

Insights

1. Sales & Profit Trends

- **Revenue and profit increased steadily** from 2016 to 2019, with peak performance seen in 2020 and 2021. This could be due to Covid19.
- Sales and profit **seasonality is evident**, suggesting promotional periods or holiday effects. E.g. High sales and profit in November due to holidays.
- **United States leads in total sales** followed by the **United Kingdom** and **Germany**.
- Online sales are recorded as a **separate "country"**, and they perform comparably to some physical countries.

2. Store Performance

- A small number of stores generate **disproportionately high revenue**, suggesting either location advantage or store size.
- There is a **clear correlation** between **store age and average sales**, with stores (2-5 years) slightly outperforming older ones.

3. Product Performance

- **The top 10 products** generate revenues **above \$360K each**, while the **bottom 10 products** barely cross **\$40K**, indicating a **long tail** in product performance.
- **Computers** and **Home Appliances** are the **leading categories**, with the **Desktop PC and HDTV models** dominating revenue.
- **Adventure works, Contoso** and **wide world importers** are the top performing brands across the countries.

4. Customer Behavior

- **Male and female customers are nearly equal** in distribution.
- **Customers aged 20–29 and 30–39** have the **highest average sales**, followed closely by other working-age groups.
- **61.16%** of customers made repeat purchases, a strong indicator of loyalty.
- Repeat customers tend to be **high-value customers**, with some placing **10–14 orders**.

6. Delivery Performance

- Most deliveries are fulfilled within **5 to 10 days**, but a **long tail of late deliveries** exists.

Recommendations

1. **Boost High-Performing Products:**

- Focus marketing and stock on **top-performing desktops and HDTVs**.
- Consider bundling low-selling accessories with high-demand products to move inventory.

2. **Strengthen Online Channel:**

- Online sales are significant; optimize website experience, recommendations, and delivery for further growth.

3. **Geographic Expansion:**

- Analyze high-performing states (e.g., California, Texas) and expand store presence or invest in local marketing.

4. **Improve Delivery Time:**

- Investigate reasons for outliers in delivery delays and optimize logistics to enhance customer satisfaction.

5. **Customer Loyalty Programs:**

- With 61% repeat rate, implement or refine loyalty programs to further encourage repeat purchases.
- Target high-frequency buyers with **exclusive promotions** or early access to sales.
- Target low-frequency buyers with discounts on their next purchases.

6. **Optimize Store Operations:**

- Study low-performing stores (e.g., Store Key 2 or 18) for root causes – location, staff, inventory, etc.
- Replicate practices of top-performing stores in underperforming regions.
- Analyze newly opened stores for their underperformance

7. **Age-Specific Campaigns:**

- Tailor marketing campaigns toward age groups **20–39**, which drive higher average revenue.
- Tailor marketing campaigns toward other age groups to encourage people to buy products.