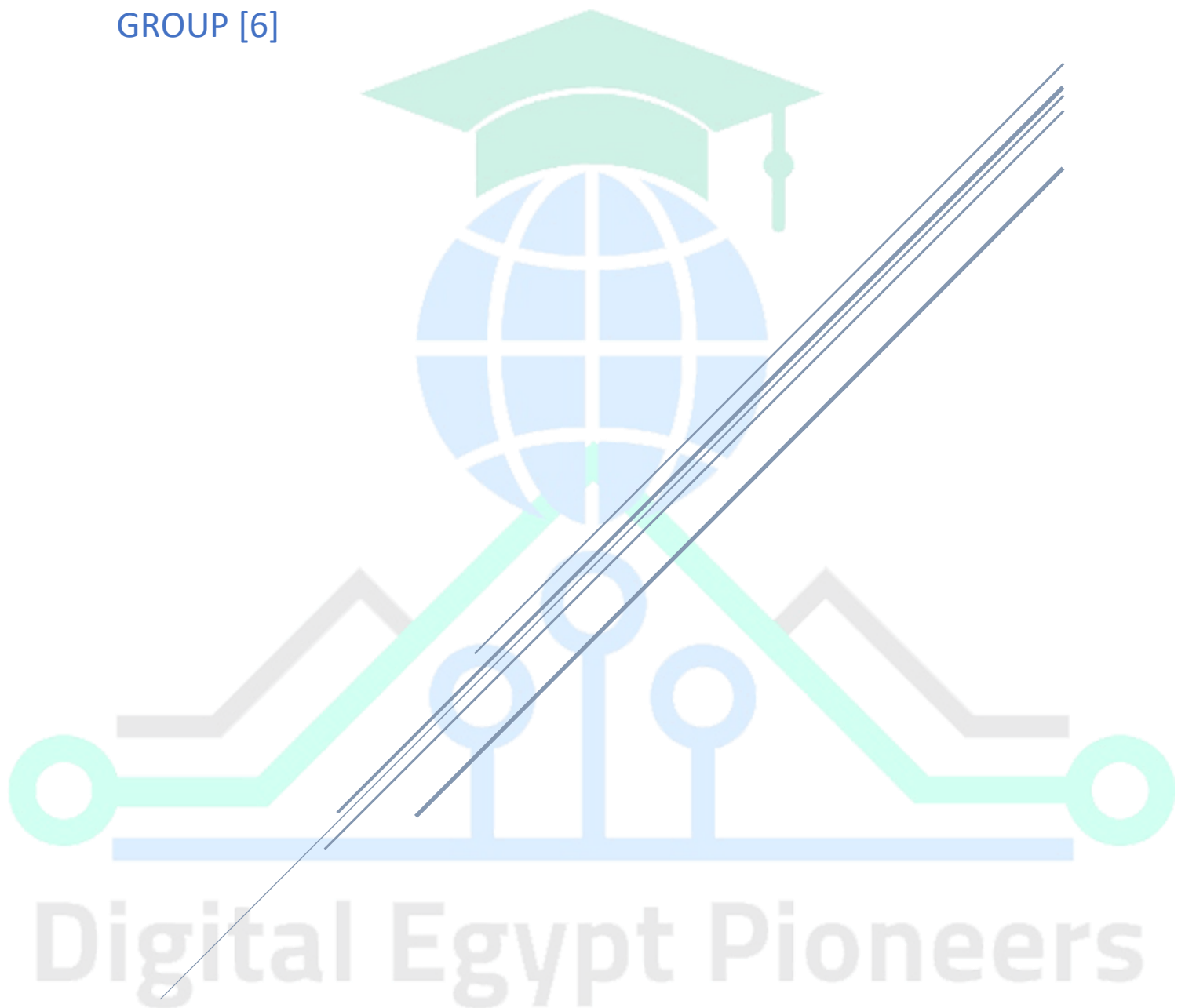


# MICROSOFT POWER BI TRACK

GRADUCATION PROJECT

GROUP [6]



MINISTRIY OF COMMUNICATION AND INFORMATION  
TECHNOLOGY  
DEPI-ROUND 2



## DEDICATION & ACKNOWLEDGEMENT

With gratitude to Allah Almighty, we, Group 6 - Data Analysis Pioneers, extend our sincere appreciation to the Egyptian Ministry of Communications for adopting the Digital Egypt Pioneers initiative in alignment with the Egyptian government's Vision 2030.

We also express our deep gratitude to Dr. Mohamed Atiya for his tremendous efforts throughout this round, providing comprehensive explanations and daily follow-ups.

Additionally, we extend our thanks and appreciation to CLS, the organizing and sponsoring company, for their dedication and excellent organization, which significantly contributed to the success of this free scholarship.

Data Analysis Pioneers team

# Digital Egypt Pioneers



## ABSTRACT

Within the framework of Egypt Vision 2030, and in alignment with the continuous directives of the President of Egypt emphasizing the necessity of investing in human development, the Ministry of Communications and Information Technology (MCIT) has launched the Digital Egypt Pioneers initiative. This initiative reflects the ministry's commitment to advancing the ICT sector and developing highly skilled professionals.

The Vision is to achieve leadership in the ICT sector by building a skilled and innovative workforce capable of driving comprehensive digital transformation both locally and regionally.

The initiative is implemented in collaboration with leading global technology companies, as well as local and regional enterprises specializing in ICT skills development. These companies contribute by organizing practical workshops in various technological fields, enriching the educational process, and offering training programs to enhance students' technical expertise.

The initiative's success partners include some of the world's leading technology companies, such as Google, Huawei, IBM, Linux, Microsoft, Oracle, SAP, and many other global industry leaders contributing to the initiative's objectives.

