

The background is a dark teal color with a subtle grid of small white dots. Overlaid on this are various light blue and white geometric shapes and lines, resembling circuit traces or data paths. These include straight lines, right-angle turns, and small circles at the ends of lines. Some lines are thicker than others. There are also small clusters of dots and symbols like '<<<<<' and '>>>>>' scattered around the edges.

# Super Store Sales Analysis

Disclaimer: The information provided in this text is not  
factual and is for illustrative purposes only

# Report Objective

Period: 2015 – 2018

<b><u>Introduction</u></b>	This report analyzes sales performance across different regions, product categories, and periods to understand market trends, identify strengths and weaknesses, and support strategic decision-making.
<b><u>Conclusion</u></b>	The report includes key performance indicators (KPIs), customer behavior analysis, order distribution, and outlier detection – all of which significantly contributed to accurate data understanding and generating actionable insights.
<b><u>Findings and Observations</u></b>	One of the key findings was the reduction of skewness in sales distribution. Initially, the mean sales value was nearly five times greater than the median, indicating a strong right skew. After addressing outliers, the gap between the mean and median narrowed significantly, resulting in a more realistic and reliable interpretation of sales performance.

Team 1

Sales PROJECT

# Super Store Sales Dashboard: (KPIs)



**No of customers  
& Products**



**Mean & Median**



**Average Order to  
ship time**



**Total Orders & Sales**

# Super Store Sales Dashboard: (KPIs)

Average Order-to-Ship Time (Days)	Total Sales	Total Customers	Total Products
3.96	\$2M	793	1861

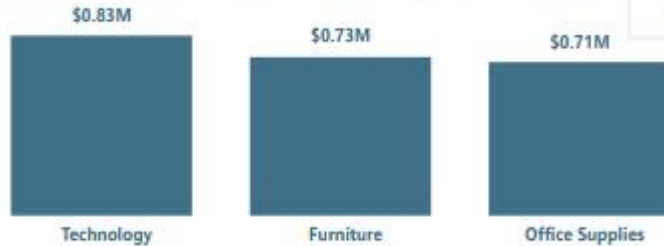
Total Orders	Mean (Sales)	Median
4922	231	54

