FROZEN DELIGHTS LTD. DATABASE REPORT

Power BI report

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1 BUSINESS DESCRIPTION

1.1 ABOUT THE COMPANY AND IT'S ACTIVITY FIELD

Frozen Delights Ltd. is a global leader in the frozen food retailers, offering a wide range of high-quality frozen food products to customers worldwide. With a strong emphasis on quality, innovation, and customer satisfaction, Frozen Delights has established itself as a trusted brand in the frozen food market.

Frozen Delights specializes in the production and distribution of frozen food products, including meat-based, plant-based, and seafood items. Products cater to diverse tastes and dietary preferences, providing convenient and delicious meal solutions for consumers around the globe.

1.2 BUSINESS PROCESS

Our primary business process involves the sale and distribution of frozen food products through both online sales and sales in local retail stores. We track sales transactions, product inventory, customer information, and employee performance to ensure efficient operations and maximize customer satisfaction.

1.3 PURPOSE OF THE REPORT

The purpose of our report is to provide comprehensive insights into our global sales and revenue distribution by analyzing key metrics such as product sales, sale costs by product categories, and geographic regions. By leveraging data from our data warehouse, the aim is to gain a deeper understanding of our business performance and identify opportunities for growth and improvement.

1.4 END USER OF THE REPORT

The report is designed to serve various stakeholders within our organization, including executives, sales managers, marketing teams. Each user group will benefit from tailored insights and analysis relevant to their respective roles and responsibilities.

1.5 BUSINESS QUESTIONS AND PROBLEMS

1. Which products generate the highest profits, and how do their sales performances compare across different regions and sales channels?
2. What is the distribution of sales by product category and subcategory, and are there any emerging trends or opportunities within specific categories?
3. How do sales patterns vary between online orders and in-store purchases, and what factors influence customer preferences across different sales channels?
4. What is the distribution of different product categories on geographical regions or territories?
5. Is there a correlation between product pricing and sales volume?

By addressing these business questions and leveraging insights from our data warehouse, Frozen Delights Ltd. aims to enhance decision-making processes, drive business growth, and maintain a competitive edge in the dynamic frozen food industry.

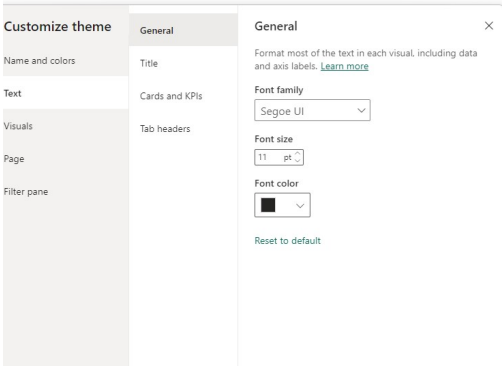
2 REPORT STYLE

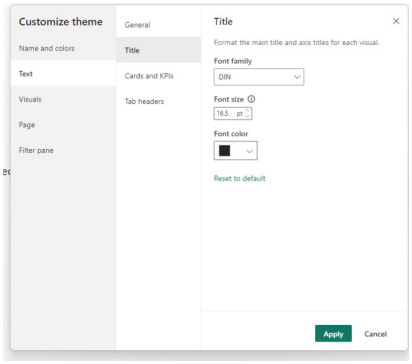
2.1 COLOR

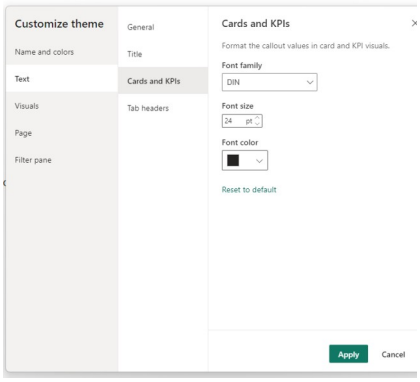
I used one of Power BI custom theme: Twilight

2.2 LETTER SIZE

I used the following letter sizes: 11 pt for body text and 24 or 16.5 pt for titles:







3 STRUCTURE OF THE REPORT

3.1 PAGE 1: FROZEN DELIGHTS LTD. SALES ANALYSIS

Visual presentation of the following key metrics:

- Total revenue
- Profits
- Sales volume
- Average selling price

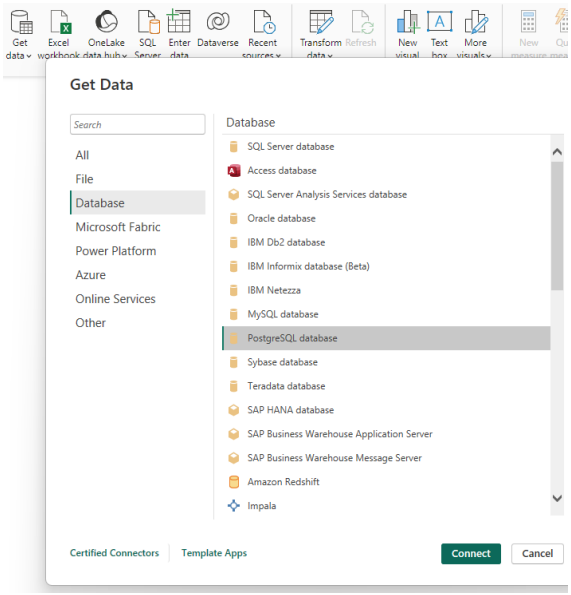
Sales performance by product categories and subcategories using visualizations and table showing top performing regions.

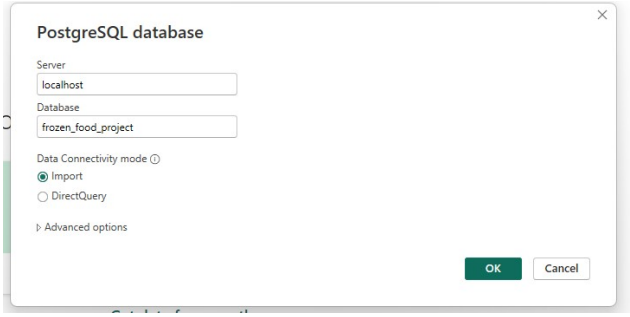
3.2 PAGE 2: SALES ANALYSIS BY CHANNELS AND PRODUCTS

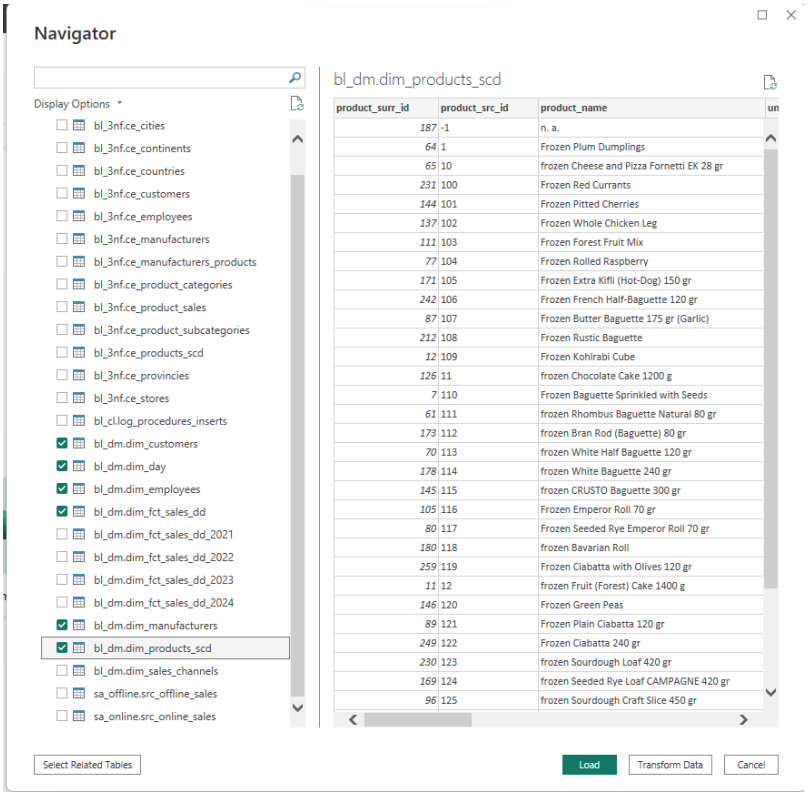
- Comparison of online sales versus and store purchases.
- Line chart displaying average profit on product unit prices.

