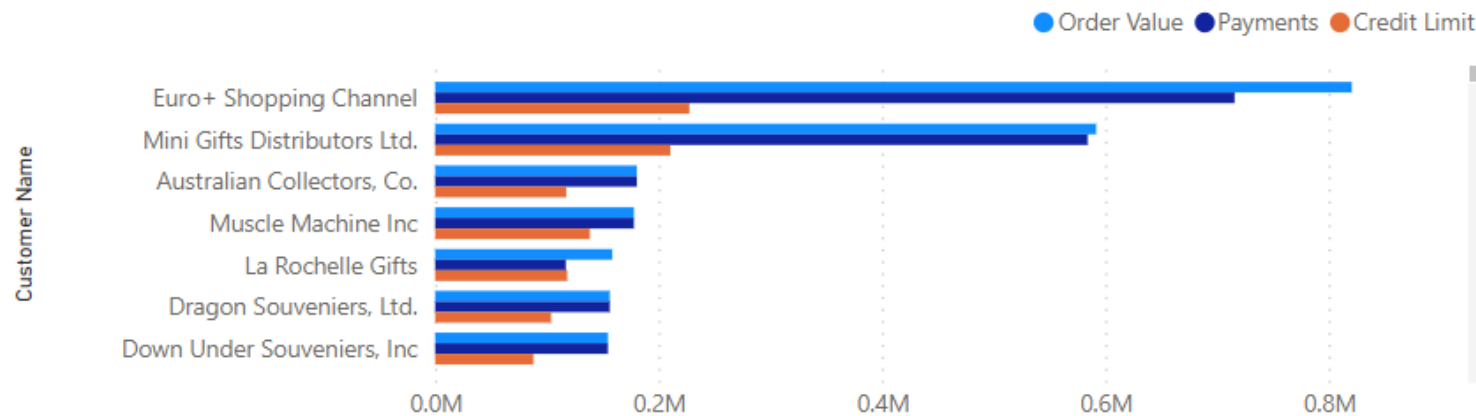
98

Unique Customers Ordered

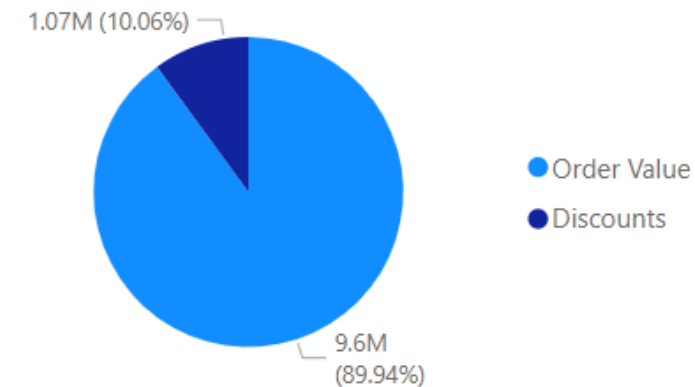
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Avg. Customer Order

Distribution of Order, Payments and Credit Limit



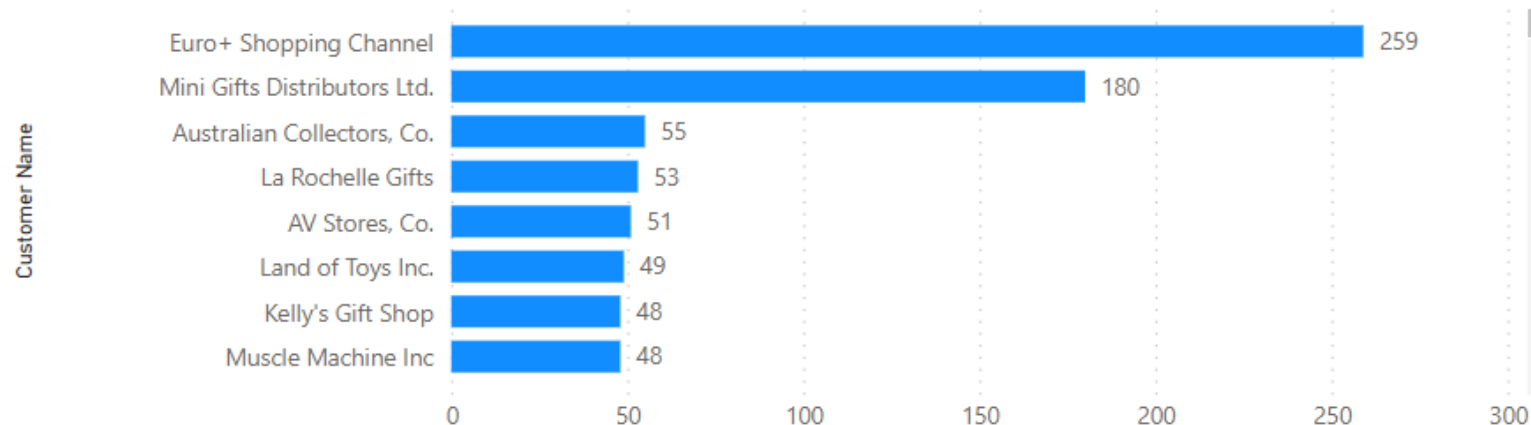
Order Value and Discounts



Customer Payments

Customer Name	Amount Received
Euro+ Shopping Channel	7,15,738.98
Mini Gifts Distributors Ltd.	5,84,188.24
Australian Collectors, Co.	1,80,585.07
Muscle Machine Inc	1,77,913.95
Dragon Souveniers, Ltd.	1,56,251.03
Down Under Souveniers, Inc	1,54,622.08
AV Stores, Co.	1,48,410.09
Anna's Decorations Ltd.	1,37,034.22
Total	88,53,839.23

Number of Orders by Customers



Customer Analysis

In the customer analysis section, the following insights are highlighted:

- 1.The average customer credit limit stands at \$68,000, with an average order value of \$32,000.
- 2.An average discount value of \$359 has been provided to 98 customers who placed orders.
- 3.On average, each customer places 3 orders.

Additionally:

- Graphs depict the distribution of orders, payments, and credit limits, providing an overview of customer payments and their credit limit utilization.
- A comparison between orders and discounts offered is visualized.
- The number of orders placed by customers is also presented.

Payments Analysis

Year ▼

All ▼

8.25M

Customer Credit Limit

9.60M

Total Order Value

1.07M

Total Discounts

8.85M

Payments Received

750.35K

Pending Payments

Home

Orders

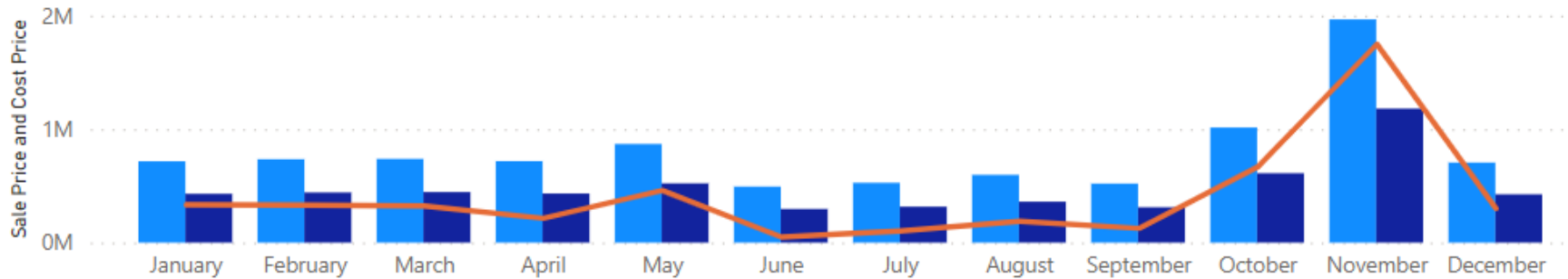
Customers

Payments

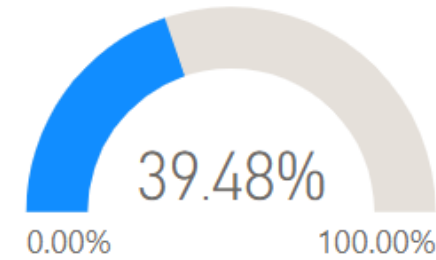
Stores

Sale Price, Cost Price and Profit Distribution

● Sale Price ● Cost Price ● Profit

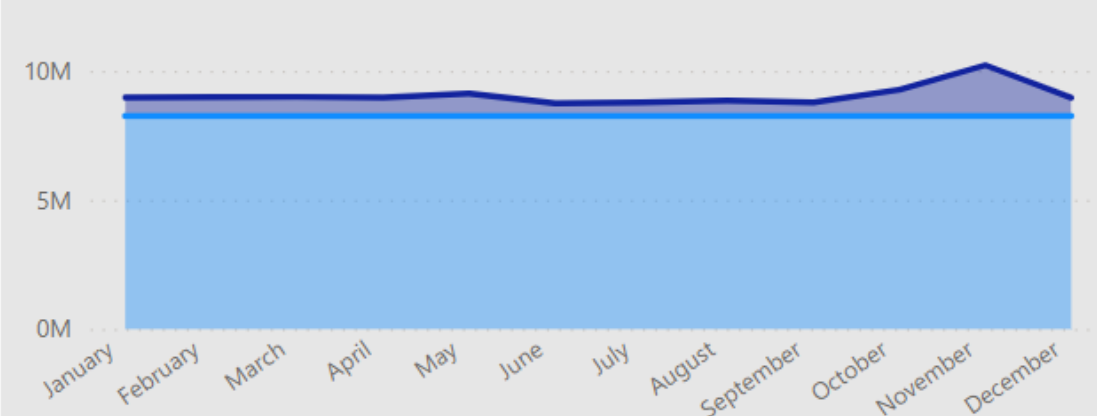


Profit Margin



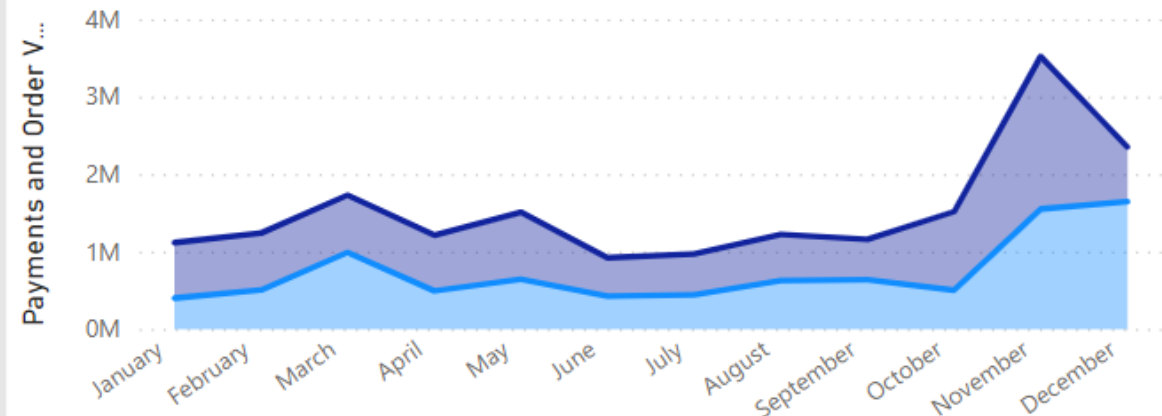
Credit Utilization vs Order Value

● Credit Limit ● Order Value



Payments and Order Value by Month

● Payments ● Order Value



Payments Analysis

In the Payments analysis section, the following insights are provided:

- 1.The total customer credit limit amounts to \$8.25 million, with orders worth \$9.60 million placed by customers.
- 2.Discounts totaling \$1.07 million were offered to customers, and payments amounting to \$8.85 million were received. There are approximately \$750.35 thousand in pending payments from customers.
- 3.The profit margin across all segments is 39.48%.