# Data Relations in Sales Report

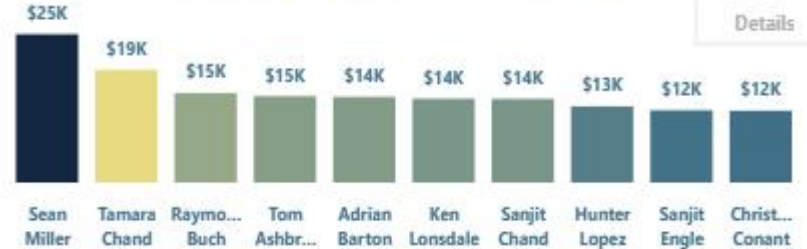


# Data Relations in Sales Report

Total Sales by Category



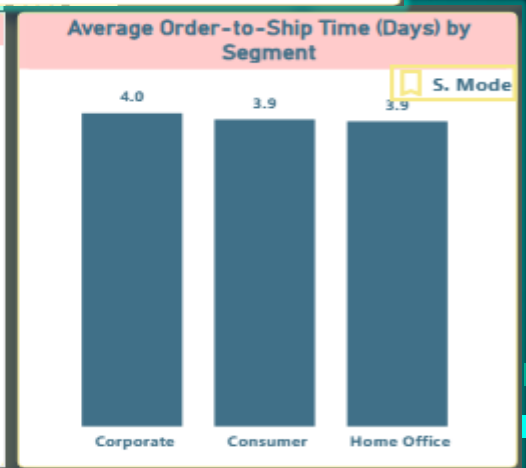
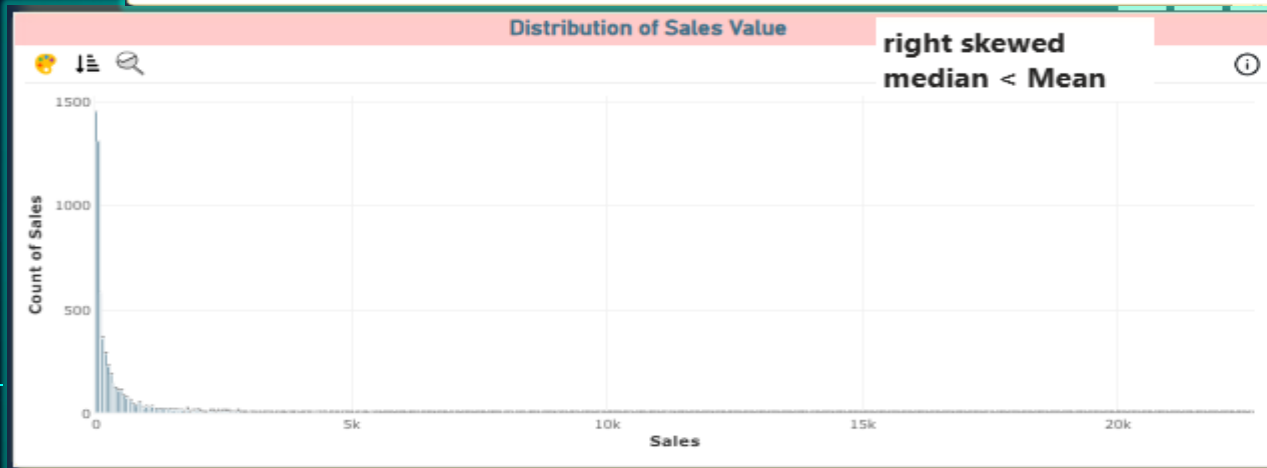
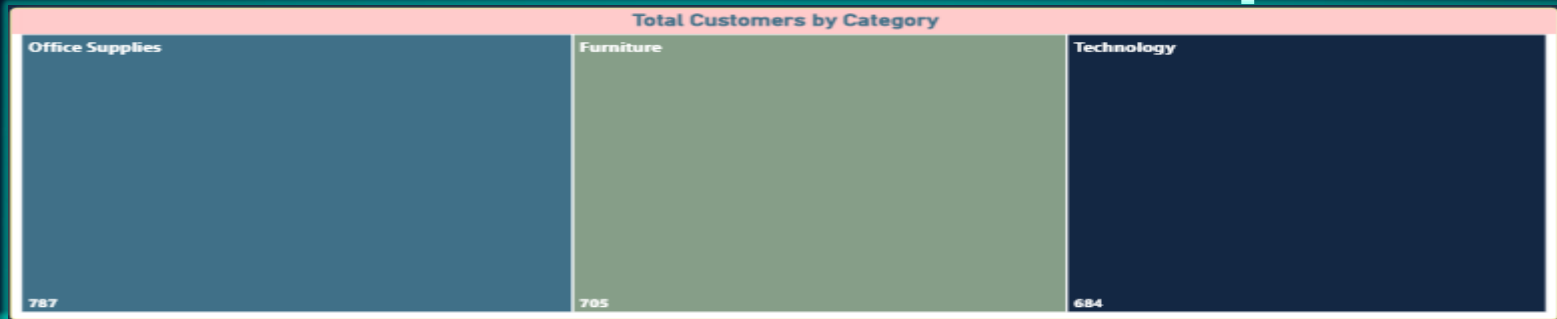
Segment & Top 10 Customer by sales



Total Sales and Total Orders by Country



# Data Relations in Sales Report



# Key Filters (Slicers) Applied in Report

**Section**

(treatment for the effect of outliers)

