DATA SPARK: ILLUMINATING INSIGHTS OF GLOBAL ELECTRONICS

Welcome to Data Spark, a deep dive into global electronics sales trends. We will explore key customer demographics, product performance, and revenue patterns to gain a comprehensive understanding of the market.

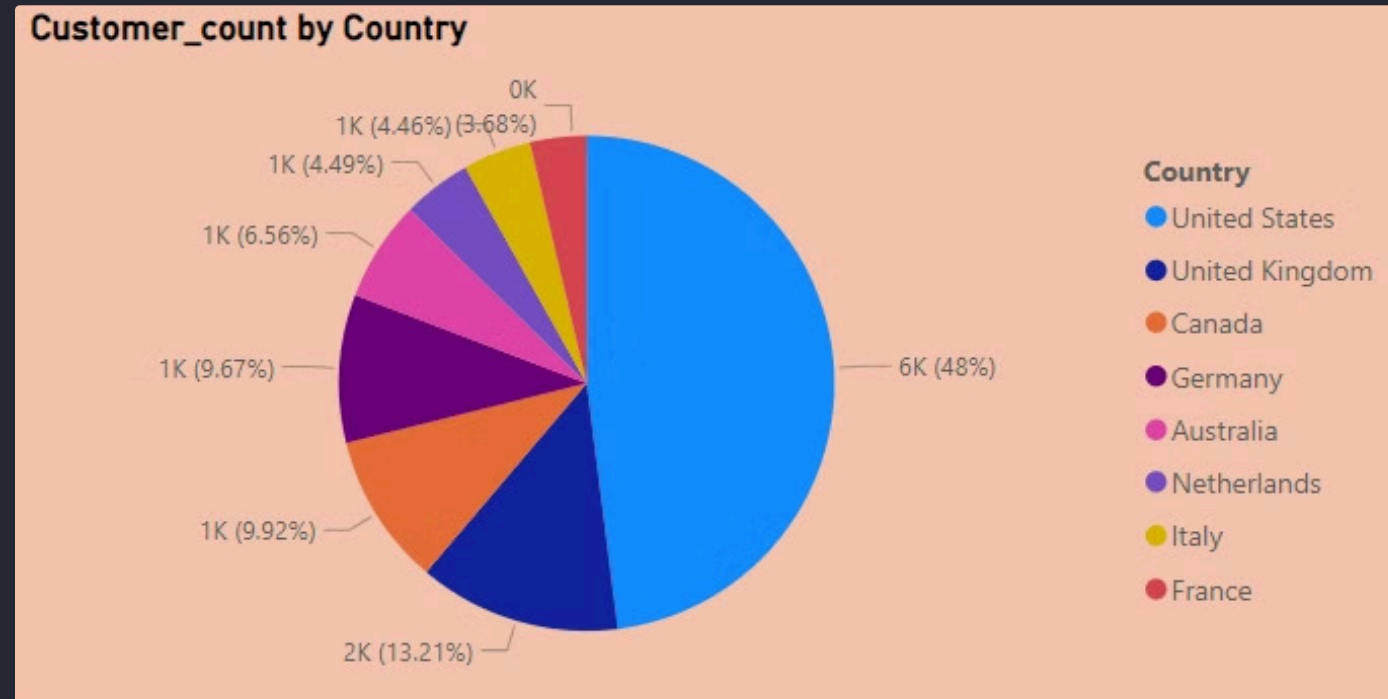by KIRUBANITHI R

Gender-Based Customer Count Analysis

- **Key Insight**: The customer count is nearly balanced across gender, with males having a slightly higher customer count (20,766) than females (20,545).

- **Implication**: Gender doesn't seem to be a significant factor in product preference; focus may shift towards other demographics or regions.

Customer Quantity by Gender

21K (49.73%) 21K (50.27%)

Gender
- Male
- Female
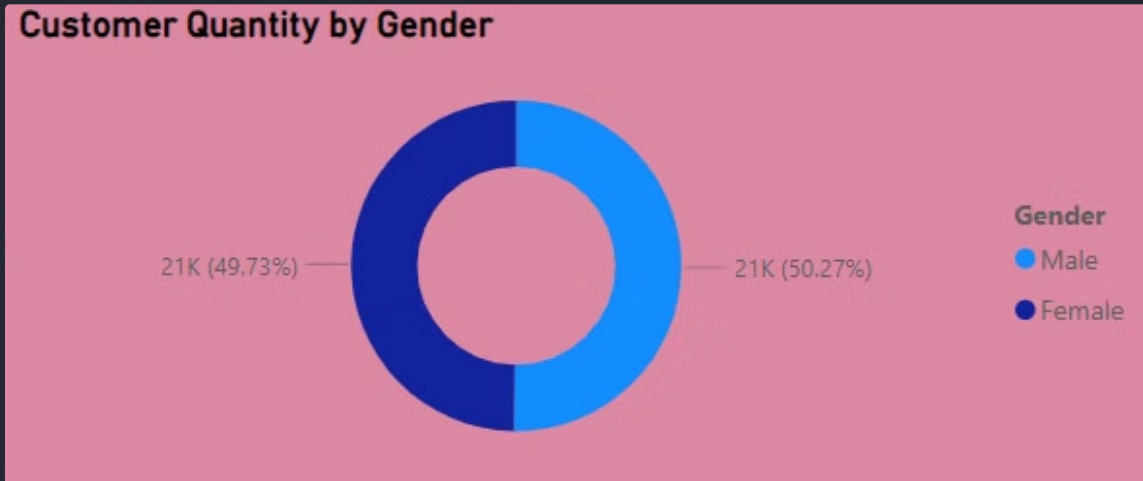
Customer Distribution by Country

Key Insight: The United States dominates with over 50% of the total customer base (5,706), followed by the United Kingdom with 1,570 customers.

Implication: Focus marketing efforts and expansion strategies in the United States, while exploring ways to increase customer engagement in countries with lower counts, especially in France and Italy.

Customer_count by Country

- United States — 6K (48%)
- United Kingdom — 2K (13.21%)
- Canada — 1K (9.92%)
- Germany — 1K (9.67%)
- Australia — 1K (6.56%)
- Netherlands — 1K (4.49%)
- Italy — 1K (4.46%)
- France — (3.68%) / 0K

Country:
United States, United Kingdom, Canada, Germany, Australia, Netherlands, Italy, France

Least Frequent Products Analysis

- **Key Insight**: Products like "WWI Desktop PC1.80 E1800 White" and "Adventure Works Desktop PC1.60 ED160 Black" are the least frequently sold, with quantities under 500 units.

