



# **Data Spark: Illuminating Insights for Global Electronics**

By analyzing Global Electronics' customer, product, sales, and store data, we seek to uncover critical insights that can refine marketing strategies, streamline inventory management, and enhance sales forecasting. These insights will enable the creation of targeted marketing campaigns, the development of improved products, and the planning of effective promotions, as well as informed decisions regarding store expansions and optimizations. Additionally, understanding the influence of currency exchange rates on sales will support more effective international pricing strategies. Ultimately, this analysis aims to boost customer satisfaction and drive business growth for Global Electronics.

# Customer Analysis.

15.11K

Count of name

## Count of country by continent and state

state  Aberdeen  Aberdeens...  Agrigento  Alabama  Alaska  Alberta  Alessandria 



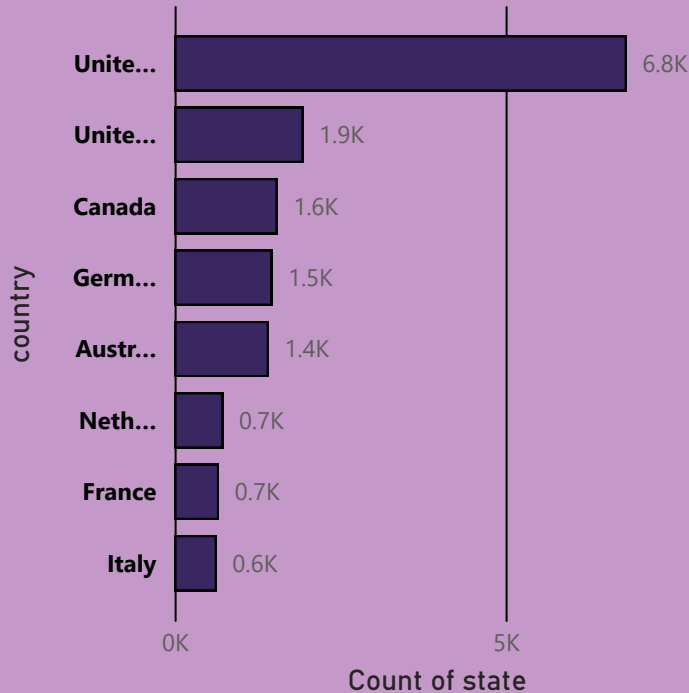
8

Count of country

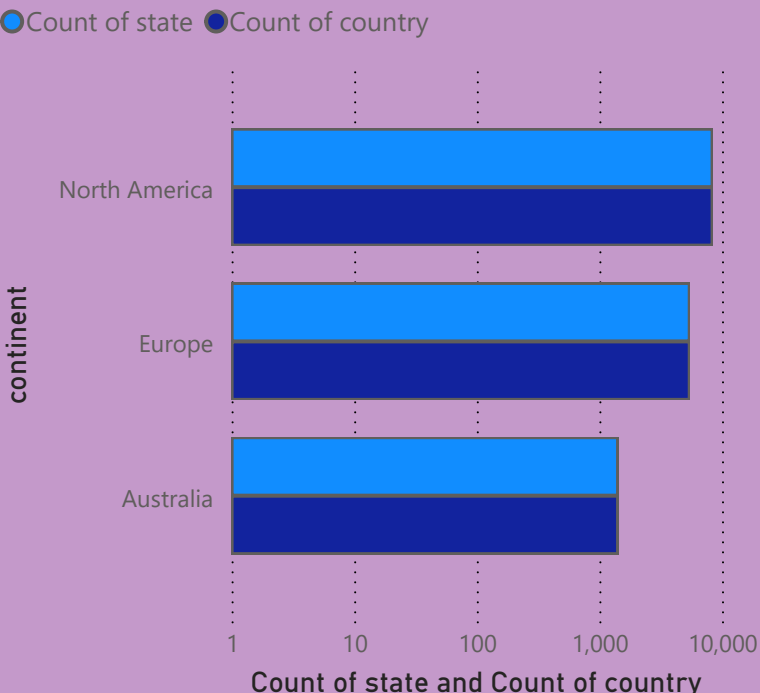
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Count of continent