**Category**

**State**

**Region**

**Product Name**

**Order Date**

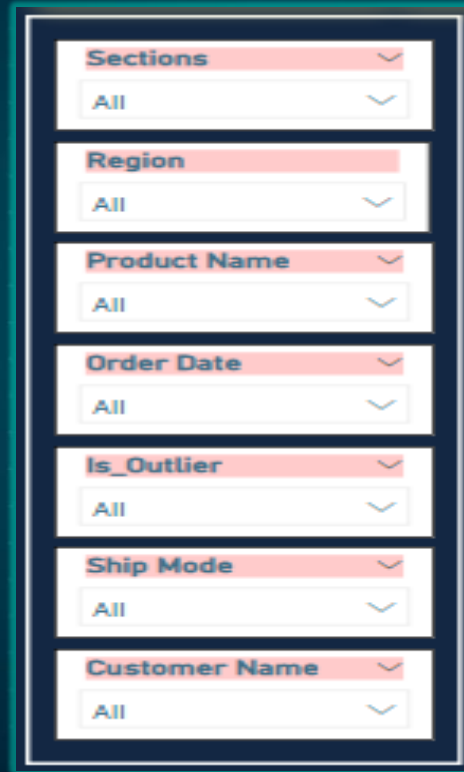
**Is Outlier**

**Ship Mode**

**Customer Name**

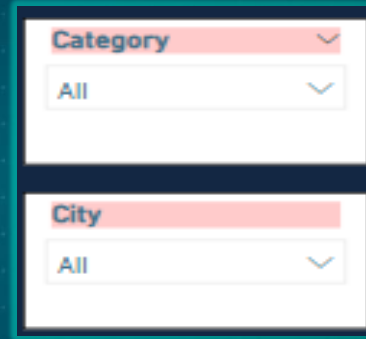


# Key Filters (Slicers) Applied in Report



A vertical stack of seven filter slicers, each with a red header and a white dropdown menu. The filters are:

- Sections**: All
- Region**: All
- Product Name**: All
- Order Date**: All
- Is\_Outlier**: All
- Ship Mode**: All
- Customer Name**: All



A vertical stack of two filter slicers, each with a red header and a white dropdown menu. The filters are:

- Category**: All
- City**: All

# Sales Data Segmentation & Outlier Analysis

## مشكلة البيانات و التأثير

وهذا يؤدي الى وجود  
**Outliers**

حيث يبلغ ال  
Mean ربع قيمة ال

**1/4**

يوجد تباين كبير في الاسعار  
في عمود المبيعات

حيث تتراوح:

أقل قيمة و أعلى قيمة

**22,638**

**0.44**

# Sales Data Segmentation & Outlier Analysis

## معالجة الـ Outliers

تم تقسيم البيانات إلى قطاعات بناءً على:

### النطاق الرباعي (IQR)

تم تحديد 1000 أوردن بقيمة 1.45  
مليون دولار في Outliers

### الانحراف المعياري (STD)

القيم الشاذة Outliers موجودة في ال  
القطاعات 8, 7, 6, 5

## (فوائد التقسيم إلى قطاعات)

بعد التقسيم تقاربت قيم ال  
Mean وال Median

تحسين فهم البيانات وبالتالي  
قرارات أكثر دقة

# Sales Data Segmentation & Outlier Analysis

## تحليل القطاعات الرئيسية

النسبة	إجمالي المبيعات	عدد الأوردرات	النطاق السعري	القطاع
4.2%	94K	3,231	0.44 – 50	1
4.3%	98K	1,183	50 – 100	2
23%	511K	654	500-1000	الأكبر