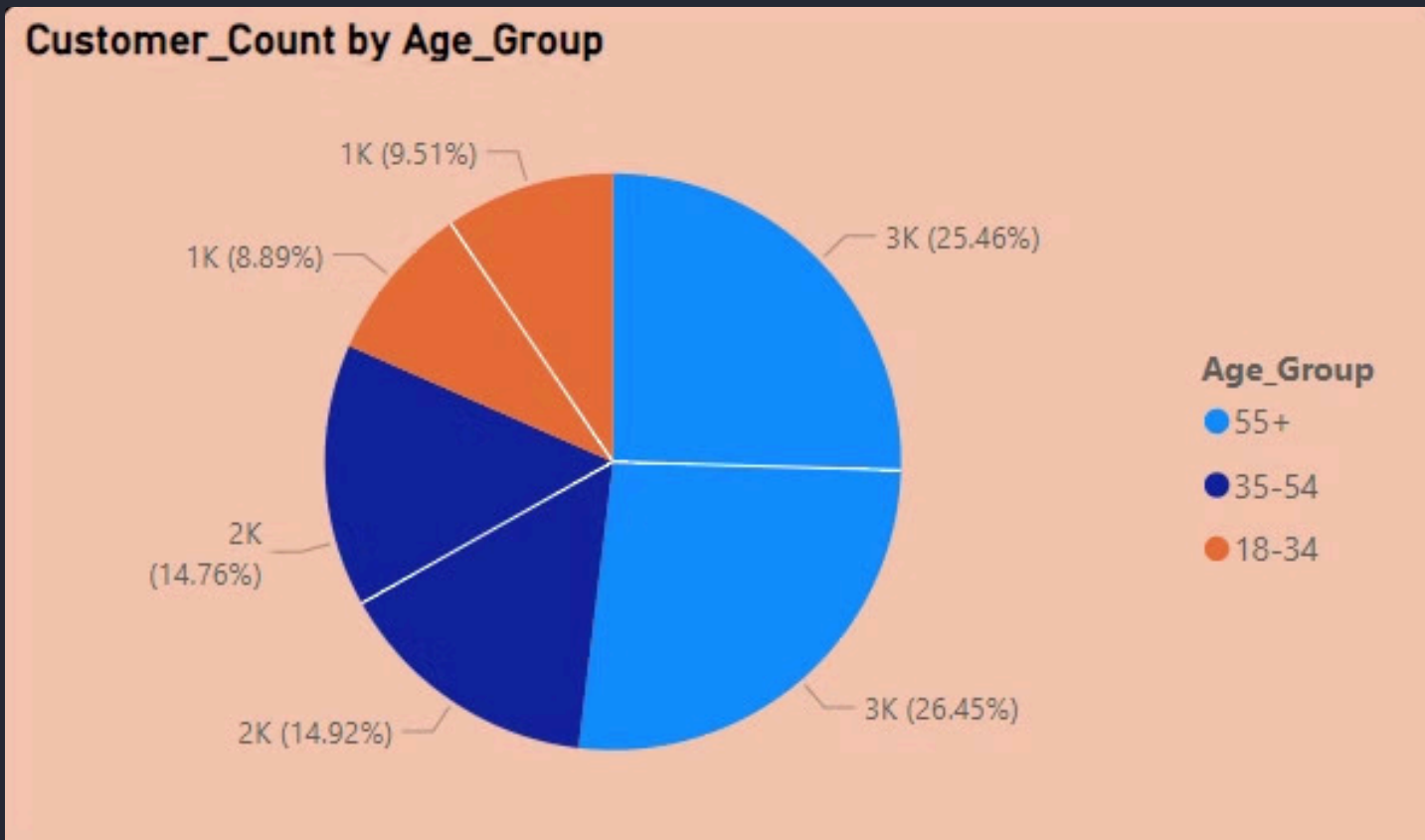- **Implication**: These products may need marketing or promotional efforts to boost their sales.

Least Ten frequency products

| Product Name |
| --- |
| Adventure Works Chandelier M8150 Black |
| Adventure Works Chandelier M8150 Silver |
| Adventure Works Desk Lamp E1300 Black |
| Litware 16" White Oscillating Stand Fan E701 White |
| Proseware Chandelier M0815 Black |
| Proseware Floor Lamp X0115 Blue |
| Proseware Wall Lamp E0215 Blue |
| WWI Floor Lamp M215 Grey |
| WWI Floor Lamp X115 Blue |
| WWI Wall Lamp E315 White |

Age-Based Customer Count Analysis

- **Key Insight**: The 55+ age group has the highest customer count, with males leading slightly over females in this segment.

- **Implication**: The electronics market may see higher demand among older age groups, particularly for desktop PCs.

Customer_Count by Age_Group

- 1K (9.51%)
- 1K (8.89%)
- 3K (25.46%)
- 2K (14.76%)
- 2K (14.92%)
- 3K (26.45%)