# Digital Egypt Pioneers



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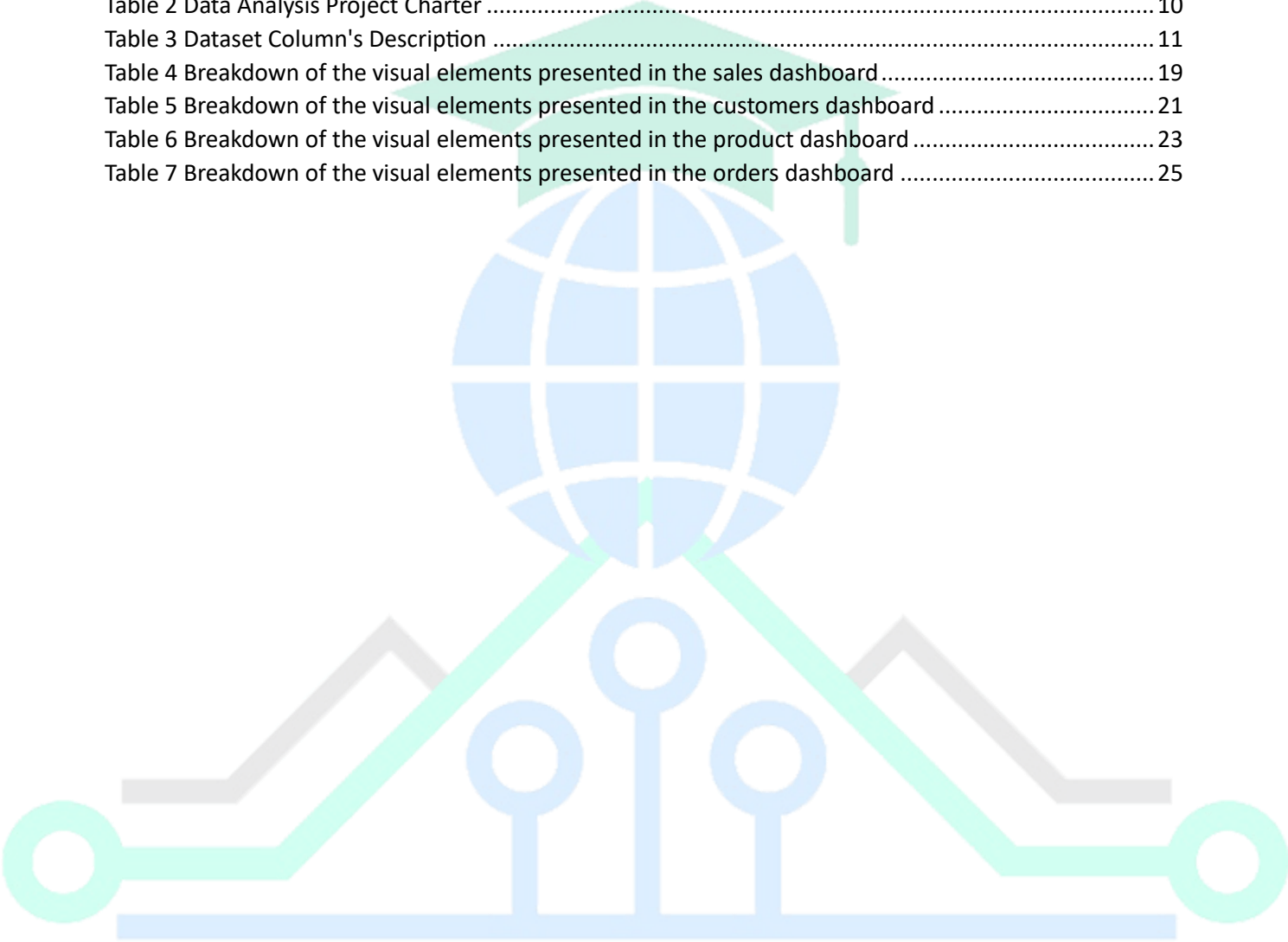
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# Digital Egypt Pioneers



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## I. Chapter (1): Introduction

The team will discuss the following topics: Overview, Scope & Objectives, Group Policy for Project Selection Criteria, and the Project Charter.

### Track Overview

Inquiry	Details
Round Number	2
Track Name	Microsoft Power BI Engineer
Instructor's Name	Dr. Mohamed Atiya
Group Code	Microsoft Power BI Engineer - CLS ONL2_DAT2_G1
Sponsor	Ministry of Communication and Information Technology
Provider	CLS Learning Solutions
Graduation Project Group Name	Data Analysis Pioneers team
Numbers of Team Members	5

Table 1 Microsoft Power BI Track Overview

### Project Scope and Objective

The project scope includes the implementation and execution of data analysis for the selected project using Microsoft Power BI. This involves:

- Utilizing Power Query to clean and prepare the data.
- Applying various charts to support the overall concept.
- Using DAX formulas to calculate key indicators based on the data.

And, the project Objective include some of agreed criteria based on the project scope. This involves:

- Encouraging collective thinking and brainstorming to increase data presentation proposals by 25% compared to the initial project discussion.
- Enhancing communication and collaboration skills among team members.





## Agreed Policy

On November 1, 2024, the team created a WhatsApp group to collaborate on the project. One team member was chosen as the leader and project manager. The following rules were agreed upon to achieve the goals of the Data Analysis Pioneers team:

- Each team member selected a project idea and presented it in an online meeting to the rest of the team.
- The team chose the best idea to apply and implement for their graduation project.
- The team agreed that each member would complete their assigned tasks individually, then discuss their work together to reach the best results, make improvements, and finalize the project.

✕ Group info



G6 - Data Analysis Pioneers team

Group · 5 members

Add group description

Group created by you, on 11/1/2024 at 4:10 PM

Media, links and docs

162 >

Figure 1 Documentation of WhatsApp group creation





## Project Selection Criteria

Among the six proposed projects provided by the Egypt Digital Pioneers Initiative Management as potential projects and databases for the graduation project, which included databases related to:

- **Human Resources (HR)**
- **Manufacturing Downtime**
- **MTA Daily Ridership**
- **UK Train Rides**
- **Superstore Sales Dataset**
- **Supply Chain Data**

Each team member individually selected a project and then presented their idea in a team meeting. Subsequently, the team collectively chose the best project to work on based on a set of criteria, these criteria was agreed and included:

- **Ease of understanding the data**
- **Data quality**
- **Richness of the data in terms of extractable insights**
- **Feasibility of utilizing the data in real-world scenarios**
- **Capability to develop advanced analytical models**

# Digital Egypt Pioneers



A relative weighting system ranging from 1 to 10 was used to compare all the proposed projects. Based on these relative weights, the team selected the most suitable project to work on.

Project Name	Selection criteria					Average Rank	Decision
	Ease of understanding the data	Data quality	Richness of the data in terms of extractable insights	Feasibility of utilizing the data in real-world scenarios	Capability to develop advanced analytical models		
Human Resources (HR)	6	7	5	3	4	5	Rejected
Manufacturing Downtime	5	6	4	7	7	5.8	Rejected
MTA Daily Ridership	4	5	6	7	4	5.2	Rejected
UK Train Rides	6	8	6	4	7	6.2	Rejected
Superstore Sales Dataset	8	9	8		9	8.8	Accepted
Supply Chain Data	6	4	7	4	6	5.4	Rejected

Figure 2 Project Selection Criteria

After selecting the project, the team documented it in a foundational project charter to ensure an institutional approach that guarantees effective implementation and monitoring.

### Project Charter

1. General Project Information	
Project Name:	Superstore Sales Dataset Analysis
Executive Sponsors:	<ul style="list-style-type: none"> <li>Ministry of Communication and Information Technology.</li> <li>DEPI</li> <li>CLS Learning Solutions</li> </ul>
Department Sponsor:	Dr. Mohamed Ateya
Impact of project:	<ul style="list-style-type: none"> <li>Increasing the team's ability to use and analyze data using Power BI.</li> <li>Enhancing the team's competitiveness in the job market by obtaining the scholarship certificate.</li> </ul>



2. Project Team		
	Name	Phone Number
<b>Project Manager:</b>	Yousef Mohamed Elsayed	+2 01026041908
<b>Team Members:</b>	Alaa Hesham	+20 10 64150642
	Marwa Taha	+20 10 20499971
	Zeniab Elsadek	+20 15 54305525
	Ahmed Fahmy	+2 01063422021
3. Stakeholders		
Stakeholders includes the following : <ul style="list-style-type: none"> <li>Ministry of Communication and Information Technology.</li> <li>DEPI.</li> <li>CLS Learning Solutions.</li> <li>Data Analysis Pioneers team.</li> </ul>		
4. Project Scope Statement		
In the project approved by the Data Analysis Pioneers team, it was observed that data is recorded in its raw form, making it difficult to utilize effectively. Therefore, the project aims to transform this data into meaningful information, ensuring at least 90% data utilization.		
The project scope includes: <ul style="list-style-type: none"> <li>Designing an interactive report using Power BI to present information clearly and effectively.</li> <li>Engaging with stakeholders to understand their requirements and ensure the report meets their needs.</li> <li>Utilizing learned tools and concepts to implement the project efficiently.</li> </ul>		
Objectives		
In the project approved by the Data Analysis Pioneers team, it was observed that data is recorded in its raw form, making it difficult to utilize effectively. Therefore, the project aims to transform this data into meaningful information, ensuring at least 90% data utilization.		
The project scope includes: <ul style="list-style-type: none"> <li>Designing an interactive report using Power BI to present information clearly and effectively.</li> <li>Engaging with stakeholders to understand their requirements and ensure the report meets their needs.</li> <li>Utilizing learned tools and concepts to implement the project efficiently.</li> </ul>		
Deliverables		
<ul style="list-style-type: none"> <li>Utilizing Power BI tools, such as Power Query, to process, organize, and clean data.</li> <li>Designing an interactive report using Power BI.</li> </ul>		
Scope		
This project includes all stakeholder requirements, as well as the outcomes of brainstorming sessions among team members. It does not include any considerations outside DEPI.		
5. Communication Strategy		
<ul style="list-style-type: none"> <li>Weekly Lectures</li> <li>Whats App Groups</li> <li>Online Meetings &amp; Cell Phones.</li> </ul>		

Table 2 Data Analysis Project Charter



## II. Chapter (2): Selected Project Overview

### Introduction

The Selected dataset, titled "Superstore Sales Dataset", contains transactional sales data from a retail store. The dataset is a Comma-Separated Values [CSV] file containing 9,800 rows and 18 columns.

It includes various details related to orders, shipping, customers, products, and sales performance. This dataset can be useful for analyzing business trends, customer behavior, and logistics efficiency.

Column Name	Data Type	Description
Row ID	int64	Unique row identifier
Order ID	object	Unique identifier for each order
Order Date	object	Date when the order was placed
Ship Date	object	Date when the order was shipped
Ship Mode	object	Shipping type (e.g., Standard, Express)
Customer ID	object	Unique customer identifier
Customer Name	object	Name of the customer
Segment	object	Customer segment (e.g., Consumer, Corporate)
Country	object	Country where the order was placed
City	object	City of the customer
State	object	State of the customer
Postal Code	int64	Postal code of the shipping address
Region	object	Regional classification (e.g., West, South)
Product ID	object	Unique identifier for each product
Category	object	Product category (e.g., Furniture, Office Supplies)
Sub-Category	object	Product sub-category
Product Name	object	Name of the product
Sales	float64	Sales revenue for the product

Table 3 Dataset Column's Description



	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	Row ID	Order ID	Order Date	Ship Date	Ship Mode	Customer	Customer	Segment	Country	City	State	Postal Code	Region	Product	Category	Sub-Category	Product	Sales
2	1	CA-2017-152156	8/11/2017	11/11/2017	Second C	CG-12520	Claire Gut	Consumer	United Sts	Henderso	Kentucky	42420	South	FUR-BO-1	Furniture	Bookcases	Bush Som	261.96
3	2	CA-2017-152156	8/11/2017	11/11/2017	Second C	CG-12520	Claire Gut	Consumer	United Sts	Henderso	Kentucky	42420	South	FUR-CH-1	Furniture	Chairs	Hon Delux	731.94
4	3	CA-2017-138688	12/6/2017	16/06/2017	Second C	DV-13045	Darrin Var	Corporate	United Sts	Los Angel	California	90036	West	OFF-LA-1	Office Sup	Labels	Self-Adhe	14.62
5	4	US-2016-108966	11/10/2016	18/10/2016	Standard	(SO-20335	Sean O'Dc	Consumer	United Sts	Fort Laude	Florida	33311	South	FUR-TA-1	Furniture	Tables	Bretford C	957.5775
6	5	US-2016-108966	11/10/2016	18/10/2016	Standard	(SO-20335	Sean O'Dc	Consumer	United Sts	Fort Laude	Florida	33311	South	OFF-ST-1	Office Sup	Storage	Eldon Folc	22.368
7	6	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	FUR-FU-1	Furniture	Furnishin	Eldon Exp	48.86
8	7	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	OFF-AR-1	Office Sup	Art	Newell 32	7.28
9	8	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	TEC-PH-1	Technolog	Phones	Mitel 5320	907.152
10	9	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	OFF-BI-1	Office Sup	Binders	DXL Angle	18.504
11	10	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	OFF-AP-1	Office Sup	Appliance	Belkin F50	114.9
12	11	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	FUR-TA-1	Furniture	Tables	Chromcra	1706.184
13	12	CA-2015-115812	9/6/2015	14/06/2015	Standard	(BH-11710	Brosina H	Consumer	United Sts	Los Angel	California	90032	West	TEC-PH-1	Technolog	Phones	Konftel 25	911.424
14	13	CA-2018-114412	15/04/2018	20/04/2018	Standard	(AA-10480	Andrew A	Consumer	United Sts	Concord	North Car	28027	South	OFF-PA-1	Office Sup	Paper	Xerox 196	15.552
15	14	CA-2017-161389	5/12/2017	10/12/2017	Standard	(IM-15070	Irene Mac	Consumer	United Sts	Seattle	Washingt	98103	West	OFF-BI-1	Office Sup	Binders	Fellowes	407.976
16	15	US-2016-118983	22/11/2016	26/11/2016	Standard	(HP-14815	Harold Pa	Home Off	United Sts	Fort Wort	Texas	76106	Central	OFF-AP-1	Office Sup	Appliance	Holmes R	68.81
17	16	US-2016-118983	22/11/2016	26/11/2016	Standard	(HP-14815	Harold Pa	Home Off	United Sts	Fort Wort	Texas	76106	Central	OFF-BI-1	Office Sup	Binders	Storex Du	2.544
18	17	CA-2015-105893	11/11/2015	18/11/2015	Standard	(PK-19075	Pete Kriz	Consumer	United Sts	Madison	Wisconsin	53711	Central	OFF-ST-1	Office Sup	Storage	Stur-D-Stc	665.88
19	18	CA-2015-167164	13/05/2015	15/05/2015	Second C	AG-10270	Alejandro	Consumer	United Sts	West Jord	Utah	84084	West	OFF-ST-1	Office Sup	Storage	Fellowes	55.5
20	19	CA-2015-143336	27/08/2015	1/9/2015	Second C	ZD-21925	Zuschuss I	Consumer	United Sts	San Franci	California	94109	West	OFF-AR-1	Office Sup	Art	Newell 34	8.56
21	20	CA-2015-143336	27/08/2015	1/9/2015	Second C	ZD-21925	Zuschuss I	Consumer	United Sts	San Franci	California	94109	West	TEC-PH-1	Technolog	Phones	Cisco SPA	213.48
22	21	CA-2015-143336	27/08/2015	1/9/2015	Second C	ZD-21925	Zuschuss I	Consumer	United Sts	San Franci	California	94109	West	OFF-BI-1	Office Sup	Binders	Wilson Jo	22.72
23	22	CA-2017-137330	9/12/2017	13/12/2017	Standard	(KB-16585	Ken Black	Corporate	United Sts	Fremont	Nebraska	68025	Central	OFF-AR-1	Office Sup	Art	Newell 31	19.46
24	23	CA-2017-137330	9/12/2017	13/12/2017	Standard	(KB-16585	Ken Black	Corporate	United Sts	Fremont	Nebraska	68025	Central	OFF-AP-1	Office Sup	Appliance	Acco Six-C	60.34
25	24	US-2018-156909	16/07/2018	18/07/2018	Second C	SF-20065	Sandra Fla	Consumer	United Sts	Philadelphi	Pennsylvan	19140	East	FUR-CH-1	Furniture	Chairs	Global De	71.372
26	25	CA-2016-106320	25/09/2016	30/09/2016	Standard	(EB-13870	Emily Burri	Consumer	United Sts	Orem	Utah	84057	West	FUR-TA-1	Furniture	Tables	Bretford C	1044.63

Figure 3 Sample Dataset Screenshot

## Agreed Metrics & KPIs

Through brainstorming and collaboration among team members, the team has settled on several key indicators and questions that are expected to be valuable to stakeholders. This Include

- Total Sales (Sum of Sales)
- Average Order Value
- Total Sales by Category
- Total Sales by Region
- Total Number of Orders
- Sales Trend Over Time
- Sales by Customer
- Sales Distribution by Segment (Consumer/Corporate)
- Average Shipping Time
- Orders by Ship Mode
- Orders by Sub-Category



- Top 5 Products by Sales
- Sales Distribution by Product

### Data Cleaning and preparation

Data cleaning is a crucial step in preparing data for analysis, and Power Query in Excel or Power BI is an effective tool for performing these tasks.

In this process, the data was imported from the source, the first row was promoted to headers, and data types were defined.

Duplicates and unnecessary columns such as "Country" were removed, and missing values and city names were standardized.

Order, customer, and product IDs were split using delimiters, converted to numbers, and the resulting temporary columns were deleted.

The cleaned columns were then renamed accordingly.

Afterwards, queries were merged to combine data from multiple sources, expanded to show detailed product information, and finally, irrelevant columns were removed to produce a well-structured, clean dataset ready for analysis.

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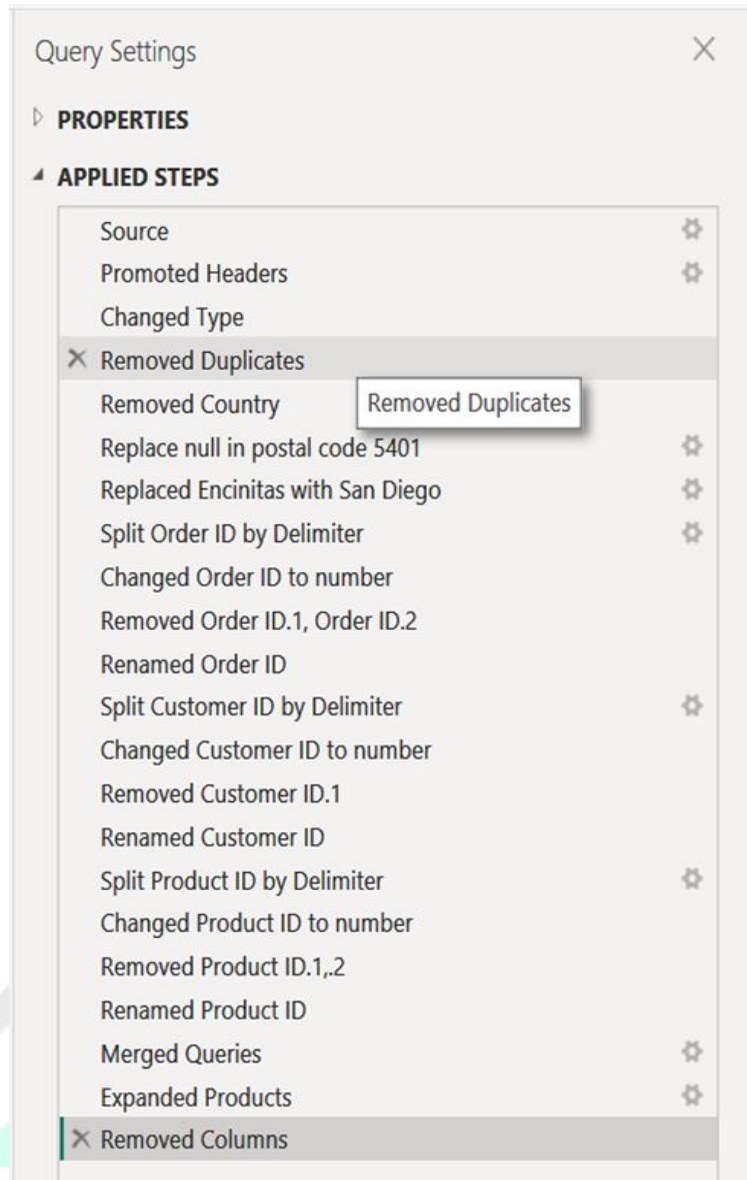


Figure 4 Data Cleaning process

After completing the data cleaning process in Power Query, the Orders table was duplicated three times to create separate sub-tables for easier analysis and organization. In the first step, the Orders table was duplicated and renamed to Customers to extract customer-related information. Then it was duplicated again and renamed to





Geolocation to work with geographic location data. Finally, the table was duplicated and renamed to Products to isolate and analyze product details. These steps help build a flexible and well-structured data model, making it easier to establish relationships between different tables using common keys.