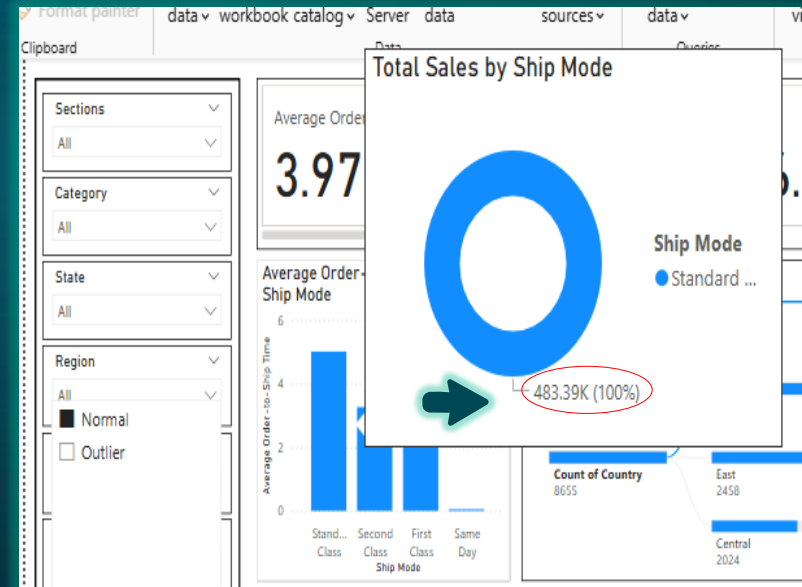
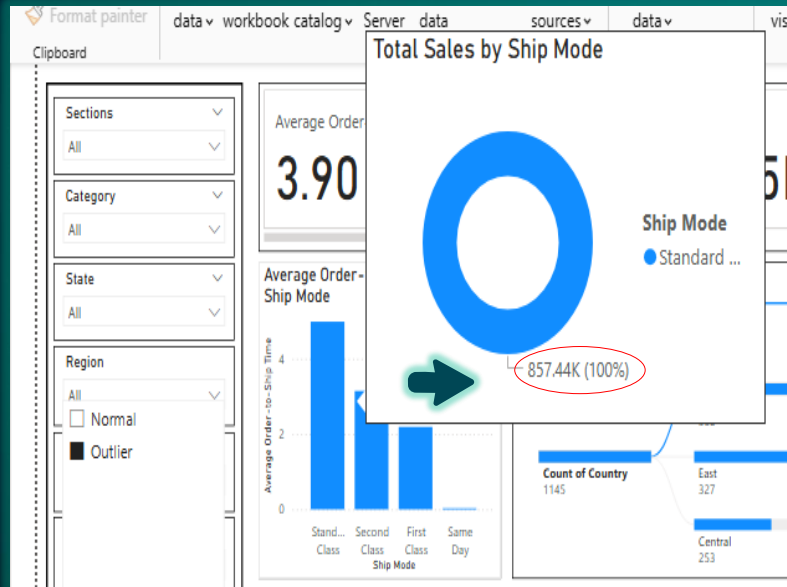
ملاحظة: الأوردر الواحد قد يحتوي على منتجات من قطاعات مختلفة.

# Impact of Outliers on Sales Analysis

في تحليل (Total Sales by Ship Mode)

قيمة ال (Standard Ship Mode) مع ال Outliers = ضعف قيمتها في حالة ال normal (بدون Outliers).