Age_Group
- ● 55+
- ● 35-54
- ● 18-34
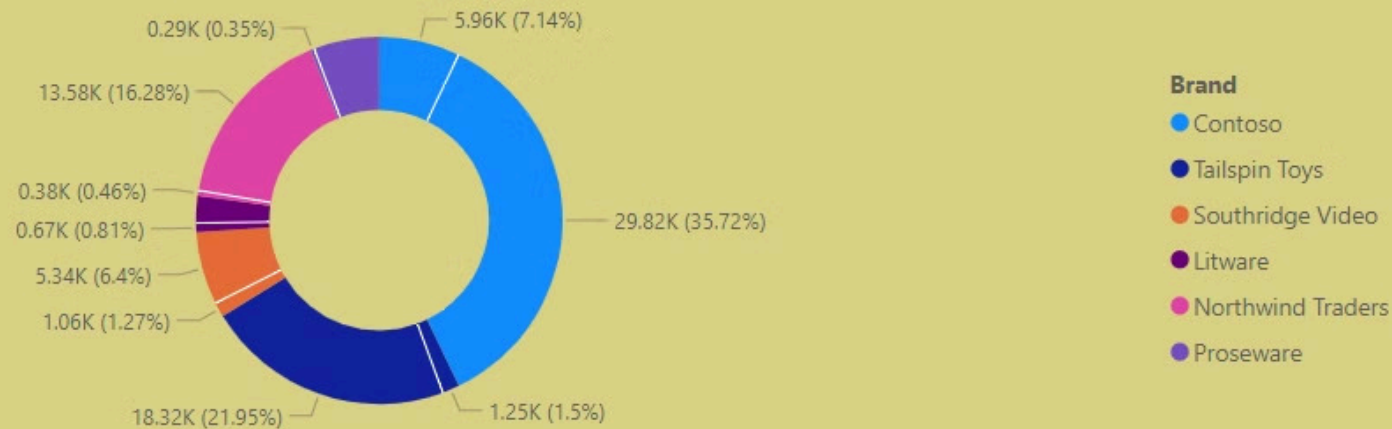
Monthly Sales Analysis

- **Key Insight**: Sales peak in **Month 1** and **Month 12**, possibly due to seasonal demand, while **Month 3** and **Month 4** see a significant drop.

- **Implication**: Plan for seasonal campaigns to leverage high-sales months and address dips in sales during off-peak periods.

Total_Sales by Month
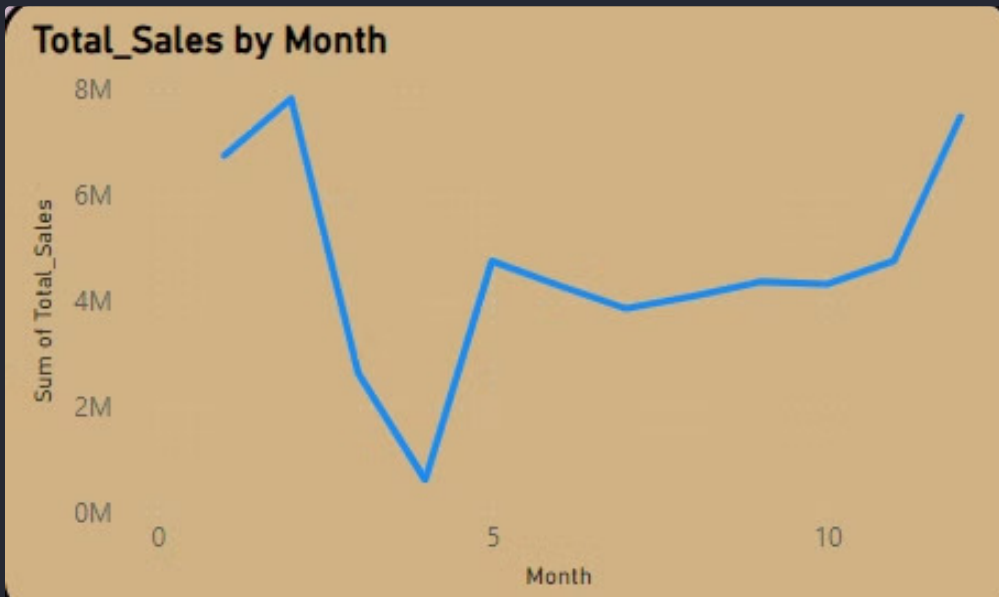
Brand-Based Profit Margin and Total Profit

- **Key Insight**: **Contoso** leads in profit with **$29.8 million**, followed by **Tailspin Toys** and **Southridge Video**.

- **Implication**: Brands like Contoso are highly profitable; explore strategies for further expanding its market share.

