Power Bi Exploration Document

Inventory and Sales Management System

Project business intelligence

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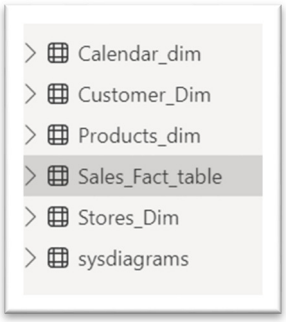
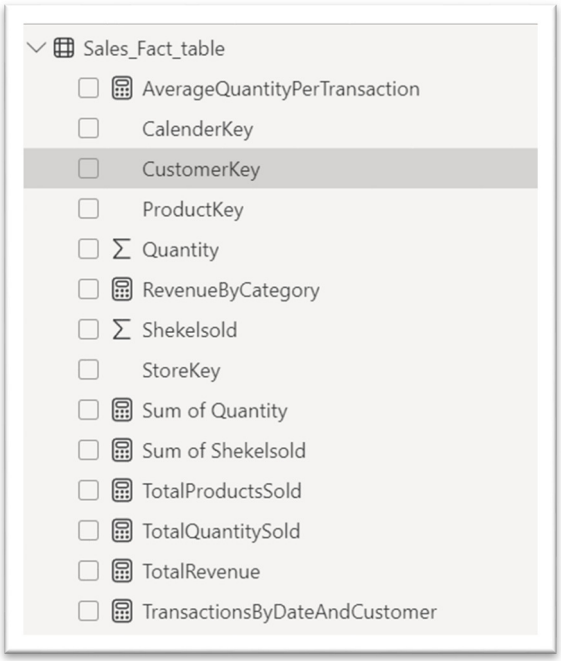
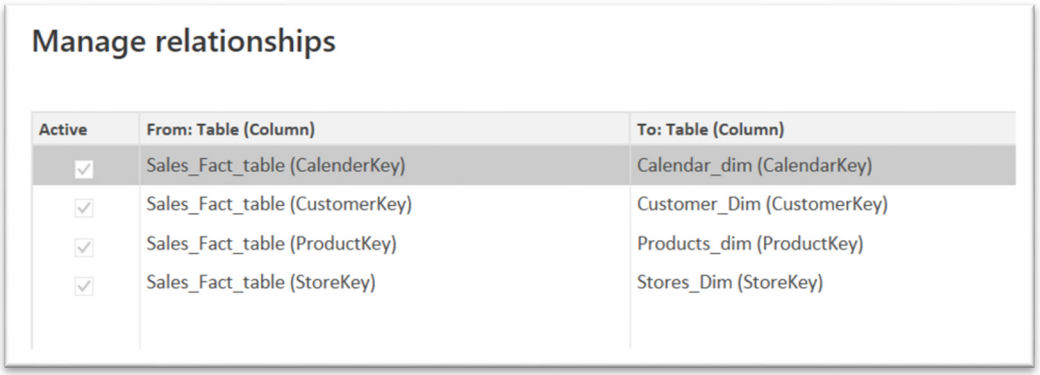
Begin by importing the SSAS model into Power BI, including measures, dimensions, and fact tables, to establish a strong foundation for analysis.



Then, verify the measures to ensure smooth functionality and accurate integration within Power BI.