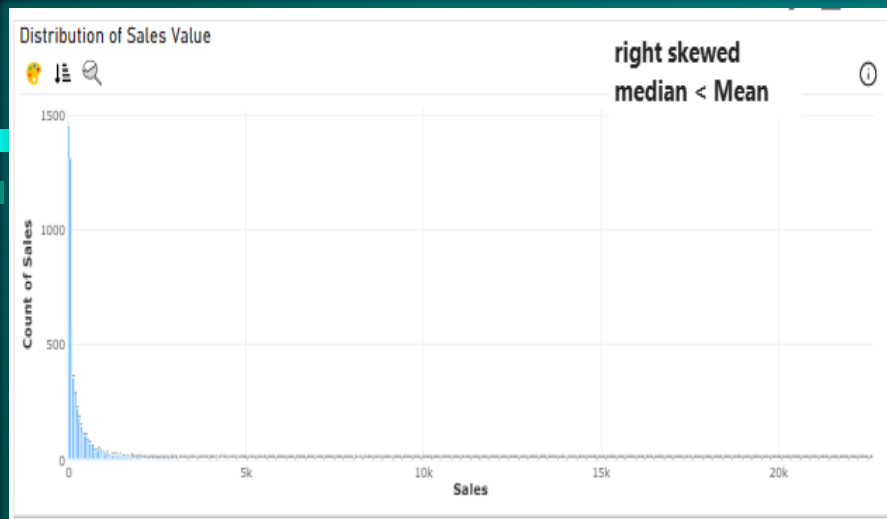
كما هو موضح في ال Screenshots



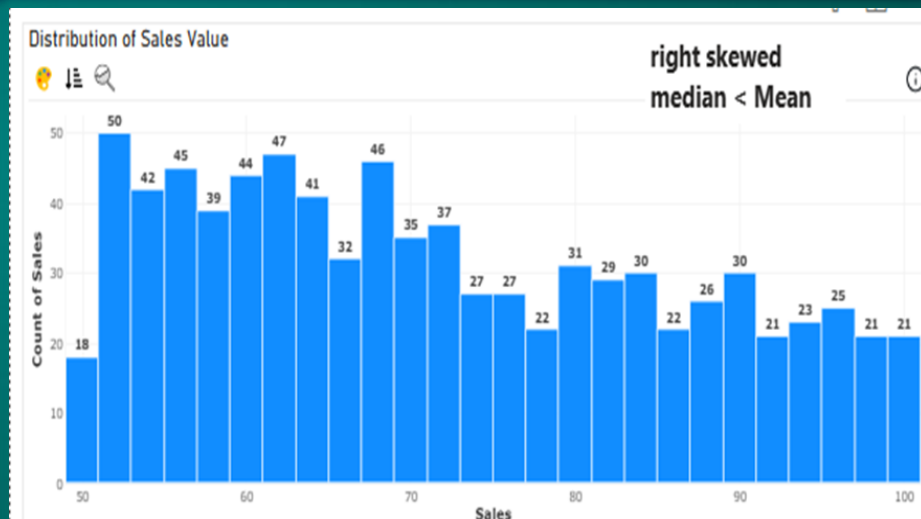
# Impact of Outliers on Sales Analysis

تأثير الـ Outliers على توزيع الـ (Right Skewed):  
الرسم البياني (Histogram) يظهر توزيعاً مائلاً لليمين (Right Skewed)