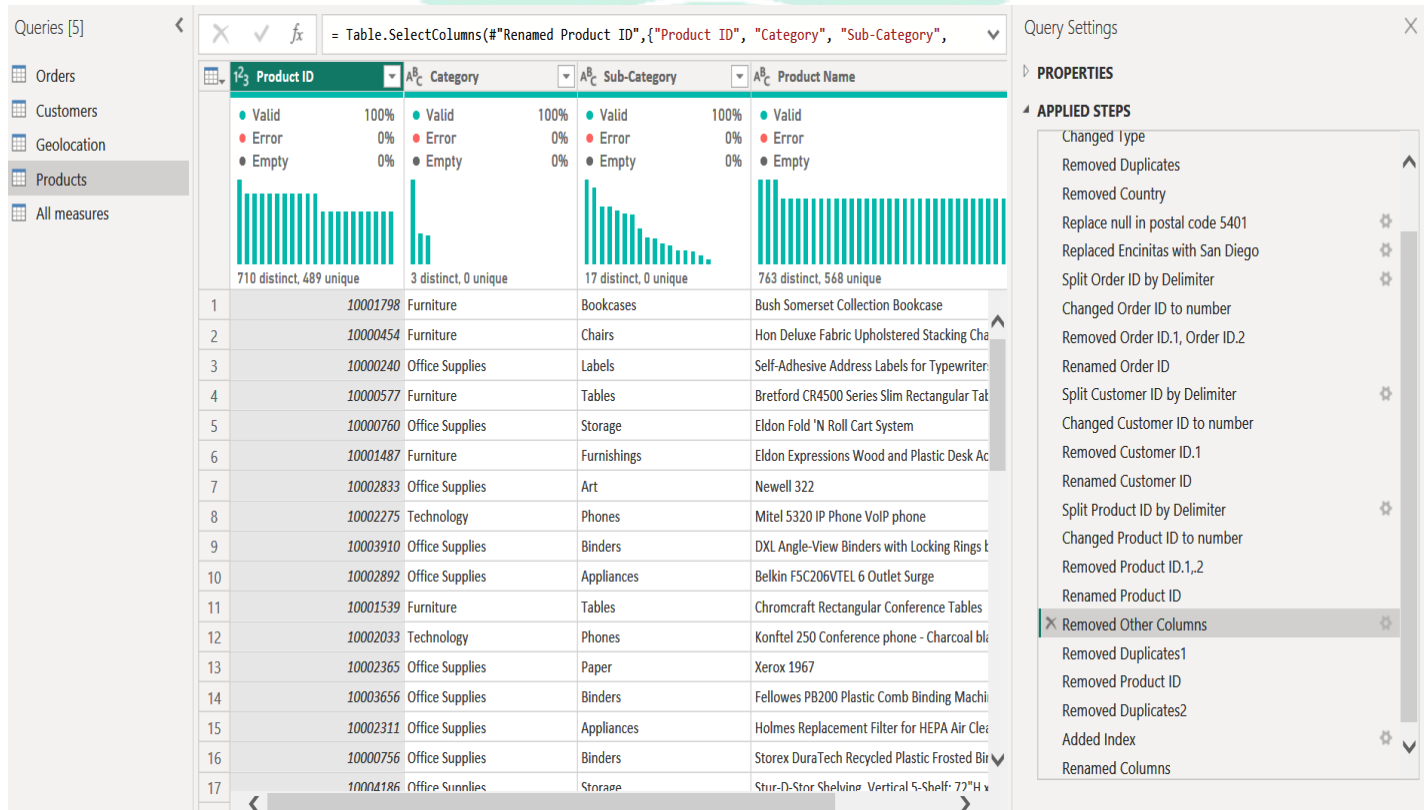


Figure 5 Creating Customers, Geolocation and Product tables

Then, we used DAX to create dates table

1 Dates = CALENDARAUTO()

Date	Year	Month	Month name	Quarter	Day Name
01/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Thursday
02/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Friday
03/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Saturday
04/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Sunday
05/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Monday
06/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Tuesday
07/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Wednesday
08/01/2015 12:00:00 AM	2015	1	January	Qrt 1	Thursday

Figure 6 Create dates table using DAX



Also, we used the Model View to create relationship (Star schema)

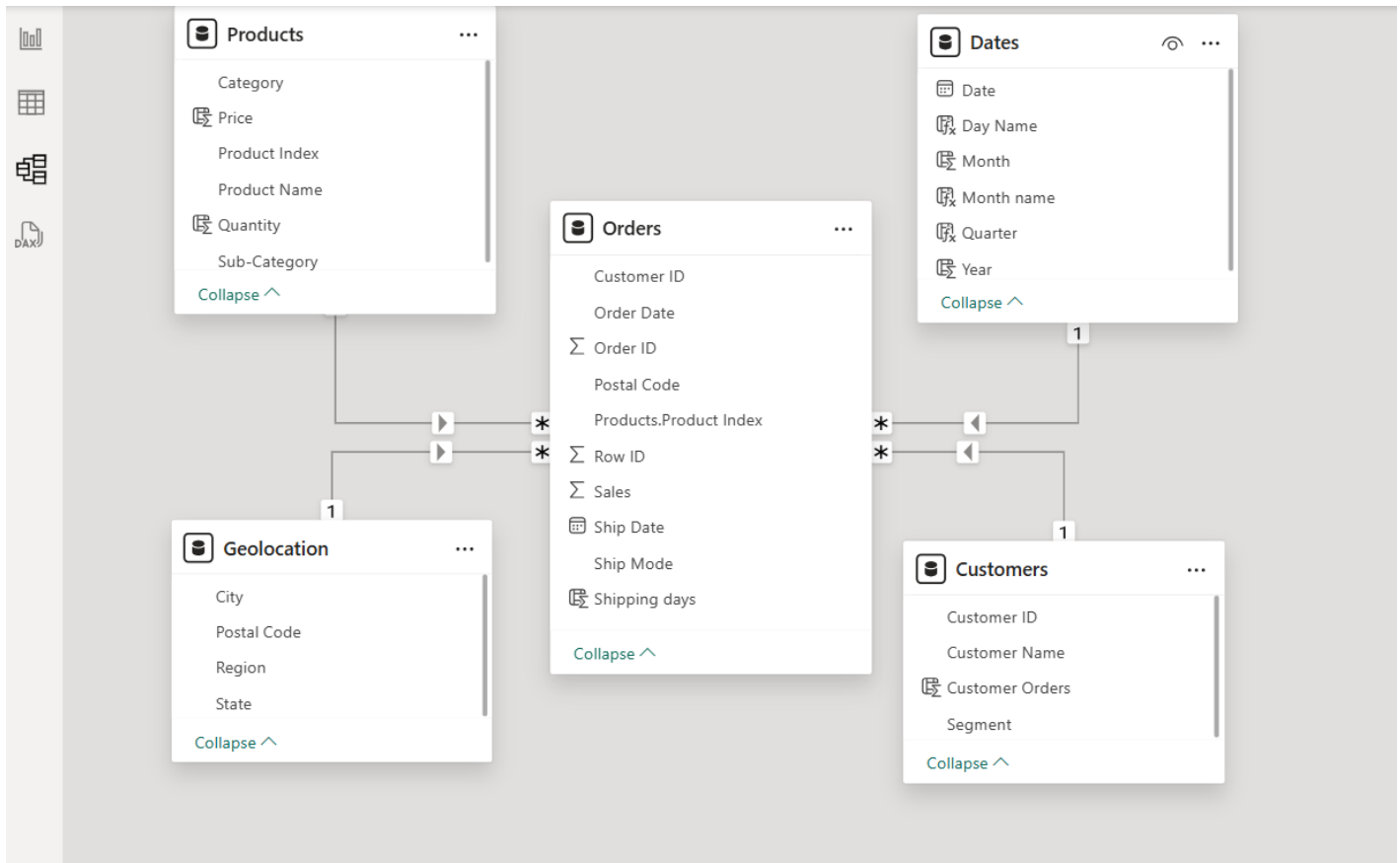


Figure 7 Using Model View to create Star Schema

And then, we create a separated section for calculates

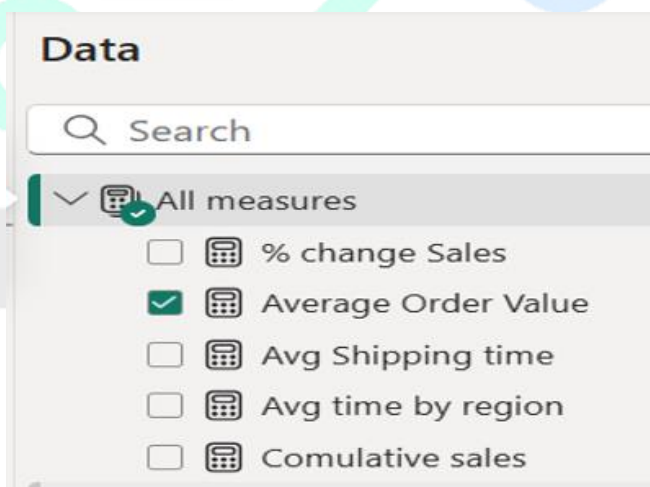


Figure 8 Creating Measures



### III. Chapter (3): Creating Dashboard

#### Dashboard Structure

The team divided the visual presentation into four sections, distributed among the team members. The presentation included a visual report for Sales, another for Customers, one for Products, and finally a visual report for Orders.

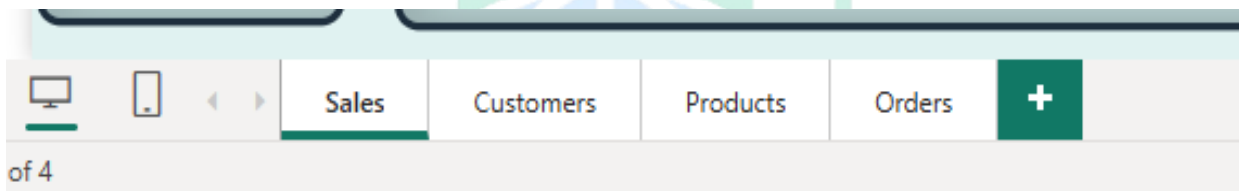


Figure 9 Structure of dashboard

#### Sales Dashboard

Sales dashboard allowing users to understand sales performance from multiple perspectives (temporal, categorical, geographical, and logistical).

It also supports data-driven decision-making through interactive and analytical visualization.

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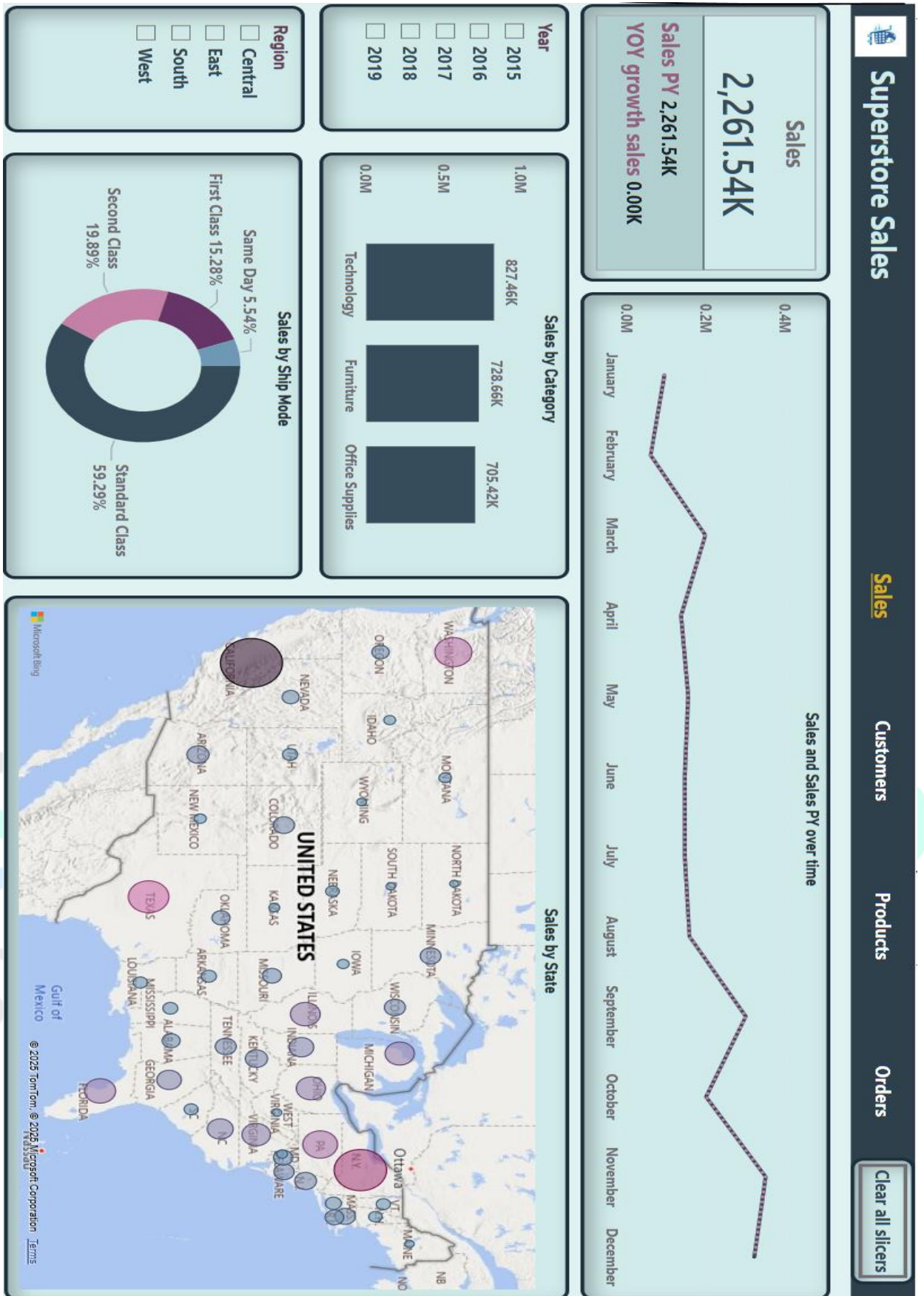


Figure 10 Sales Dashboard



<i>Indicator / Element</i>	<i>Description</i>	<i>Value</i>	<i>Chart Type / Element</i>
<b>Sales</b>	Total current sales value	2,261.54K	KPI Card
<b>Sales PY (Previous Year Sales)</b>	Sales value for the same period last year	2,261.54K	KPI within the card
<b>YOY Growth Sales</b>	Year-over-year sales growth rate (no growth in this case)	0.00K	KPI within the card
<b>Sales and Sales PY Over Time</b>	Comparison of monthly sales this year vs. last year	-	Line Chart
<b>Sales by Category</b>	Sales distribution across three categories:	Technology: 827.46K Furniture: 728.66K Office Supplies: 705.42K	Bar Chart
<b>Sales by State</b>	Geographical distribution of sales by state across the U.S.	-	Map with Bubble Markers
<b>Sales by Ship Mode</b>	Percentage of sales by shipping method	Standard: 59.29% Second: 19.89% First: 15.28% Same Day: 5.54%	Donut Chart
<b>Year Slicer</b>	Filter to select the year from 2015 to 2019	2015–2019	Slicer (Interactive Filter)
<b>Region Slicer</b>	Filter to select region (Central – East – South – West)	Central, East, South, West	Slicer (Interactive Filter)

Table 4 Breakdown of the visual elements presented in the sales dashboard

The table provides a detailed breakdown of the visual elements presented in the sales dashboard. Each indicator is described along with its corresponding value and the type of chart or visual component used to represent it.

The dashboard components cover various analytical perspectives, including overall performance (KPIs), trends over time, category-based analysis, geographical insights, shipping logistics, and interactive filters for year and region.





## Customers Dashboard

Customers dashboard enabling users to analyze customer distribution, behavior, and contribution to sales across different segments, time periods, and regions. It facilitates strategic insights through interactive filters and visualizations, helping identify key customer groups and top performers.

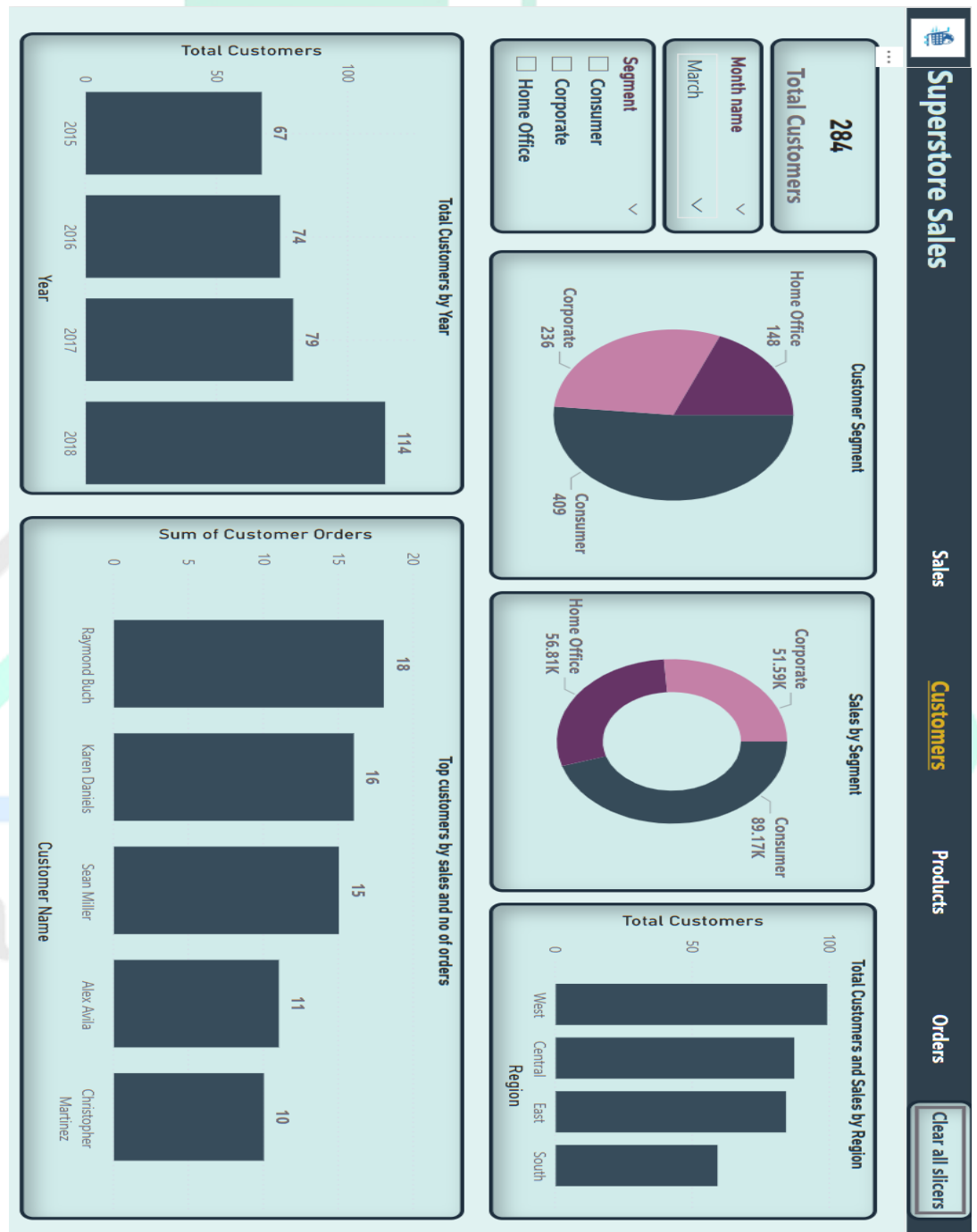


Figure 11 Customer Dashboard



<i>Indicator / Element</i>	<b>Description</b>	<b>Value</b>	<b>Chart Type / Element</b>
<i>Total Customers</i>	Total number of customers in the selected time period	284	KPI Card
<i>Month Filter</i>	Drop-down filter to select a specific month	March	Slicer (Interactive Filter)
<i>Segment Filter</i>	Interactive filter to select customer segments	Consumer, Corporate, Home Office	Slicer (Interactive Filter)
<i>Customer Segment</i>	Distribution of customers across three segments	Consumer: 409 Corporate: 236 Home Office: 148	Pie Chart
<i>Sales by Segment</i>	Total sales value per segment	Consumer: 89.17K Home Office: 56.81K Corporate: 51.59K	Donut Chart
<i>Total Customers and Sales by Region</i>	Geographical distribution of customers across regions	West, Central, East, South (with bar heights indicating customer count)	Bar Chart
<i>Total Customers by Year</i>	Annual customer count from 2015 to 2018	2015: 67 2016: 74 2017: 79 2018: 114	Bar Chart
<i>Top Customers by Sales and Number of Orders</i>	Leading customers by number of orders placed	Raymond Buch: 18 Karen Daniels: 16 Sean Miller: 15 Alex Avila: 11 Christopher Martinez: 10	Bar Chart

Table 5 Breakdown of the visual elements presented in the customers dashboard





Product Dashboard

dashboard providing a comprehensive view of the superstore's product portfolio performance across various sub-categories. It highlights total product count, quantity by sub-category, and top-selling products, enabling users to identify popular items and sales trends.