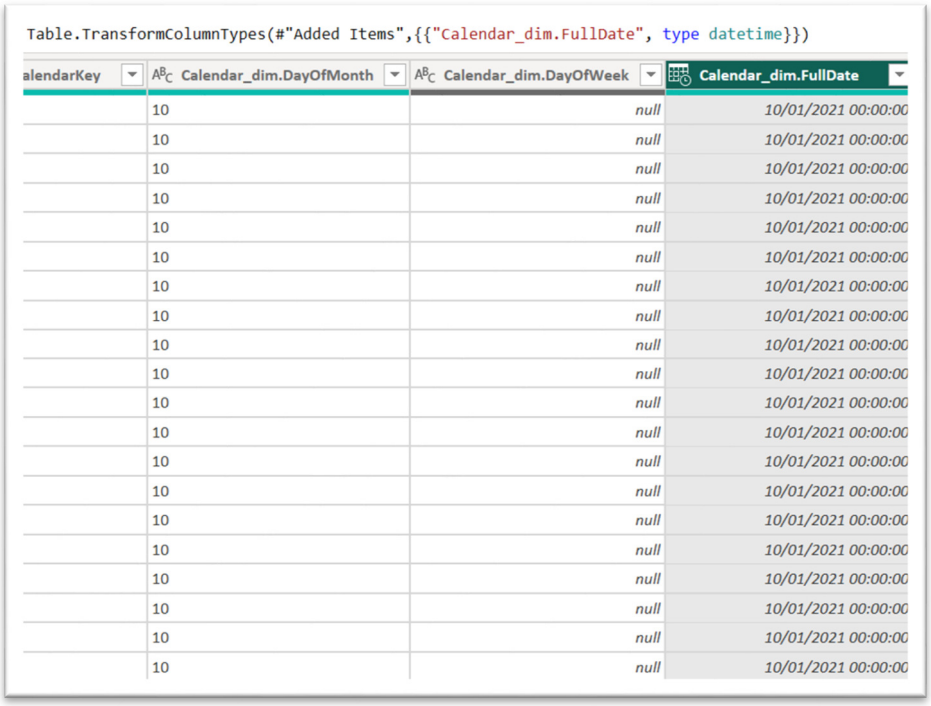
Checking that the relationships imported from SSAS, between the dimension tables and the FACT table are correct.



Data transformation

We employed Power Query to modify attributes of measures and parameters, streamlining our data analysis process in Power BI. By leveraging these capabilities, we enhanced the effectiveness of our analytical framework.

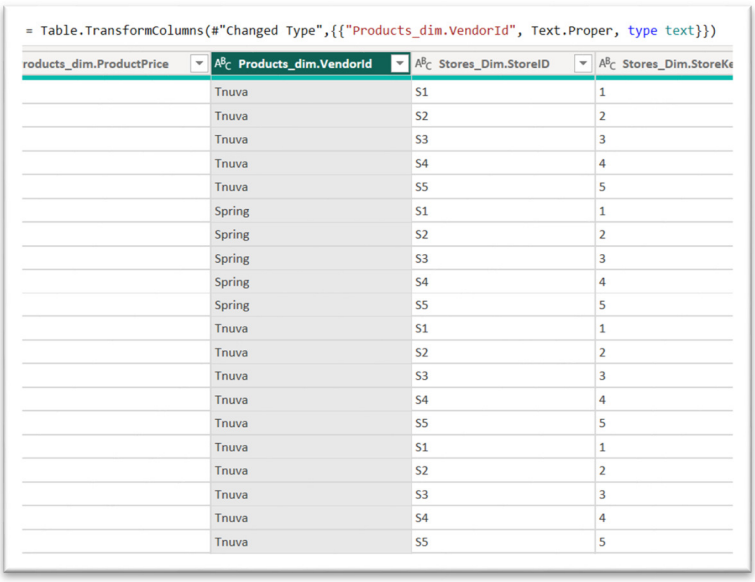
Text to Date transformation parameter -



```
Table.TransformColumnTypes(#"Added Items",{{"Calendar_dim.FullDate", type datetime}})
```

alendarKey	Calendar_dim.DayOfMonth	Calendar_dim.DayOfWeek	Calendar_dim.FullDate
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00
	10	null	10/01/2021 00:00:00

Make First letter Capital of Text transformation parameter -



```
= Table.TransformColumns(#"Changed Type",{{"Products_dim.VendorId", Text.Proper, type text}})
```

roducts_dim.ProductPrice	Products_dim.VendorId	Stores_Dim.StoreID	Stores_Dim.StoreKe
	Tnuva	S1	1
	Tnuva	S2	2
	Tnuva	S3	3
	Tnuva	S4	4
	Tnuva	S5	5
	Spring	S1	1
	Spring	S2	2
	Spring	S3	3
	Spring	S4	4
	Spring	S5	5
	Tnuva	S1	1
	Tnuva	S2	2
	Tnuva	S3	3
	Tnuva	S4	4
	Tnuva	S5	5
	Tnuva	S1	1
	Tnuva	S2	2
	Tnuva	S3	3
	Tnuva	S4	4
	Tnuva	S5	5

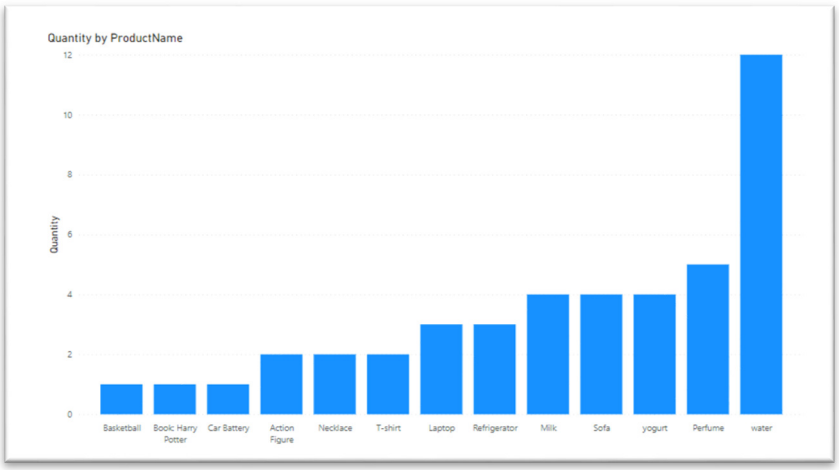
Create a new measure -

Price after VAT (17 percent tax)

```
sumwith17perc = [Sum of Shekelsold] * 1.17
```

Quantity by ProductName -

The "Quantity by ProductName" graph displays the distribution of product quantities across different product names, providing insights into the popularity and demand for each product in the dataset. This graph visually represents the variation in quantities sold for each product, allowing for easy comparison and analysis of product performance.



Dashboard of cards –

Number of Stores Card: This card displays the total number of stores in the dataset, providing a snapshot of the retail footprint and geographic coverage of the business.

Number of Customers Card: This card showcases the total count of unique customers, offering insights into the customer base size and potential market reach of the business.

Total Purchase Amount Card (in New Israeli Shekels): This card presents the sum of total purchases in New Israeli Shekels (NIS), reflecting the aggregate monetary value of all transactions processed by the business.

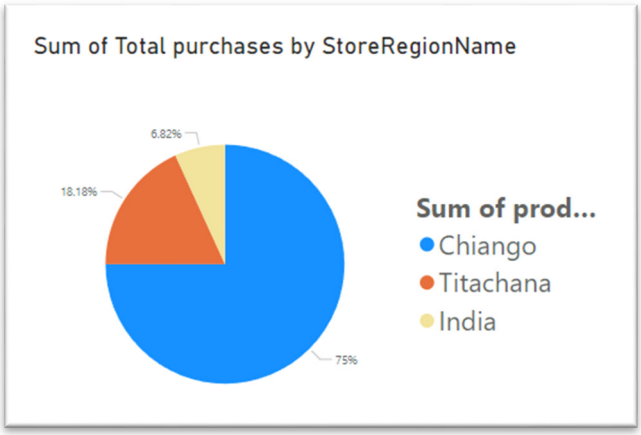
Average Purchase Amount per Customer Card (in NIS): This card calculates the average purchase amount per customer in NIS, offering a measure of customer spending behavior and potential revenue generation per customer.

Total Quantity Sold Card: This card displays the total quantity of products sold across all transactions, providing insights into product demand and sales volume.

