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

Introduction	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.
Conclusion	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.
Findings and Observations	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.

Super Store Sales Dashboard: (KPIs)

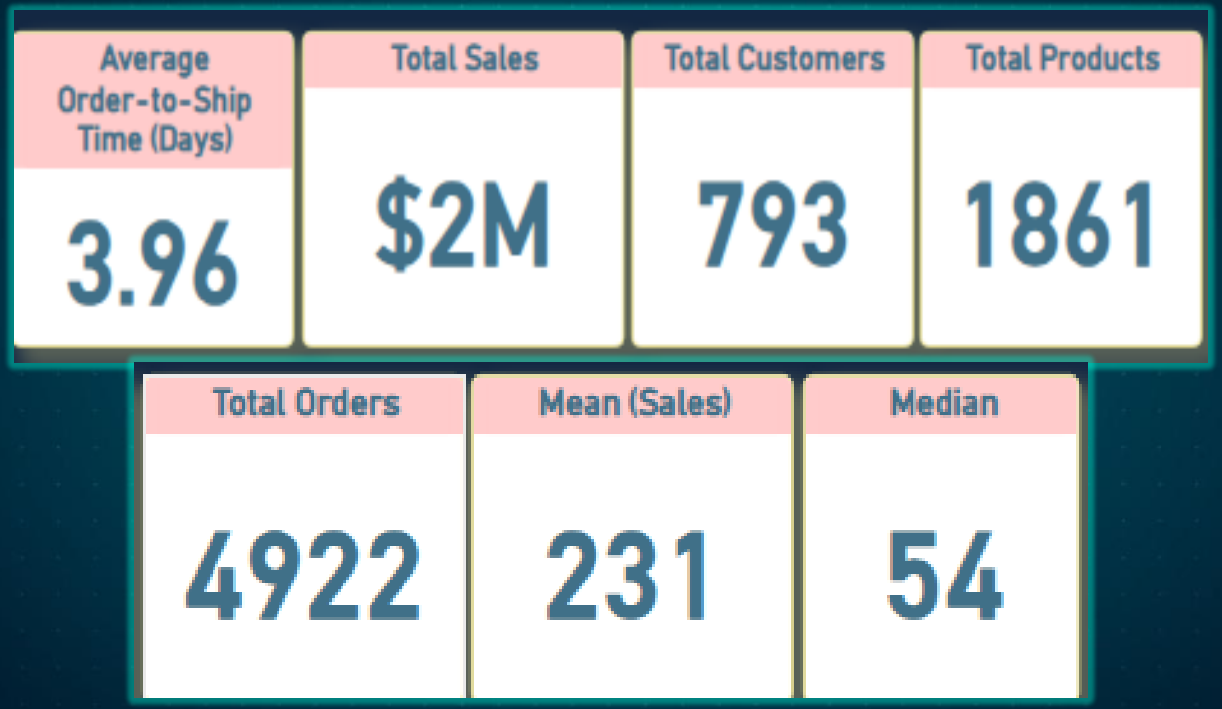
No of customers & Products

Mean & Median

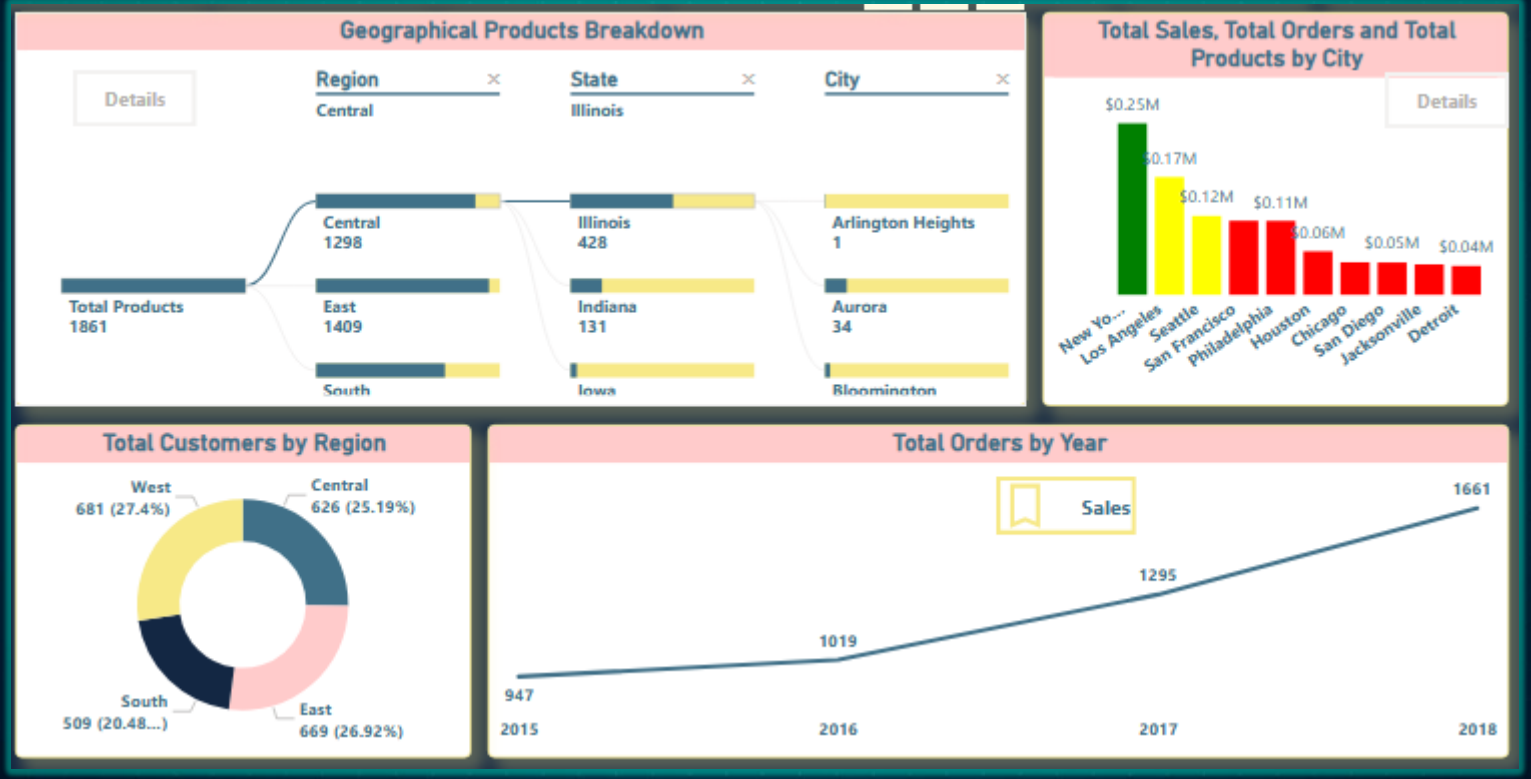
Average Order to ship time

Total Orders & Sales

Super Store Sales Dashboard: (KPIs)