Total_Profit by Brand

0.29K (0.35%)
5.96K (7.14%)
13.58K (16.28%)
29.82K (35.72%)
0.38K (0.46%)
0.67K (0.81%)
5.34K (6.4%)
1.06K (1.27%)
18.32K (21.95%)
1.25K (1.5%)

Brand
- Contoso
- Tailspin Toys
- Southridge Video
- Litware
- Northwind Traders
- Proseware

Annual Sales and Revenue Trends

- **Key Insight**: 2019 shows the highest total sales at **$18.26 million**, with a significant decline in **2020** and **2021**.

- **Implication**: External factors, likely the pandemic, caused a revenue drop; strategies should focus on recovery and future growth.

Sum of year_sales by Year
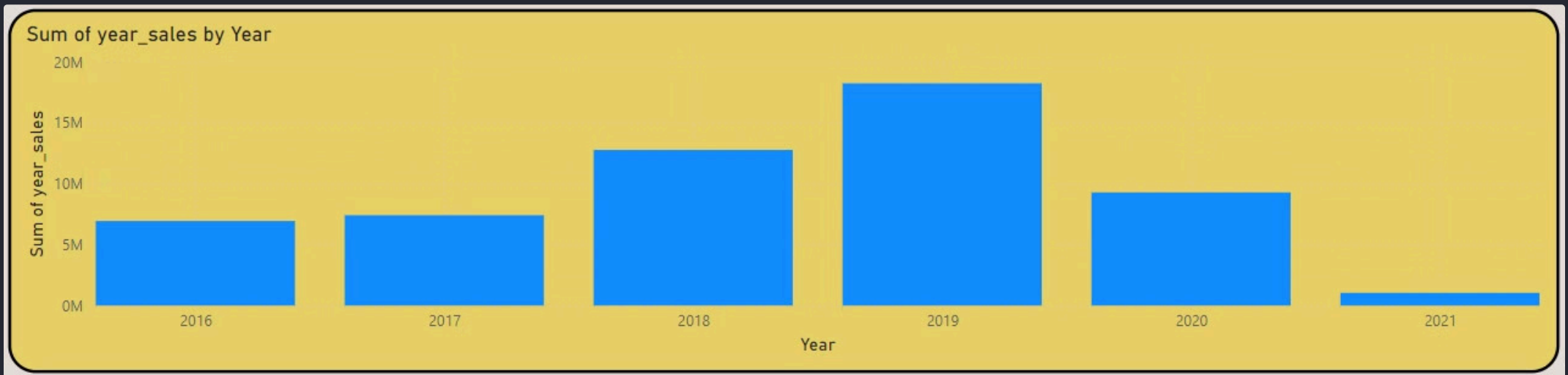
Product Quantity Sold

- **Key Insight**: Products like "WWI Desktop PC2.33 X2330 Black" and "Adventure Works Desktop PC1.60 ED160 Black" lead in quantity sold, with sales ranging from 500 to 550 units.

- **Implication**: These products are consistently popular and should be stocked more heavily or promoted further.

Revenue by Product Name

Product Name	Revenue
WWI Desktop PC2.33 X2330 Black	100%
Adventure Works Desktop PC2.33 XD233 Silver	
Adventure Works Desktop PC2.33 XD233 Brown	
Adventure Works Desktop PC2.33 XD233 Black	447.68K
Adventure Works Desktop PC2.33 XD233 White	437.02K
WWI Desktop PC2.33 X2330 White	424.58K
WWI Desktop PC2.33 X2330 Brown	422.74K
Adventure Works 52" LCD HDTV X590 White	394.40K
Adventure Works 52" LCD HDTV X590 Black	374.10K
WWI Desktop PC2.33 X2330 Silver	360.25K

71.3%

Conclusion and Key Takeaways

Improvisation: "As we move forward, understanding the dynamics behind top-performing products, regions, and customer segments will guide more effective decision-making. Focusing on product innovation, regional expansion, and brand loyalty will be key to maintaining momentum and capitalizing on new growth opportunities."

- Strong sales trends are observed in specific months, countries, and product categories. Store optimization and targeted marketing could boost underperforming areas.

- **Next Steps**: Leverage high-performing stores and products for future growth. Focus on recovering lost revenue from **2020-2021** and expand in top-performing regions.