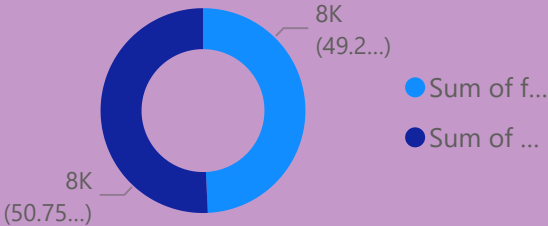
## Count of state by country



## Count of state and Count of country by continent



## Sum of female\_count and Sum of male\_count



4

Count of count\_age\_customers

- ☐ (Blank)
- ☐ Aberdeen
- ☐ Aberdeenshire
- ☐ Agrigento
- ☐ Alabama
- ☐ Alaska
- ☐ Alberta
- ☐ Alessandria
- ☐ Allerdale
- ☐ Alsace
- ☐ Amber Valley
- ☐ Ancona
- ☐ Anglesey
- ☐ Angus
- ☐ Aosta
- ☐ Aquitaine
- ☐ Arezzo
- ☐ Argyllshire
- ☐ Arizona
- ☐ Arkansas
- ☐ Arun
- ☐ Ascoli Piceno
- ☐ Ashfield
- ☐ Ashford

## Insights Summary:

### 1. Gender Distribution:

- The customer base is nearly evenly divided by gender, with females accounting for 50.75% and males 49.25%. This indicates balanced representation among male and female customers.

### 2. Age Groups:

- Customers are evenly distributed across four age groups (20–39, 40–59, 60–79, and 80+), each accounting for approximately 25% of the total. This suggests an opportunity to tailor products and marketing strategies for diverse age demographics.

### 3. Regional Distribution:

- North America, particularly the United States, dominates the customer base, with significant contributions from Europe and Australia. This highlights the U.S. as a core market, with growth potential in European and Australian markets.