Data Relations in Sales Report



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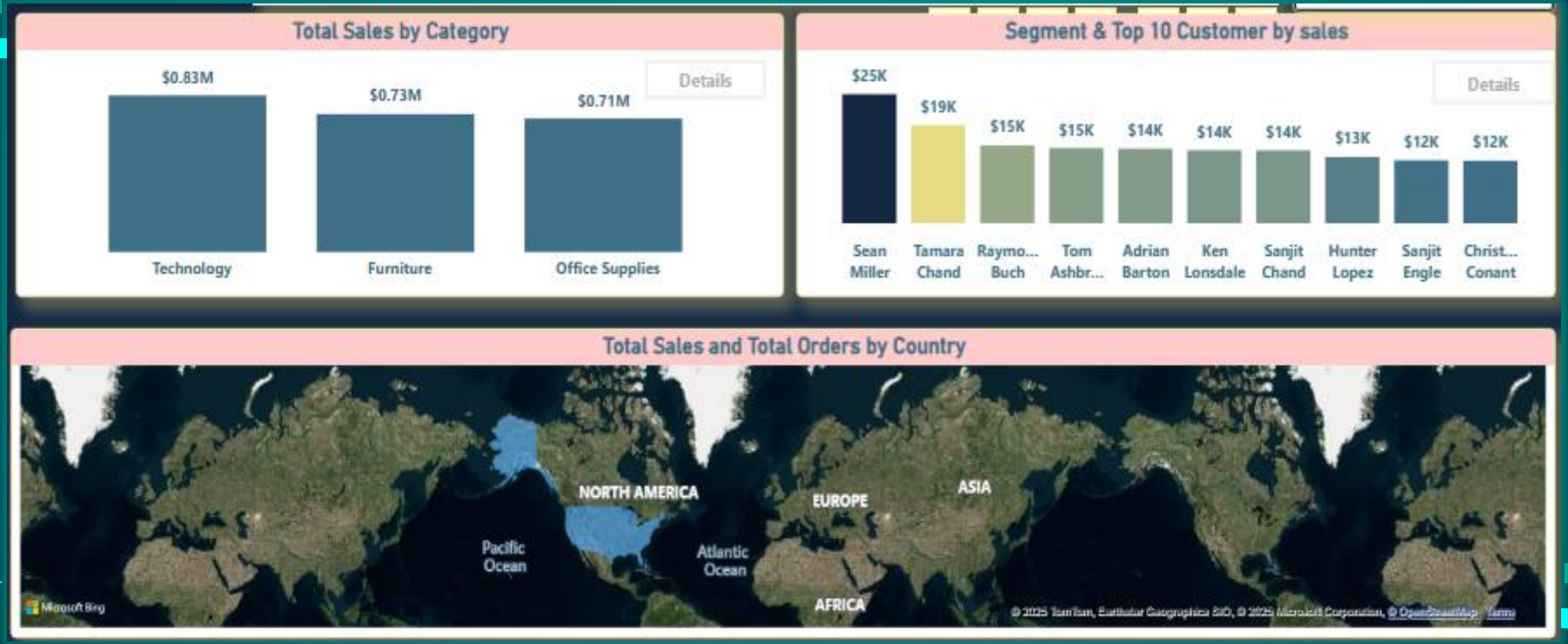

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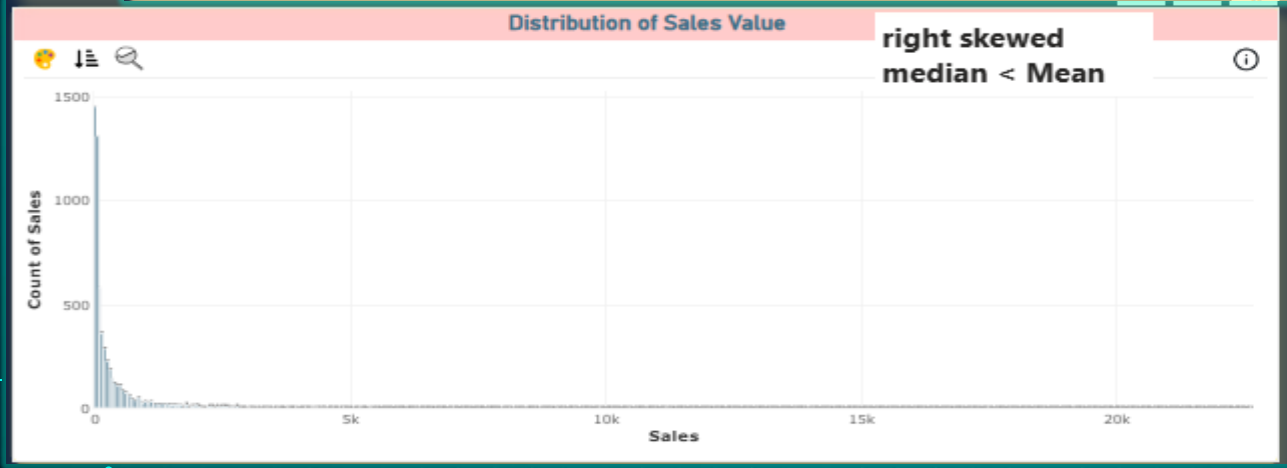
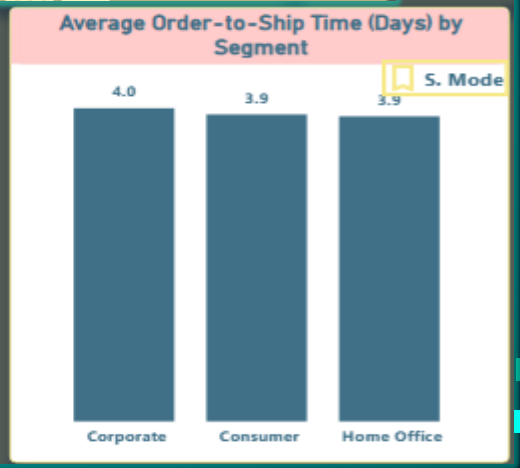
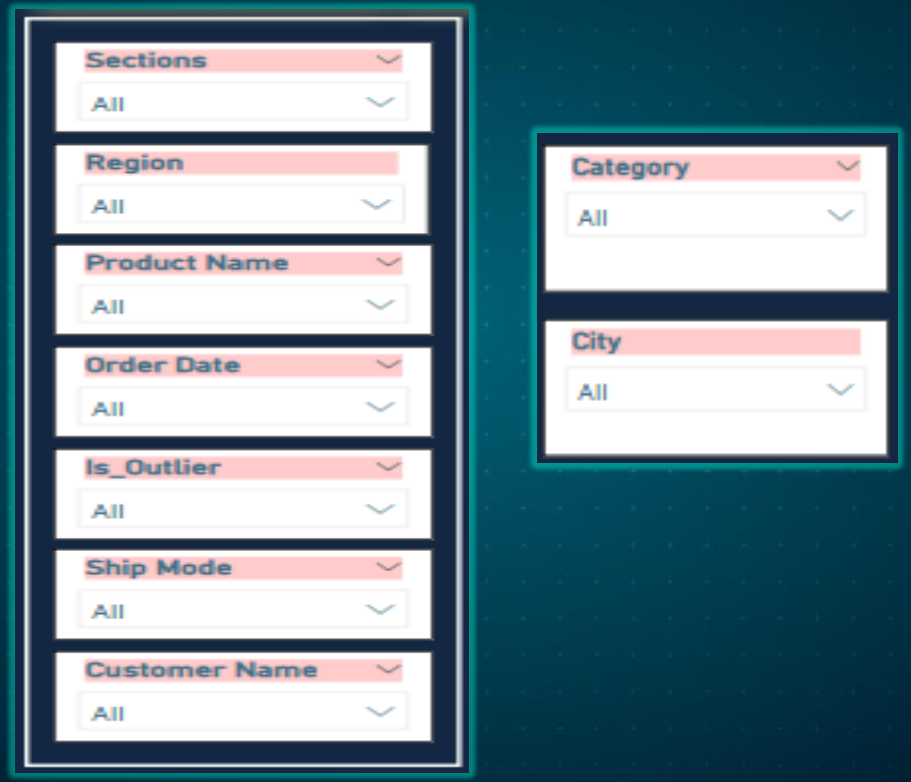




Key Filters (Slicers) Applied in Report

- **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



Sales Data Segmentation & Outlier Analysis

مشكلة البيانات و التأثير

يوجد تباين كبير في الاسعار فى عمود المبيعات

حيث تتراوح:

اقل قيمة: **0.44**

و

أعلى قيمة: **22,638**

وهذا يؤدي الى وجود Outliers

حيث يبلغ ال Median ربع قيمة ال Mean

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Sales Data Segmentation & Outlier Analysis

معالجة الـ Outliers

تم تقسيم البيانات إلى قطاعات بناءً على:

الانحراف المعياري (STD)

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

النطاق الرباعي (IQR)

تم تحديد 1000 أوردر بقيمة 1.45
مليون دولار فى Outliers

(فوائد التقسيم إلى قطاعات)