Quantity by Strore Region –

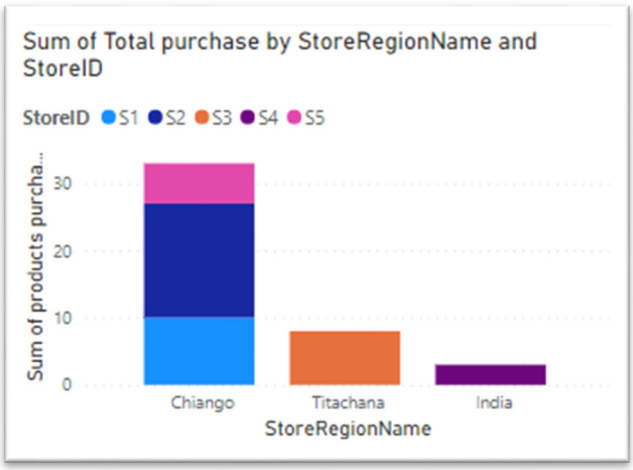
Quantity by Store Region - Pie Chart:

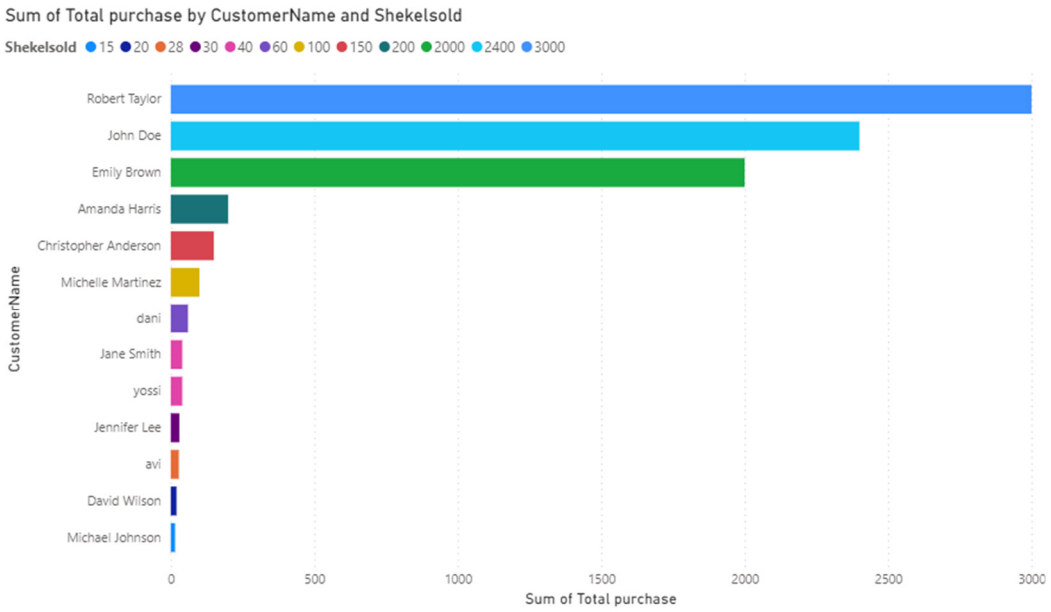
The pie chart illustrates the distribution of product quantities sold across various store regions, offering a clear visualization of the proportional contribution of each region to the total sales volume, aiding in understanding regional sales performance and market share.



Quantity by Store Region and Store ID - Stacked Bar:

This stacked bar chart visually represents the quantity of products sold in each store region, further segmented by store ID, providing a comprehensive view of product distribution across different stores within each region.




Sum of Total purchase by CustomerName and Shekelsold
Shekelsold 15 20 28 30 40 60 100 150 200 2000 2400 3000
Robert Taylor
John Doe
Emily Brown
Amanda Harris
Christopher Anderson
Michelle Martinez
dani
Jane Smith
yossi
Jennifer Lee
avi
David Wilson
Michael Johnson
CustomerName
0
500
1000
1500
2000
2500
3000
Sum of Total purchase