Median < Mean



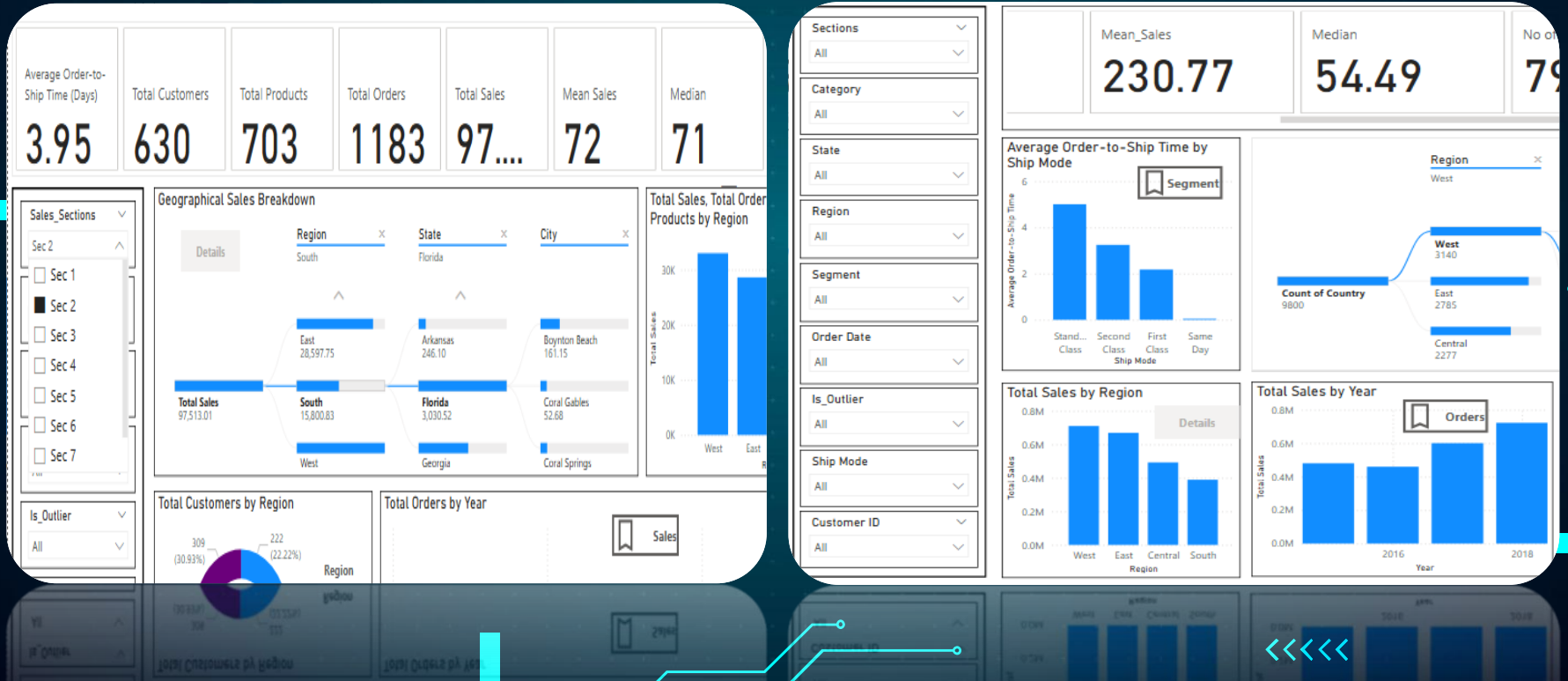
With outliers



بعد التقسيم الى Sections

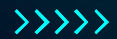
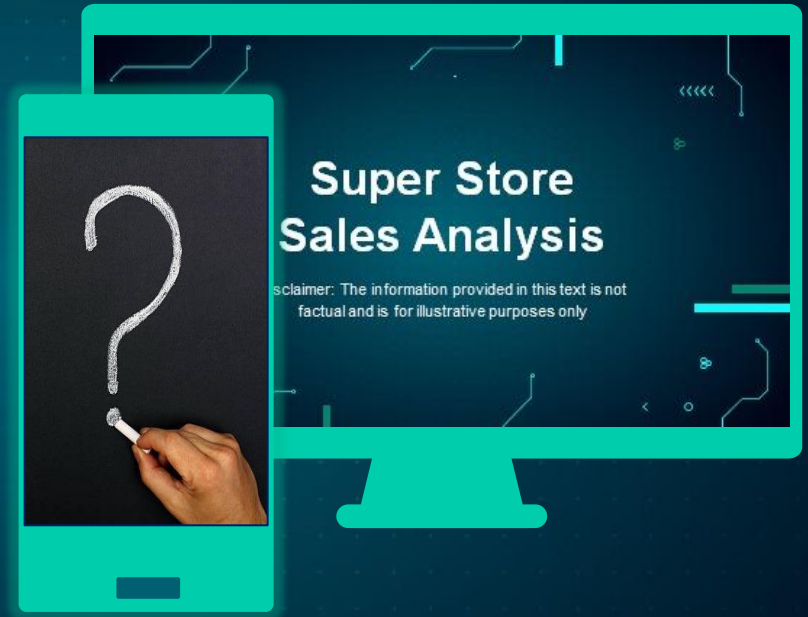
<<<<

# Outliers Effect on Median & Mean





# Any Question???





# TEAM 1



**Janet Essam**



**Fatma Samy**



**Hader Karam**



**Rokia Ashraf**



**Muhammad Hassan**



**Nadia Amr**

# Thank you!

Github Link

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