تحسين فهم البيانات وبالتالى قرارات أكثر دقة

بعد التقسيم تقاربت قيم ال Mean وال Median

Sales Data Segmentation & Outlier Analysis

تحليل القطاعات الرئيسية

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

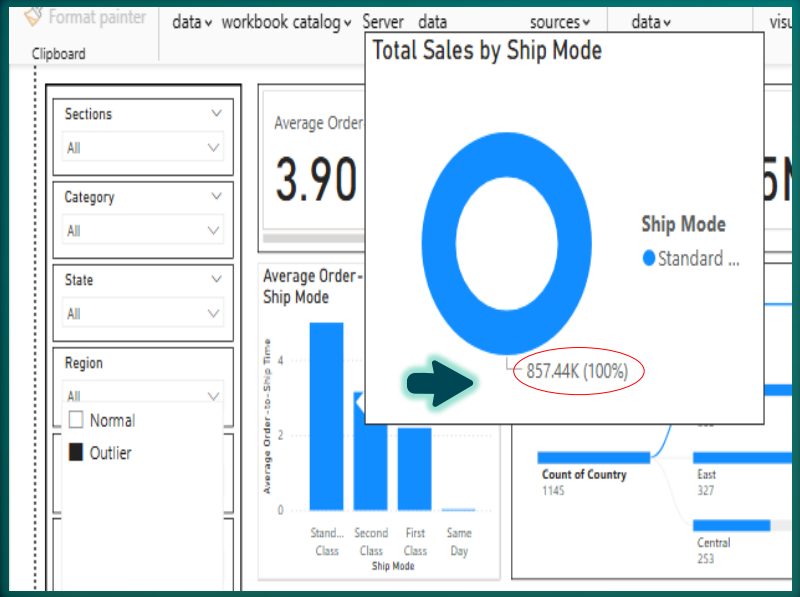
ملاحظة: الأوردر الواحد قد يحتوي على منتجات من قطاعات مختلفة.

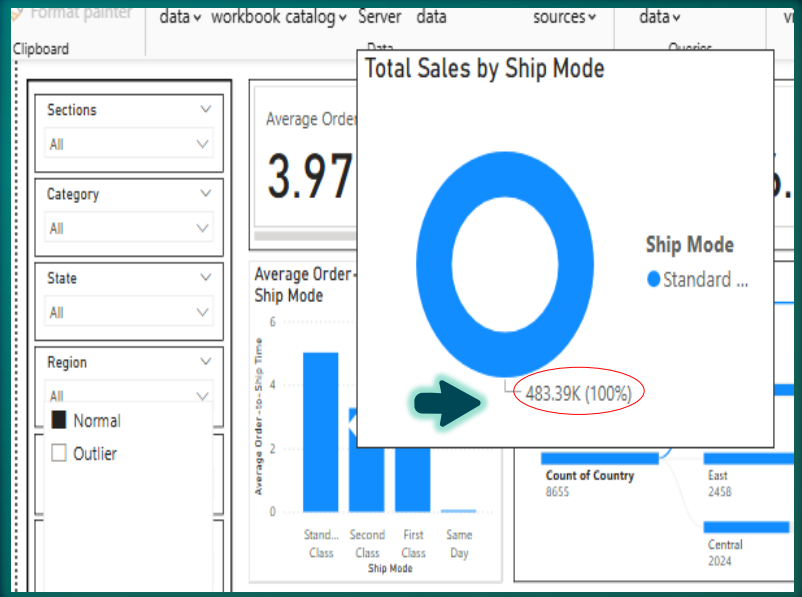
Impact of Outliers on Sales Analysis

في تحليل (Total Sales by Ship Mode):

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

كما هو موضح فى ال Screenshots



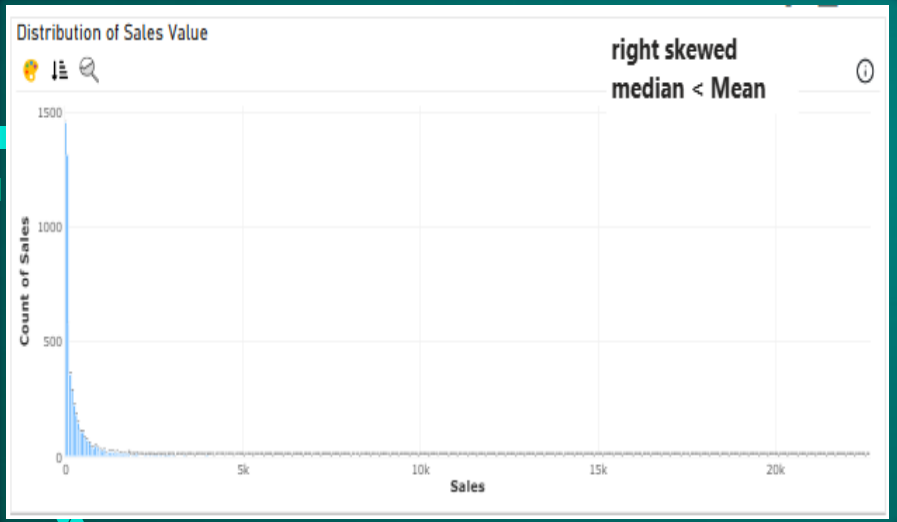


Impact of Outliers on Sales Analysis

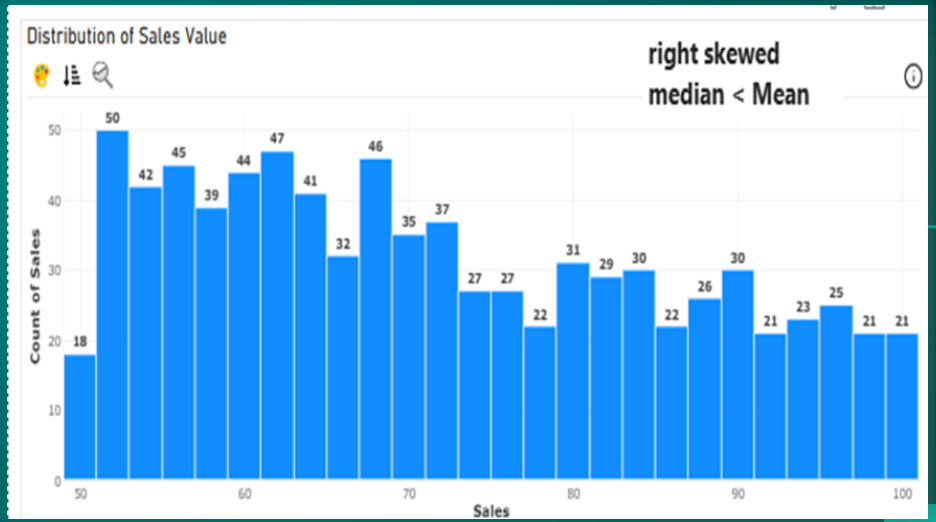
تأثير الـ Outliers على توزيع ال (Right Skewed):

الرسم البيانى (Histogramيظهر توزيعًا مائلًا لليمين ((Right Skewed

Median < Mean

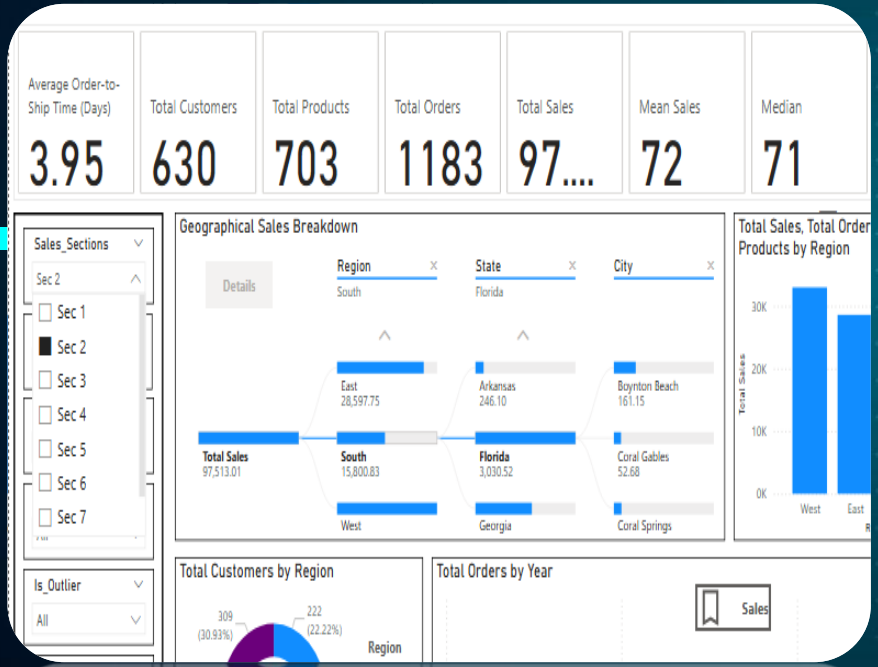


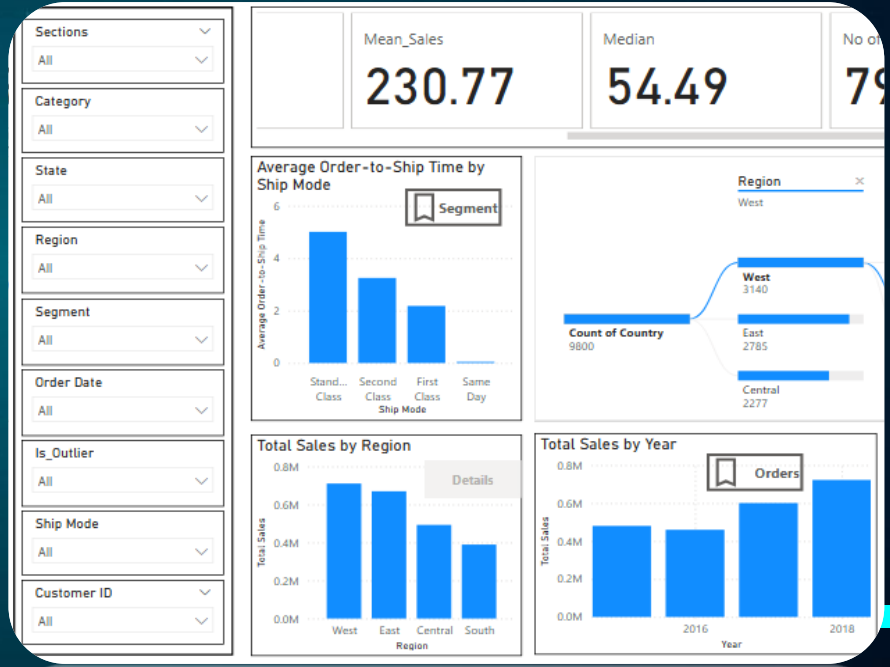
With outliers



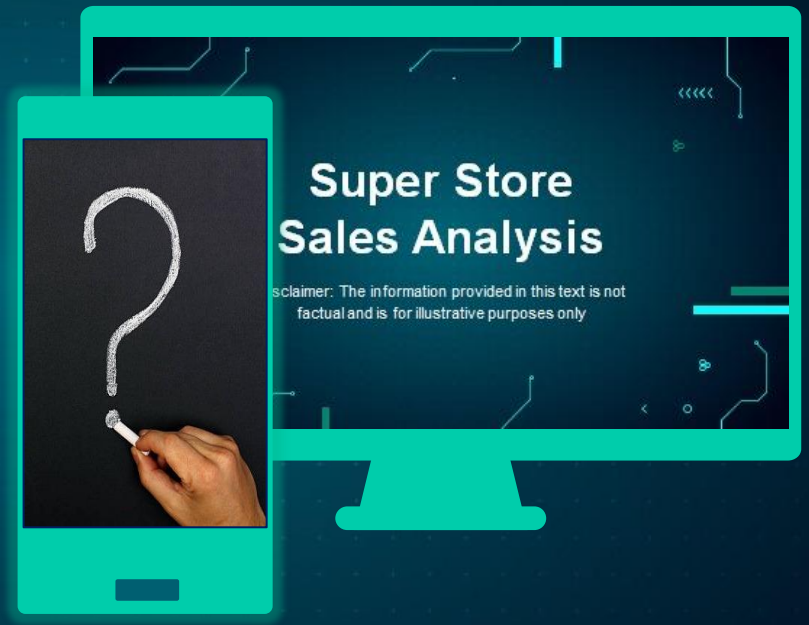
بعد التقسيم الى Sections

Outliers Effect on Median & Mean





Any Question???



TEAM 1

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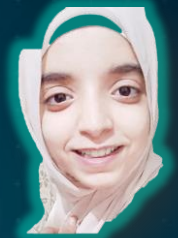

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Thank you!

Github Link

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