### 4. Top Markets by Country:

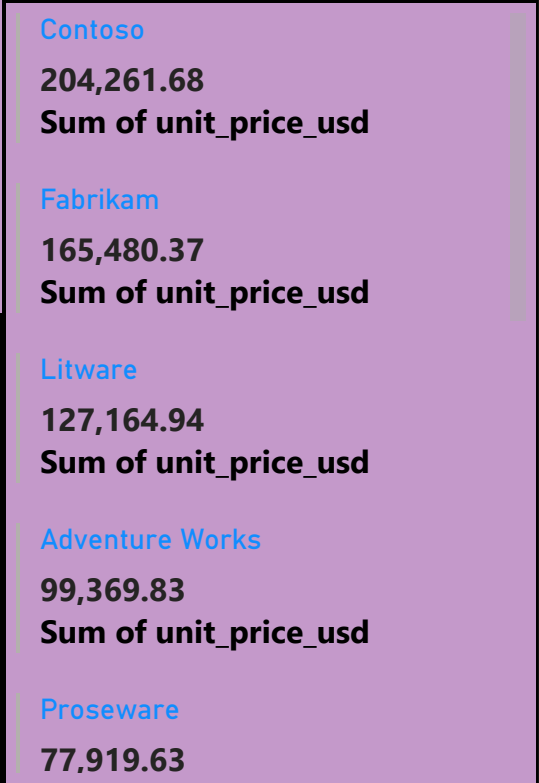
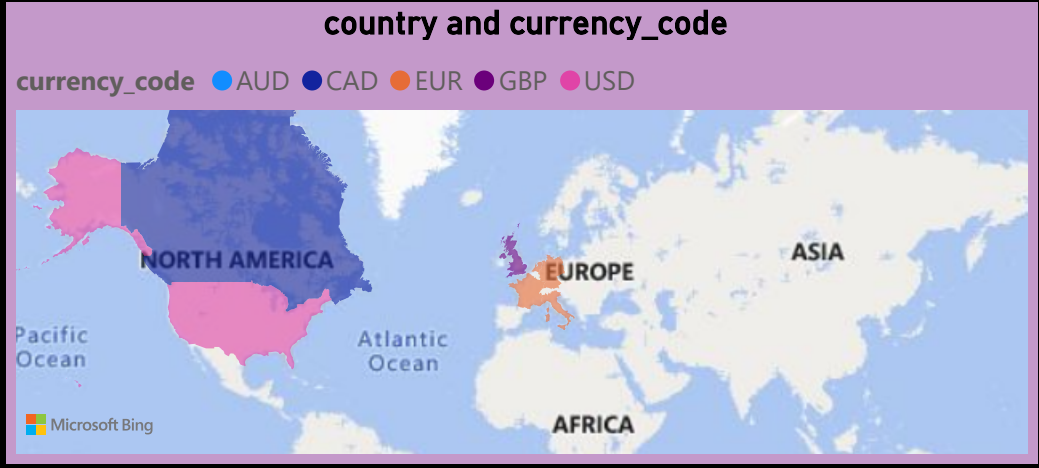
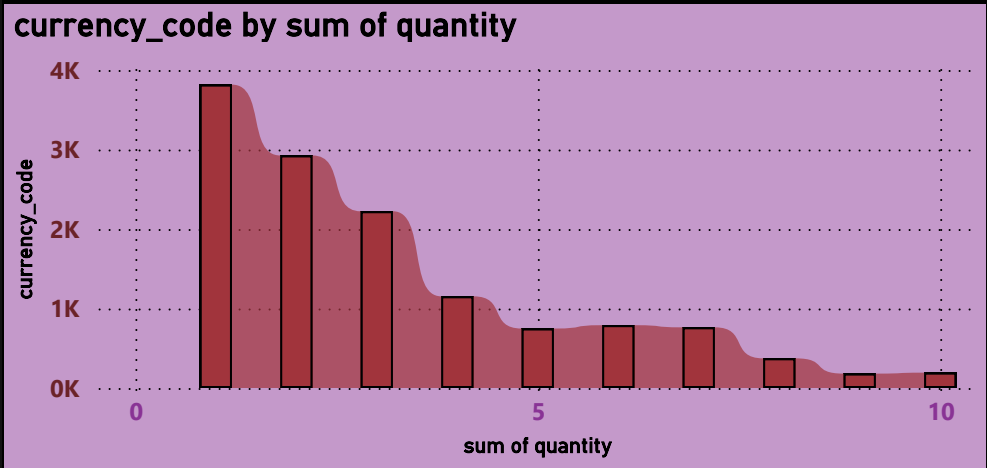
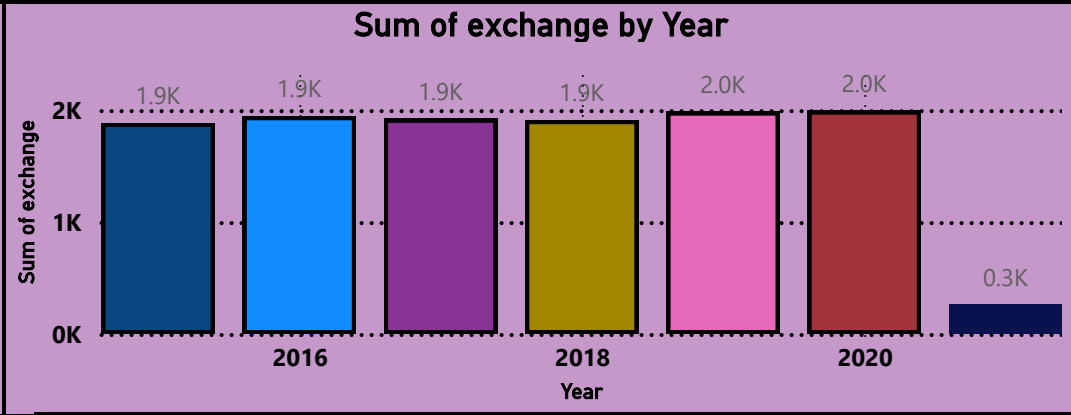
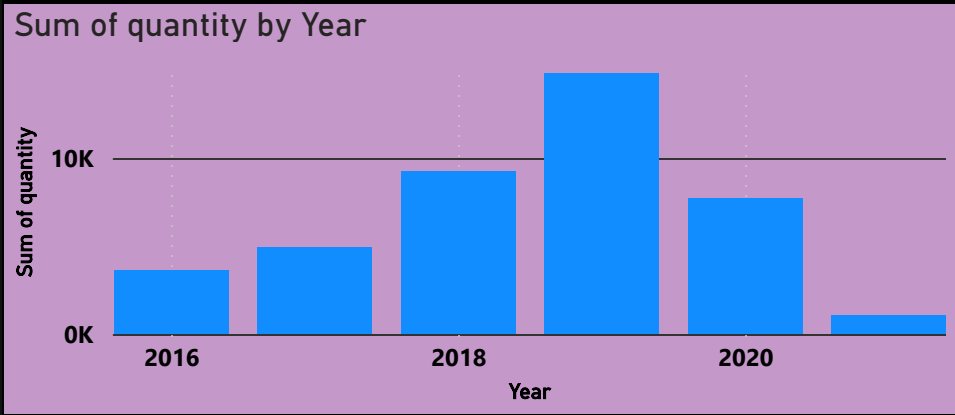
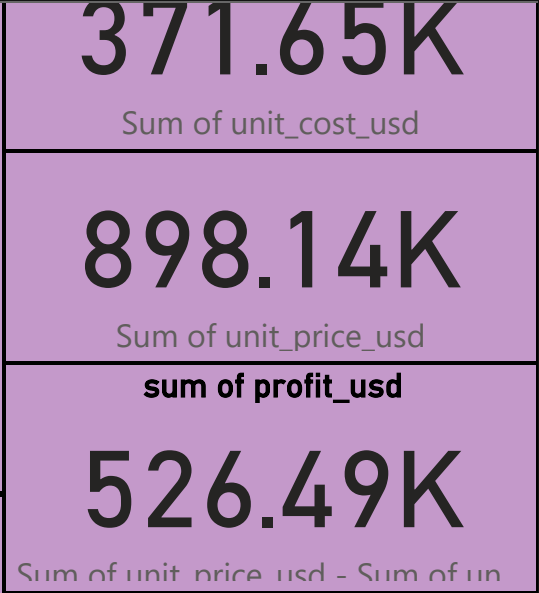
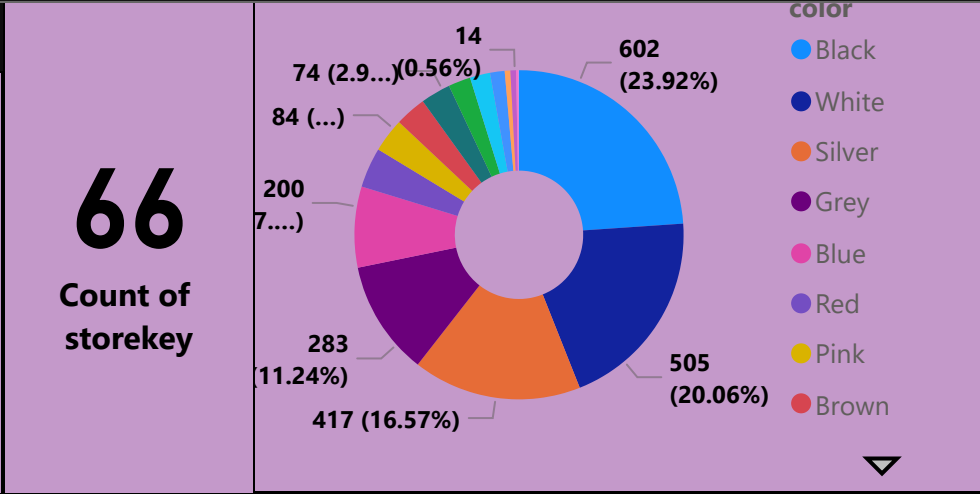
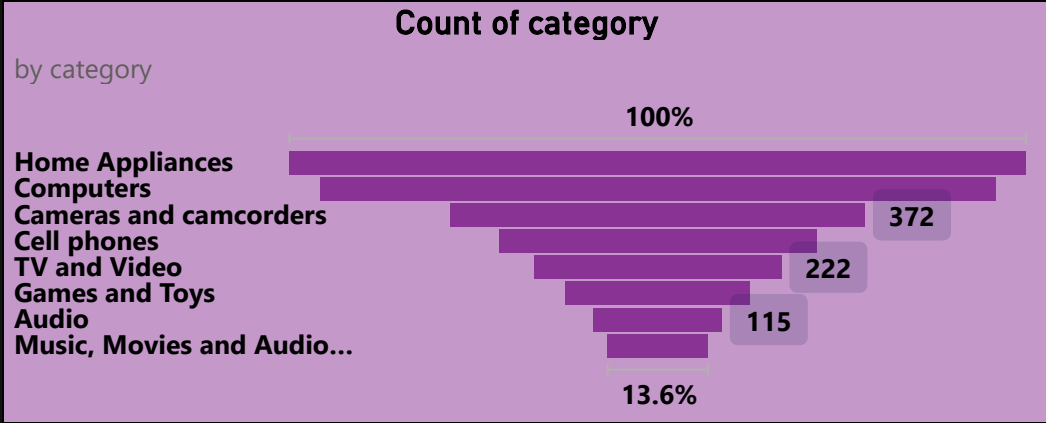
- The United States is the leading market, followed by the United Kingdom, Canada, Germany, and Australia. These countries represent key areas for targeted campaigns and expansion strategies.

### 5. Customer Count:

- The total customer count stands at 15.11K, indicating a substantial customer base to leverage for marketing and sales initiatives.

### 6. Geographic Insights:

- North America leads in terms of customer distribution, with notable representation in Europe and Australia. Expanding efforts in Europe (e.g., Germany, UK) and Australia could yield further growth opportunities.





# Sales Insights Summary:

## a. Overall Sales Performance

- Total Profit: \$236.17K
- Total Unit Price (Revenue): \$592.98K
- Unit Cost: \$356.81K

This indicates a healthy profit margin across the sales.

## b. Top Performing Categories:

1. Home Appliances leads with the highest count, dominating sales in this category.
2. Followed by Computers, Cameras and Camcorders, and Cell Phones.
3. Music, Movies, and Audio has the lowest contribution, suggesting a potential area for improvement or reconsideration.

## c. Sales Trends by Year:

- Sales peaked between 2016 and 2020 ,but experienced a decline in the most recent year (2021). This highlights the need to investigate and address the recent dip in performance.

## d. Top Contributing Brands:

- Contoso leads in unit price contributions at \$126,081.68.
- Fabrikam (\$104,162.44) and Litware (\$69,206.01) follow.
- Adventure Works and Wide World Importers contribute relatively less, indicating scope for targeted improvement.

## e. Regional Insights:

- The map highlights significant activity in North America and Europe, reinforcing these as strong markets.
- There might be growth opportunities in underrepresented regions based on sales trends.



## Product Insights Summary:

### **. Top Brands by Revenue:**

- Contoso leads as the top-performing brand with \$126,081.68 in unit price revenue.
- Fabrikam and Litware are also strong performers, while smaller contributors like Adventure Works and Wide World Importers may have growth potential with targeted promotions.

### **. Sales Trends by Year:**

- Product quantity peaked between 2016 and 2019 but declined significantly post-2020. This could signal market saturation or shifting customer preferences.

### **. Geographic Distribution:**

- Products are primarily sold in North America and Europe, with room for growth in other regions, as highlighted by the map.

### **. Currency Contribution:**

- USD drives the highest quantity of product sales, followed by EUR, while other currencies like GBP, CAD, and AUD show lower volumes.

These insights suggest opportunities to further promote high-performing categories, explore growth in underperforming regions, and tailor product offerings based on popular colors and top-selling brands. Let me know if you need additional analysis!



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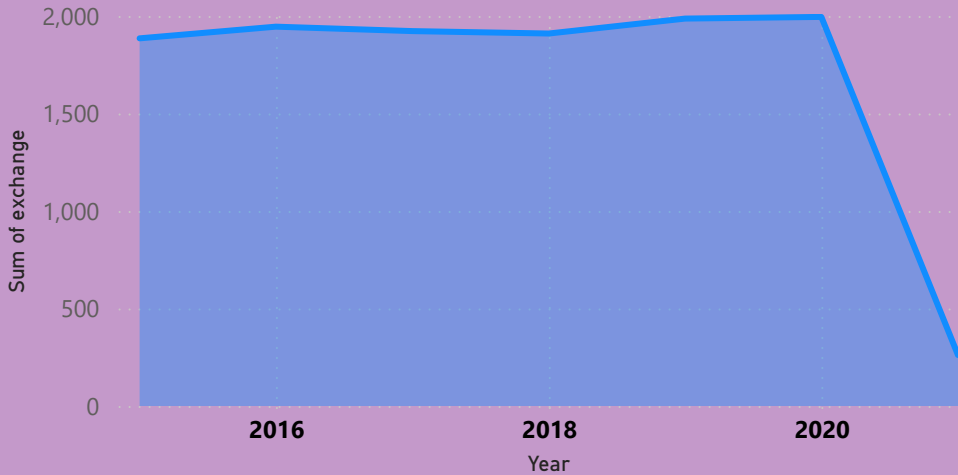
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# Store and Exchange