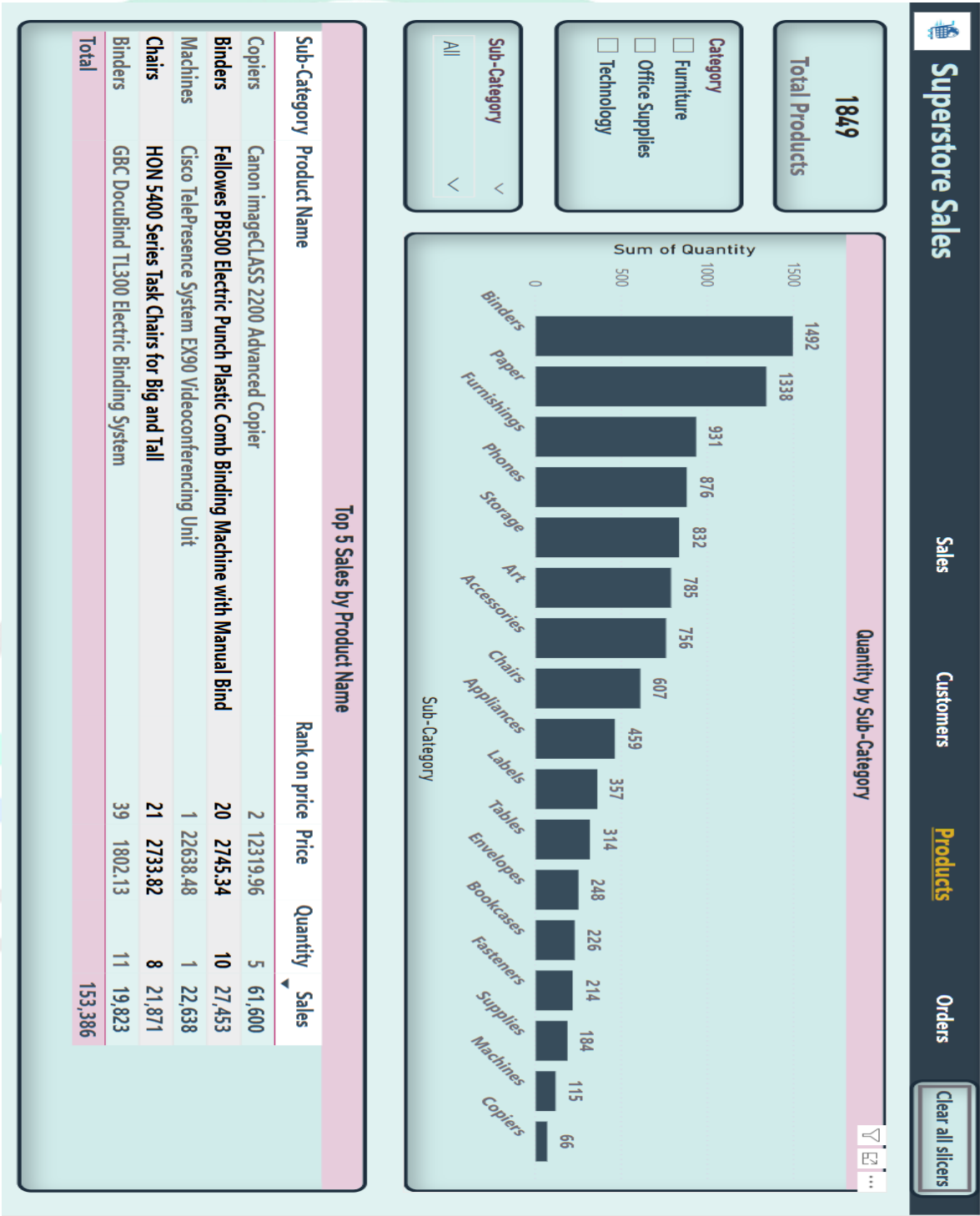


Figure 12 Product Dashboard



<b>Indicator / Element</b>	<b>Description</b>	<b>Value</b>	<b>Chart Type / Element</b>
<i>Total Products</i>	Total number of unique products in the dataset	1849	KPI Card
<i>Category Filter</i>	Interactive filter to select product categories (Furniture, Office Supplies, Technology)	Furniture, Office Supplies, Technology	Slicer
<i>Sub-Category Filter</i>	Interactive filter to select product sub-categories within the chosen category	All (with a dropdown list of sub-categories)	Slicer
<i>Quantity by Sub-Category</i>	Total quantity sold for each product sub-category	Binders: 1492, Paper: 1338, ... Copiers: 66	Bar Chart
<i>Top 5 Sales by Product Name</i>	Top 5 products based on total sales value	(See table in the image for details)	Table

*Table 6 Breakdown of the visual elements presented in the product dashboard*

## Orders Dashboard

dashboard providing a comprehensive overview of order-related metrics, including total orders, average shipping time, and average order value.

It allows users to analyze order patterns by ship mode, customer segment, and product sub-category, as well as track shipping time trends over different years and categories, facilitating insights into operational efficiency and sales distribution.

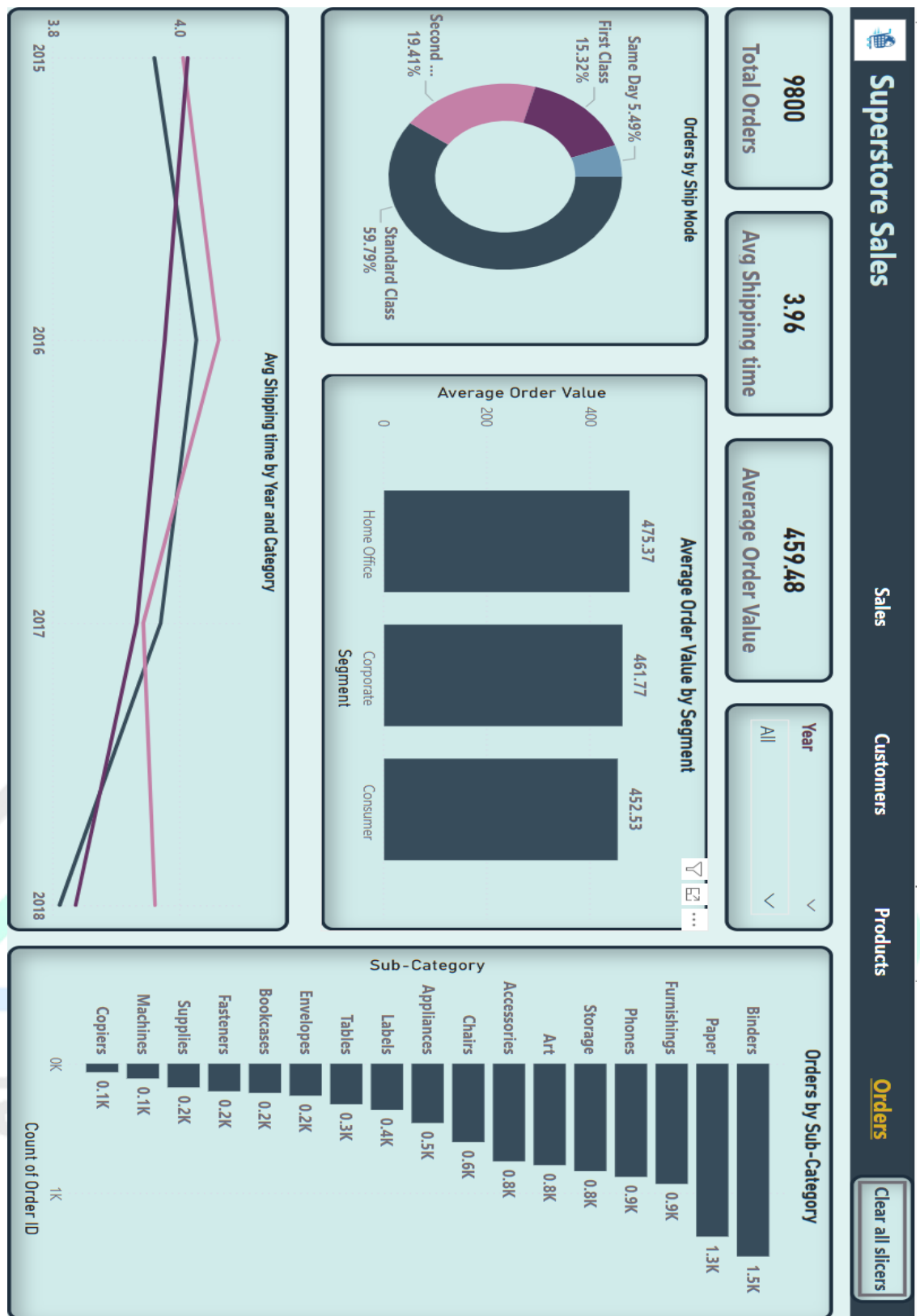


Figure 13 Orders Dashboard



<b>Indicator / Element</b>	<b>Description</b>	<b>Value</b>	<b>Chart Type / Element</b>
<i>Total Orders</i>	Total number of orders placed	9800	KPI Card
<i>Avg Shipping time</i>	Average time taken for order shipment	3.96	KPI Card
<i>Average Order Value</i>	Average value of all orders	459.48	KPI Card
<i>Year Filter</i>	Drop-down filter to select a specific year for order analysis	All	Slicer
<i>Orders by Ship Mode</i>	Distribution of orders across different shipping modes	Same Day: 5.49%, First Class: 15.32%, ...	Pie Chart
<i>Average Order Value by Segment</i>	Average order value for each customer segment	Home Office: 475.37, Corporate: 461.77, ...	Bar Chart
<i>Orders by Sub-Category</i>	Number of orders containing items from each product sub-category	Binders: 1.5K, Paper: 1.3K, ... Copiers: 0.1K	Horizontal Bar Chart
<i>Avg Shipping time by Year and Category</i>	Trend of average shipping time over the years, broken down by product category	(Visual representation of lines for each category)	Line Chart

Table 7 Breakdown of the visual elements presented in the orders dashboard





## **IV. Chapter (4): Conclusion**

In conclusion, this project represents a significant achievement that aligns with Egypt's Vision 2030 for the development of the information and communication technology sector. The Digital Egypt Pioneers initiative has provided the Data Analysis Pioneers team with the opportunity to gain practical experience in using Microsoft Power BI to analyze sales data.

Through this project, we were able to:

- Clean and process data using Power Query.
- Design interactive dashboards that provide valuable insights into sales, customers, products, and orders.
- Utilize charts and Key Performance Indicators (KPIs) to facilitate data understanding and decision-making.

The team's ability to transform raw data into actionable information highlights the importance of investing in the development of data analysis skills. We hope that this project has contributed to the initiative's objectives and will have a positive impact on the participants' ability to compete in the job market.

**Digital Egypt Pioneers**