4 REPORT CREATION PROCESS

To load datas from PostgreSQL database I selected in PostgreSQL option in Power BI, added "localhost" as server name, and the name of the database (frozen_food_project), then selected dimensional tables to load:


Get data
Excel workbook
OneLake data hub
SQL Server
Enter data
Dataverse
Recent sources
Transform data
Refresh
New visual
Text box
More visuals
New measure
Get Data
Search
All
File
Database
Microsoft Fabric
Power Platform
Azure
Online Services
Other
Database
SQL Server database
Access database
SQL Server Analysis Services database
Oracle database
IBM Db2 database
IBM Informix database (Beta)
IBM Netezza
MySQL database
PostgreSQL database
Sybase database
Teradata database
SAP HANA database
SAP Business Warehouse Application Server
SAP Business Warehouse Message Server
Amazon Redshift
Impala
Certified Connectors
Template Apps
Connect
Cancel


PostgreSQL database
Server
localhost
Database
frozen_food_project
Data Connectivity mode
Import
DirectQuery
Advanced options
OK
Cancel


Navigator
Display Options
bl_3nf.ce_cities
bl_3nf.ce_continents
bl_3nf.ce_countries
bl_3nf.ce_customers
bl_3nf.ce_employees
bl_3nf.ce_manufacturers
bl_3nf.ce_manufacturers_products
bl_3nf.ce_product_categories
bl_3nf.ce_product_sales
bl_3nf.ce_product_subcategories
bl_3nf.ce_products_scd
bl_3nf.ce_provincies
bl_3nf.ce_stores
bl_cl.log_procedures_inserts
bl_dm.dim_customers
bl_dm.dim_day
bl_dm.dim_employees
bl_dm.dim_fct_sales_dd