## Analysis:

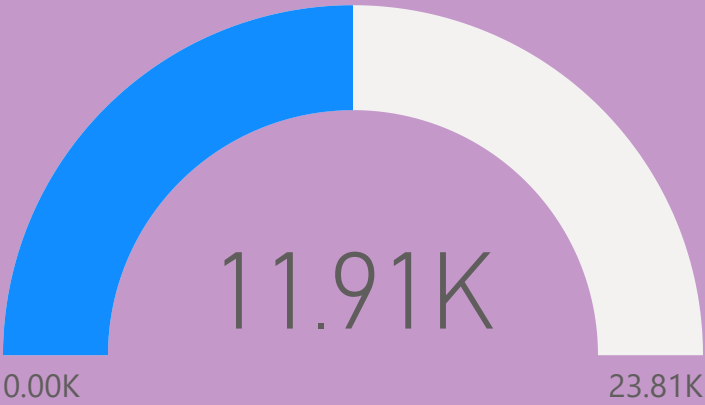
Sum of exchange by Year



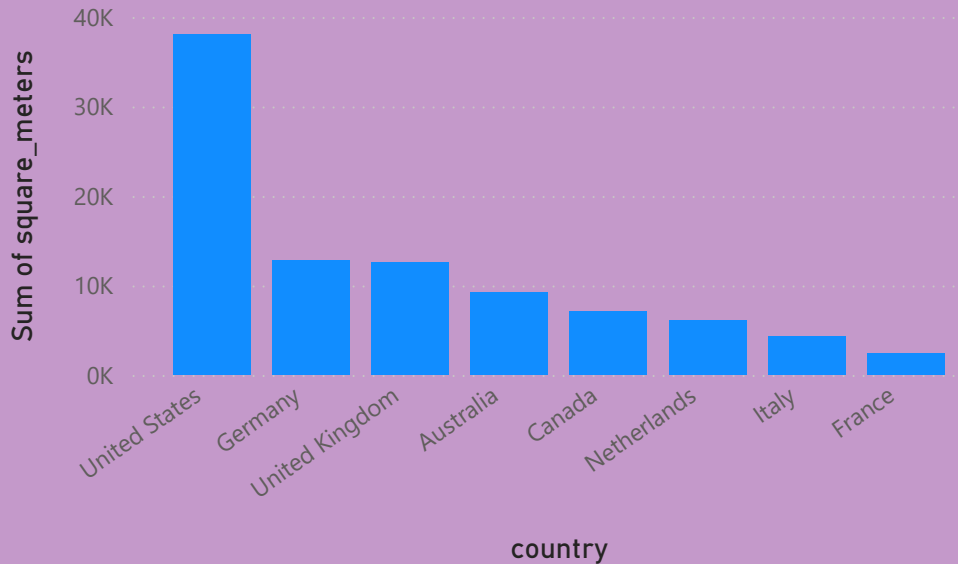
8

Count of country

Sum of exchange



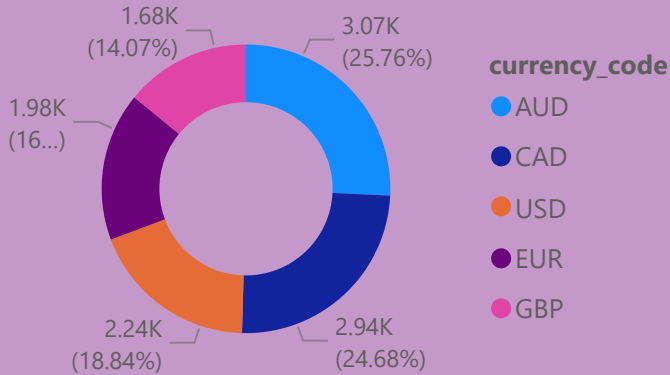
Sum of square\_meters by country



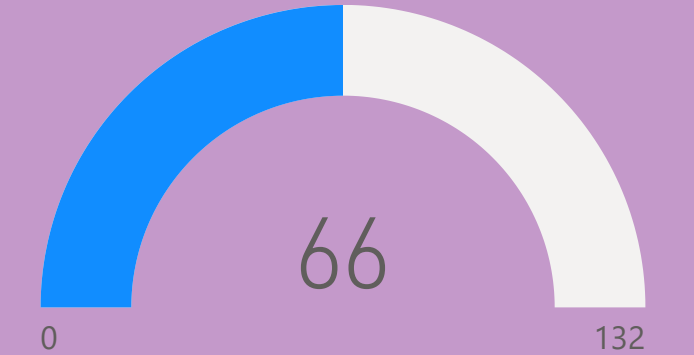
92.55K

Sum of square\_meters

Sum of exchange by currency\_code



Count of state





# Store and Exchange Performance Insights:

## Store and Exchange Insights:

### Store Insights:

- The **total store area** is **92.55K sqm**, reflecting a robust physical presence across multiple regions.
- **The United States** dominates with the largest share of store space, followed by **Germany, the United Kingdom, and Australia**.
- Smaller contributors include **Canada, the Netherlands, Italy, and France**, which account for relatively minimal square meter allocations.

### Exchange Insights:

- The **total sum of exchange** is **11.91K**, with contributions spread across five major currencies.
- **AUD (Australian Dollar)** leads at **25.76%**, followed by **CAD (Canadian Dollar)** at **24.68%**, and **USD (United States Dollar)** at **16.6%**.
- **EUR (Euro)** contributes **18.84%**, while **GBP (British Pound)** accounts for the remaining **14.07%**.

### Yearly Trends:

- Exchange values remained consistent between **2015** and **2018**, peaking during this period.
- A **sharp decline** occurred after **2019**, with performance hitting its lowest point in **2021**, signaling the need for adaptive strategies to mitigate external challenges such as economic fluctuations or market dynamics.





# Global Electronics Insights Report:

## Problem Statement:

Global Electronics, a prominent consumer electronics retailer, aims to leverage data-driven insights to boost customer satisfaction, streamline operations, and achieve business growth. By analyzing customer demographics, product performance, sales trends, and store metrics, the company seeks to pinpoint areas for improvement, refine marketing strategies, and establish effective pricing models, with a particular focus on the influence of currency exchange rates.

## Business Use Cases:

The key objectives include enhancing marketing effectiveness, optimizing inventory management, and improving sales forecasting. By gaining insights into customer preferences and regional sales trends, Global Electronics can fine-tune its promotions, product offerings, and expansion strategies. Addressing the impact of currency exchange rates on international sales is essential for developing competitive pricing strategies in global markets.

