

# DATA ANALYST INTERNSHIP

## Task 8: Dashboard Design

**Objective:** Create a basic interactive dashboard that shows sales performance by product, region, and month.

**Tools:** Power BI

**Dataset:** USA Sales Dataset (2021-2024)

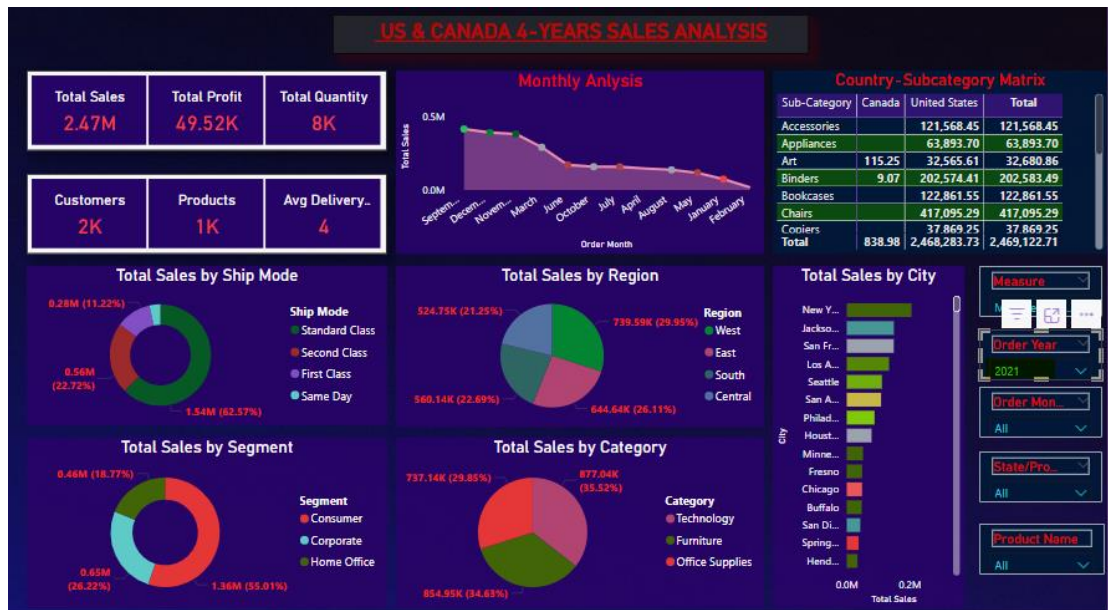
### Dashboard:



### Insights:

### Yearly Insights:

**Year: 2021**



Total Sales: 2.47M USD

Total Profit: 49.52k USD

Highest Sales: In September 2021 in West Region

Year:2022



Total Sales: 2.39M USD

Total Profit: 61. 58k USD

Highest Sales: In December 2022 in East Region

Year: 2023

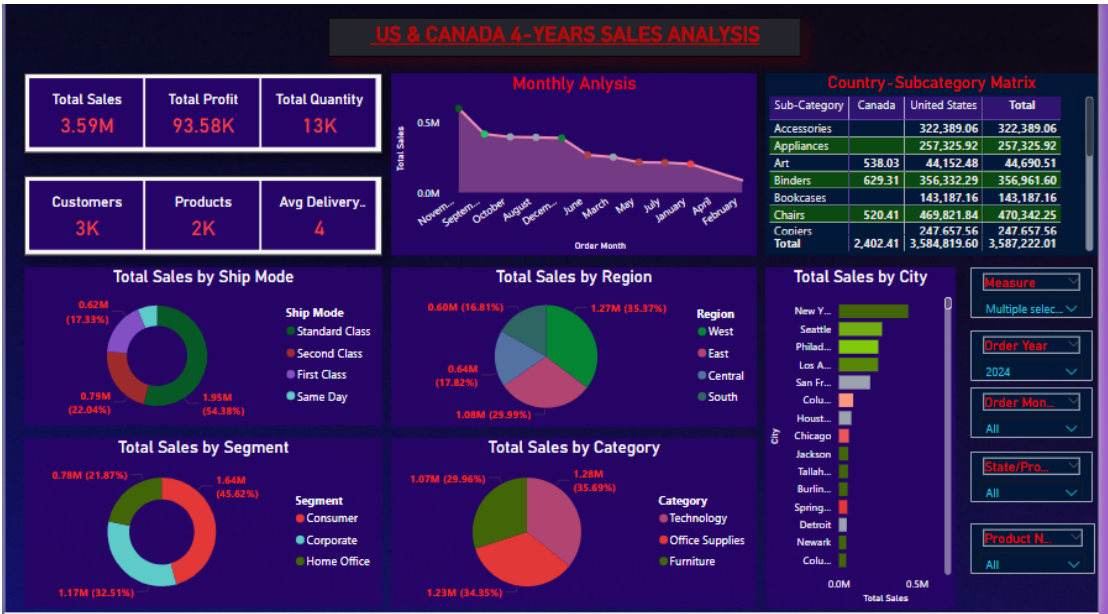


Total Sales: 3.05M USD

Total Profit: 81.92k USD

Highest Sales: In December 2023 in West Region

Year: 2024



**Total Sales: 3.59M USD**

**Total Profit: 93.5k USD**

**Highest Sales: In November 2024 in West Region**

**Conclusion:**

**Sales is mainly happened and most revenue earned in the time period of November and December (Quarter 3) and dominated in West Region.**

**Other Insights:**

**Highest Sales in all 4 years (2021-2024): New York City**

**Revenue generating Segment is: Consumer**

**Customers are Preferring Shipping Mode: Standard Class**

**Except 2022, Technology category is the leading category in sales and revenue.**

**Business Decision:**

Focus Area	Strategy	Expected Outcome
Peak Season (Q4)	Boost marketing & inventory	20% higher sales
West Region	Expand distribution & promotions	15% regional growth
Technology Category	New product launches	25% segment growth
Shipping Optimization	Free shipping thresholds	Higher AOV (Average Order Value)

Focus Area	Strategy	Expected Outcome
NYC Market	Flagship store/influencer collabs	Brand dominance
Low Seasons (Q1-Q2)	Early-year discounts	10% sales increase
Profit Margins	Bulk procurement & upselling	5-8% higher profits

Based on the **sales and profit insights (2021-2024)**, here are **data-driven business decisions** to **improve sales throughout the year** and **maximize profitability**:

---

1. Focus on Peak Sales Periods (Q3 & Q4 – Nov & Dec)

**✓ Action Plan:**

- **Increase marketing spend** (digital ads, discounts, loyalty programs) in **October-December** to capitalize on high-demand months.
  - **Stock inventory aggressively** in **West & East regions** (highest sales zones).
  - **Run flash sales & bundle offers** (e.g., "Black Friday Tech Deals") to boost revenue.
- 

2. Strengthen Dominance in the West Region

**✓ Action Plan:**

- **Expand distribution centers** in the West (e.g., California, Texas) to reduce delivery times.
- **Partner with local retailers** for offline sales growth.

- **Offer region-specific promotions** (e.g., "West Coast Tech Fest").
- 

### 3. Leverage New York City (Top-Performing Market)

#### ✓ **Action Plan:**

- **Open a flagship store or pop-up experience centers** in NYC.
  - **Collaborate with influencers** in NYC to drive brand awareness.
  - **Exclusive NYC-only deals** (e.g., "NYC Tech Week Discounts").
- 

### 4. Push the Technology Segment (Leading Category)

#### ✓ **Action Plan:**

- **Introduce new tech products** (smart home devices, wearables) to attract buyers.
  - **Offer extended warranties** or free tech support to increase perceived value.
  - **Run B2B tech partnerships** (corporate bulk purchases).
- 

### 5. Optimize Shipping Strategy (Standard Class Preference)

#### ✓ **Action Plan:**

- **Negotiate better rates with logistics partners** to maintain low-cost shipping.
  - **Offer free Standard Class shipping** above a certain order value (e.g., "\$50+ free shipping").
  - **Test faster shipping options** (e.g., "2-Day Express at no extra cost") for high-margin products.
-

## 6. Boost Underperforming Quarters (Q1 & Q2 – Jan to Jun)

### ✓ Action Plan:

- **Launch "Early Year Sales"** (e.g., "New Year Tech Refresh") to stimulate demand.
  - **Introduce subscription models** (e.g., "Quarterly Tech Upgrades") for recurring revenue.
  - **Target corporate clients** (Q1 budgets) with bulk purchase discounts.
- 

## 7. Improve Profit Margins (Sales Up, But Profits Lagging)

### ✓ Action Plan:

- **Reduce procurement costs** by bulk-buying high-demand items.
  - **Upsell high-margin accessories** (e.g., cases, warranties) at checkout.
  - **Optimize logistics** (reduce returns, improve packaging efficiency).
- 

## 8. Expand Consumer Segment (Highest Revenue Generator)

### ✓ Action Plan:

- **Personalized email campaigns** for repeat buyers (e.g., "Recommended for You").
- **Launch referral programs** ("Refer a Friend, Get \$10 Off").
- **Enhance customer support** (live chat, quick refunds) to improve retention.

**Thank You**