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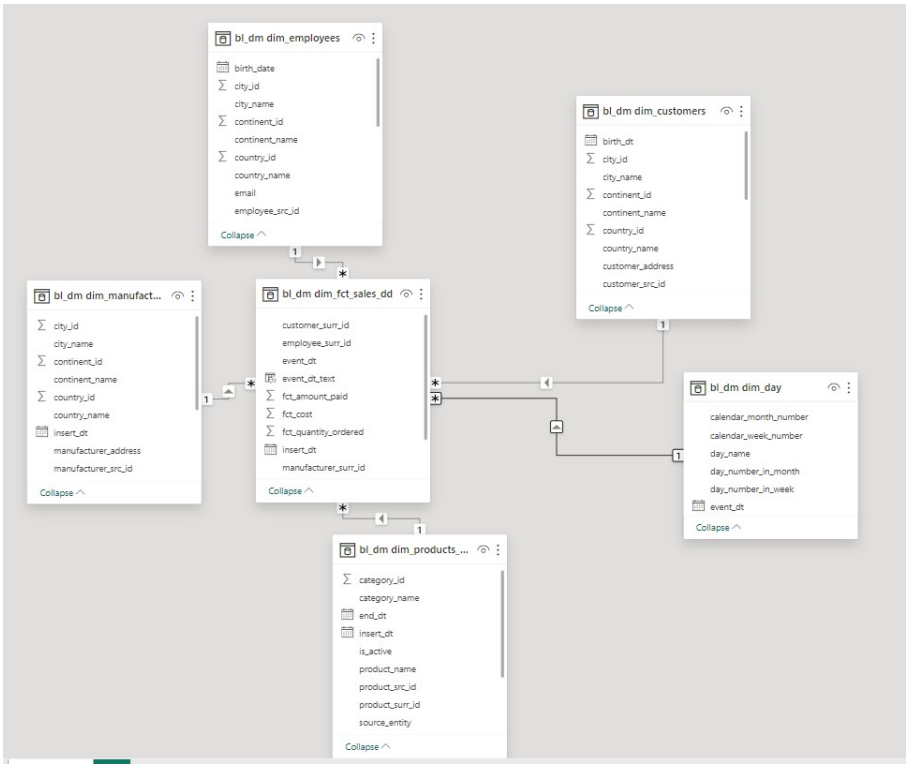
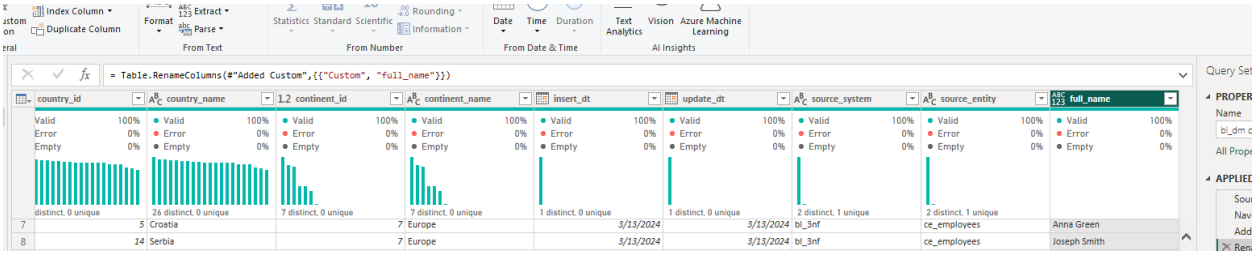
bl_dm.dim_manufacturers
bl_dm.dim_products_scd
bl_dm.dim_sales_channels
sa_offline.src_offline_sales
sa_online.src_online_sales
bl_dm.dim_products_scd
product_surr_id product_src_id product_name un
187 -1 n. a.
64 1 Frozen Plum Dumplings
65 10 frozen Cheese and Pizza Fornetti EK 28 gr
231 100 Frozen Red Currants
144 101 Frozen Pitted Cherries
137 102 Frozen Whole Chicken Leg
111 103 Frozen Forest Fruit Mix
77 104 Frozen Rolled Raspberry
171 105 Frozen Extra Kifli (Hot-Dog) 150 gr
242 106 Frozen French Half-Baguette 120 gr
87 107 Frozen Butter Baguette 175 gr (Garlic)
212 108 Frozen Rustic Baguette
12 109 Frozen Kohlrabi Cube
126 11 frozen Chocolate Cake 1200 g
7 110 Frozen Baguette Sprinkled with Seeds
61 111 frozen Rhombus Baguette Natural 80 gr
173 112 frozen Bran Rod (Baguette) 80 gr
70 113 frozen White Half Baguette 120 gr
178 114 frozen White Baguette 240 gr
145 115 frozen CRUSTO Baguette 300 gr
105 116 Frozen Emperor Roll 70 gr
80 117 Frozen Seeded Rye Emperor Roll 70 gr
180 118 frozen Bavarian Roll
259 119 Frozen Ciabatta with Olives 120 gr
11 12 frozen Fruit (Forest) Cake 1400 g
146 120 Frozen Green Peas
89 121 Frozen Plain Ciabatta 120 gr
249 122 Frozen Ciabatta 240 gr
230 123 frozen Sourdough Loaf 420 gr
169 124 frozen Seeded Rye Loaf CAMPAGNE 420 gr
96 125 frozen Sourdough Craft Slice 450 gr
Select Related Tables
Load
Transform Data
Cancel