Additionally:

- Graphs illustrate the distribution of order value, cost price to the company, and profits month on month.
- Credit utilization versus order value and payments received each month are depicted for further analysis.

Store Analysis

Year
All

1.26M

Avg. Revenue Per Store

15.49K

Avg. Profit Per Store

47

Avg. Orders Per Store

23

Total Employees

5

Country Availability

Home

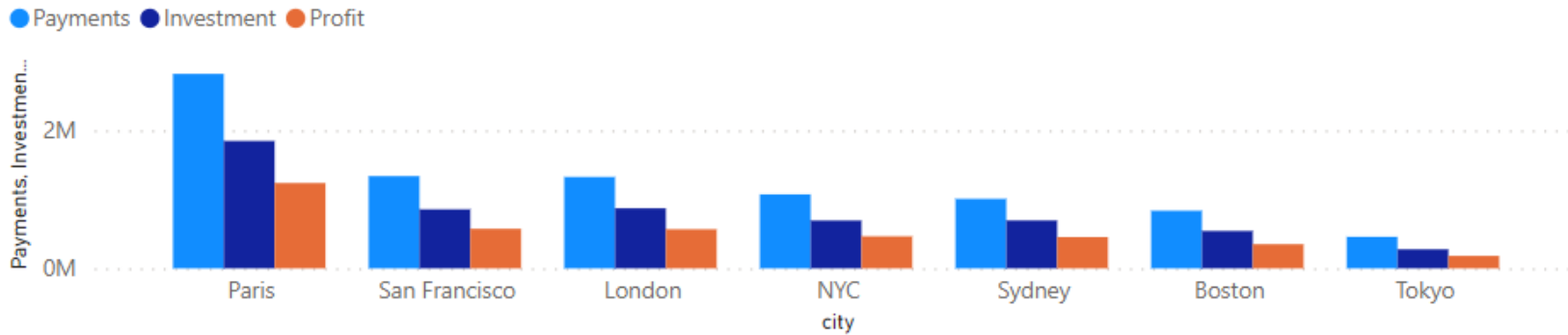
Orders

Customers

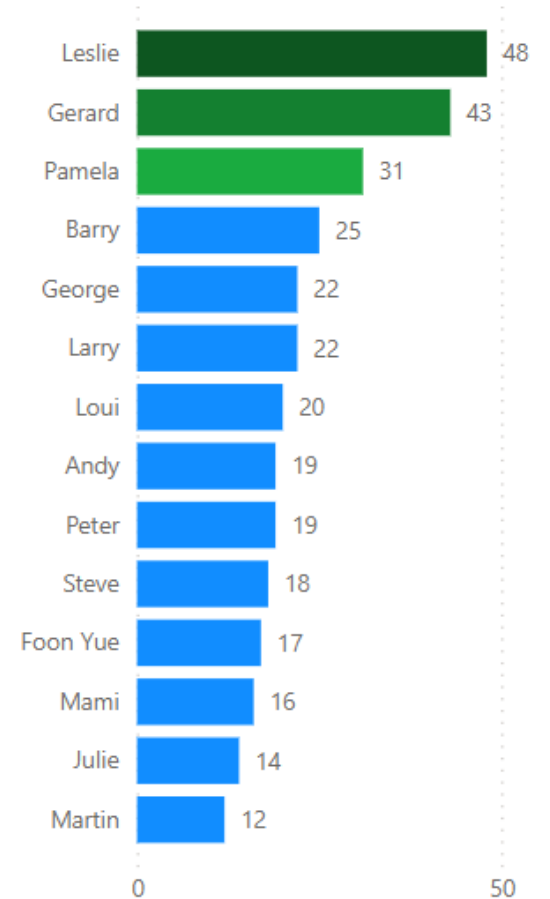
Payments

Stores

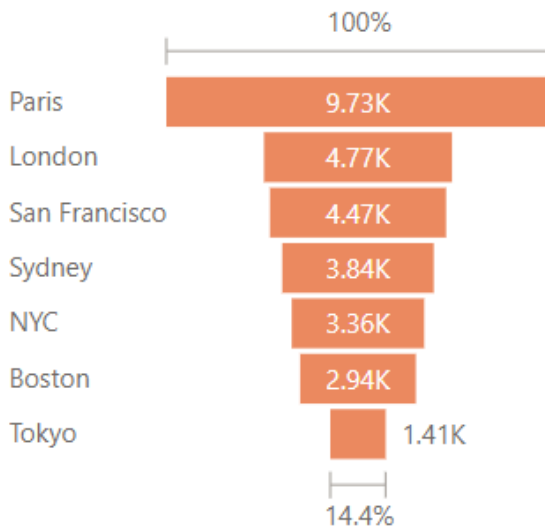
Payments, Investment and Profit by Offices



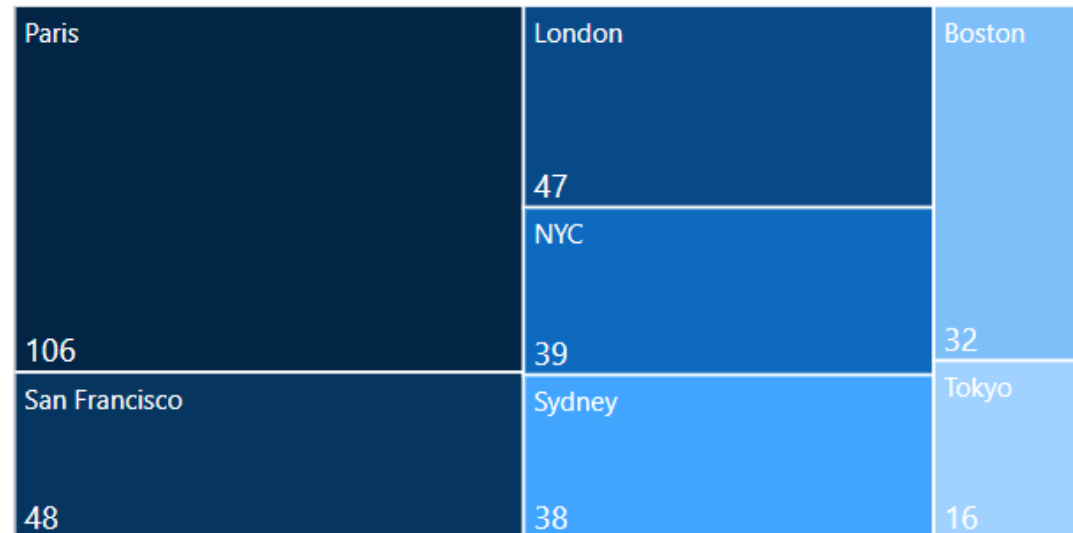
Orders by Employee



Discounts by Offices



Orders by Offices



Store Analysis

In the Store analysis section, the following insights are provided:

- 1.The average revenue per store is \$1.26 million, generating a profit of \$15.49 thousand.
- 2.On average, each store receives 47 orders. These stores are situated in 5 countries and have a total employee count of 23.
- 3.Top-selling employees with high sales are highlighted.

Additionally:

- Graphs illustrate the distribution of payments received/revenue, investments, and profits by office, along with discounts offered.
- Sales orders processed by office locations are also presented for further analysis.

Observations

- Over the observed period, 326 orders were placed.
- The EMEA region accounted for 46.99% of orders, while 36.14% originated from NA, with the USA being the highest contributor at 21.90%.
- Classic Cars and Vintage Cars were the most frequently ordered product categories.
- The average monthly order rate stands at 35.
- November saw the lowest discount offerings compared to other months.
- Some customers are surpassing their credit limits with their order values, suggesting a need for credit limit adjustments.
- Discounts averaging around 10% were consistently offered throughout the year.
- Payments are predominantly received on time, with 92% of payments totaling \$8.85 million processed, while \$750.35 thousand remains pending.
- The overall profit margin on sales orders is 39.48%, resulting in a profit of \$3.78 million.

Overall, the business appears to be performing well.