

U.S. Retail Sales Performance

By Kurosh Karimi

The attached dashboard created in Power BI gives information about **U.S. Retail Sales Performance**. The data comes from the “**Power BI Fundamentals**” course on Coursera.

The project analyses sales performance across different store types, locations, and departments within the United States. The graphs are created using a number of tables.

The component of this dashboard is as follows:

1. Filter Panel (Top-Left Corner):

- **Department Filter:**
 - A slicer is used to filter the data by different departments.
 - Departments listed include:
 - Clothing
 - Electronics
 - Garage
 - Kitchen
 - Other
 - Each department has a checkbox next to it, allowing users to filter the entire dashboard based on selected departments.

2. Key Metrics (Top-Center):

- **Total Sales YTD:**
 - Displays total sales year-to-date (YTD) as **1.39bn**.
- **Total Sales:**
 - shows overall sales as **4.05bn**.
- **Total Gross:**
 - Displays total gross as **2.22bn**.

3. Map Visualization (Center-Left):

- **Total Sales by Store Location and Store Type:**
 - A map of the United States with circular markers representing sales by location.
 - **StoreType** is color-coded:

- CORE: Light Blue
- DIGITAL: Dark Blue
- LOCAL: Orange

- The size of the circles corresponds to the sales volume in each location.

4. Stacked Bar Chart (Top-Right):

- **Total Sales by Store Location and Department:**
 - Stacked bar chart showing total sales segmented by department for each store location.
 - Departments are color-coded:
 - Clothing: Light Blue
 - Electronics: Orange
 - Garage: Purple
 - Kitchen: Pink
 - Other: Dark Blue
 - Store locations are listed along the x-axis, with sales volume on the y-axis.

5. Clustered Column Chart (Bottom-Right):

- **Total Sales by StoreType and Department:**
 - Clustered column chart showing total sales by StoreType (CORE, DIGITAL, LOCAL) and department.
 - Each department is represented by a different color.
 - **CORE** has the highest sales, followed by **DIGITAL** and then **LOCAL**.

These components together provide an interactive and comprehensive overview of sales performance by department, store location, and store type across the United States.

Here is the summary and insight that can be drawn from the dashboard:

1. Key Metrics:

- **Total Sales YTD:** The total sales year-to-date (YTD) are **1.39 billion** USD.
- **Total Sales:** The total sales are reported as **4.05 billion** USD.
- **Total Gross:** The total gross profit is **2.22 billion** USD.

2. Sales by Store Location and Store Type:

- The map shows that sales are distributed across various store locations in the U.S.
- **Washington** and **California** have large sales volumes, as indicated by the larger circle sizes.
- **CORE** stores (light blue circles) generally have the largest presence and highest sales volume across multiple states.
- **DIGITAL** stores (dark blue circles) also show significant sales, especially in areas like Michigan and Pennsylvania.
- **LOCAL** stores (orange circles) have smaller sales volumes, with notable activity in southern states like Alabama and Mississippi.

3. Sales by Store Location and Department:

- **Clothing** (light blue) and **Electronics** (orange) departments have the highest sales across most store locations.
- States like **Texas** and **Michigan** show a balanced distribution of sales across different departments.
- States like **Connecticut** and **Washington** have noticeable sales in **Garage** and **Kitchen** departments as well.

4. Sales by Store Type and Department:

- **CORE** stores generate the highest sales overall, especially in the **Clothing** department, which alone accounts for **1.02 billion** USD in sales.
- **Electronics** and **Garage** departments also contribute significantly to CORE store sales.
- **DIGITAL** stores have notable sales in the **Clothing** and **Electronics** departments, with **0.28 billion** USD in total sales.
- **LOCAL** stores have the smallest sales volume, with **Electronics** and **Other** departments leading their sales, totaling **0.09 billion** USD.

5. Geographic Insights:

- **Northeastern** states like Pennsylvania and New Jersey, as well as **Midwestern** states like Michigan and Indiana, show strong digital sales.
- **CORE** stores dominate in regions like the **Pacific Northwest** (Washington and Oregon) and **Midwest** (Illinois, Michigan), reflecting their significance in these areas.
- **LOCAL** stores, though smaller in sales, have a presence primarily in the southern regions.

Overall Summary:

The dashboard indicates that the retail business is performing well across various regions and store types, with the highest sales coming from CORE stores, especially in the Clothing and Electronics departments. Geographic distribution of sales shows a mix of physical and digital sales, with CORE stores leading in most regions. The dashboard effectively highlights where the business is thriving and where there may be opportunities for growth or improvement, particularly in the LOCAL store category.