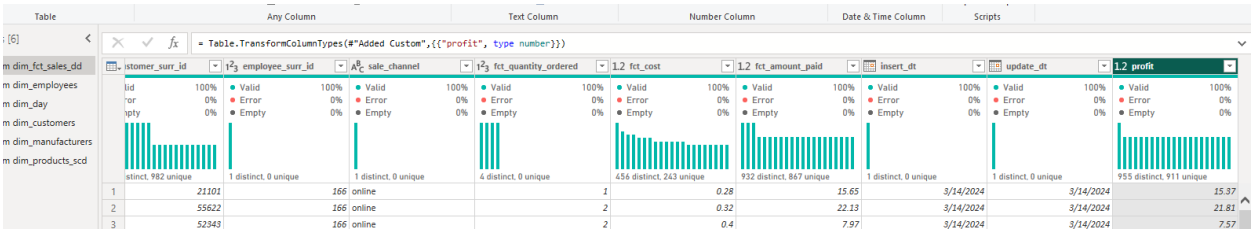
Power BI managed to create necessary and intended connections between tables, and got a star scema:



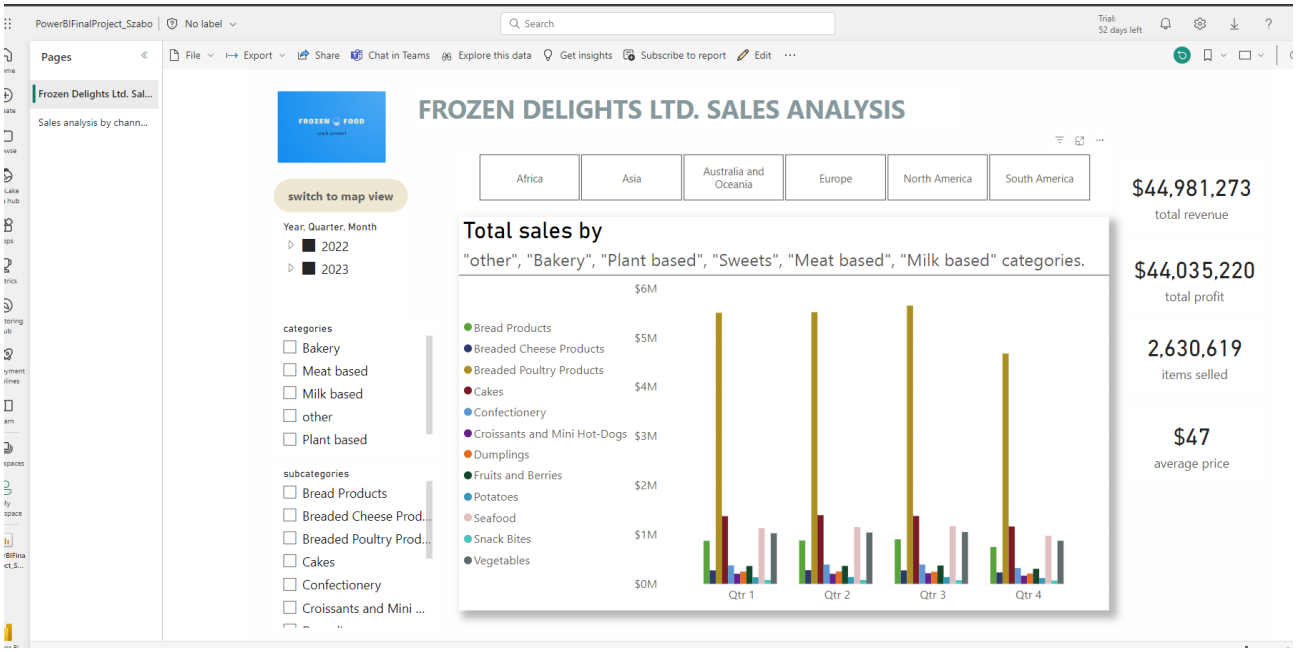
Added full_name columns to employee and customers tables:



Added a calculated column in power query, named "profit":



I added two hidden pages additionally to the FROZEN DELIGHTS LTD. SALES ANALYSIS and **SALES ANALYSIS BY CHANNELS** pages:

- PROFIT TREND AND TOP PRODUCTS as tooltip,
- PRODUCTS TOTAL PROFITS as drill through page.

I shared the final version to the Power BI services: