GLOBAL ELECTRONICS RETAILER

POWER BI Visualization Report

ABSTRACT

The global electronics retailer dataset has been chosen for this visualization project since it contains appropriated time series and a set of useful table. This data set also bring more challenge to the analyst in terms of creating new measurement, tables and relationship establishing. Moreover, currencies involving in this dataset also make the analysis more complicated which would be another good dataset for practising data skills.

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POWER BI VISUALIZATION: GLOBAL ELECTRONIC RETAILER

INTRODUCTION

This project is a part of Data Analysis Application course (Professional Certificate – Data Science) at Southern Alberta Institute of Technology. The project is about creating data visualization using POWER BI tool for data analysis and management planning.

The global electronics retailer dataset has been chosen for this visualization project since it contains appropriated time series and a set of useful table. This data set also bring more challenge to the analyst in terms of creating new measurement, tables and relationship establishing. Moreover, currencies involving in this dataset also make the analysis more complicated which would be another good dataset for practising data skills.

The dataset contains 2016-2020 and the first 2 months of 2021 time series which is appropriated for trend analysis. Furthermore, it also lacking of some core data which needs to be calculated and measured before creating visualization.

ANALYSIS

Executive Report

Overall performance for the latest year report to executive level for summarizing total revenue data and future trend prediction. The report including;

- Total Sales and Total Profit for 2020
- Sales and Profit Growth compared with previous year
- Total Sales by Category
- Total Sales by Continental
- Sales Trends by month
- Top Seller Products
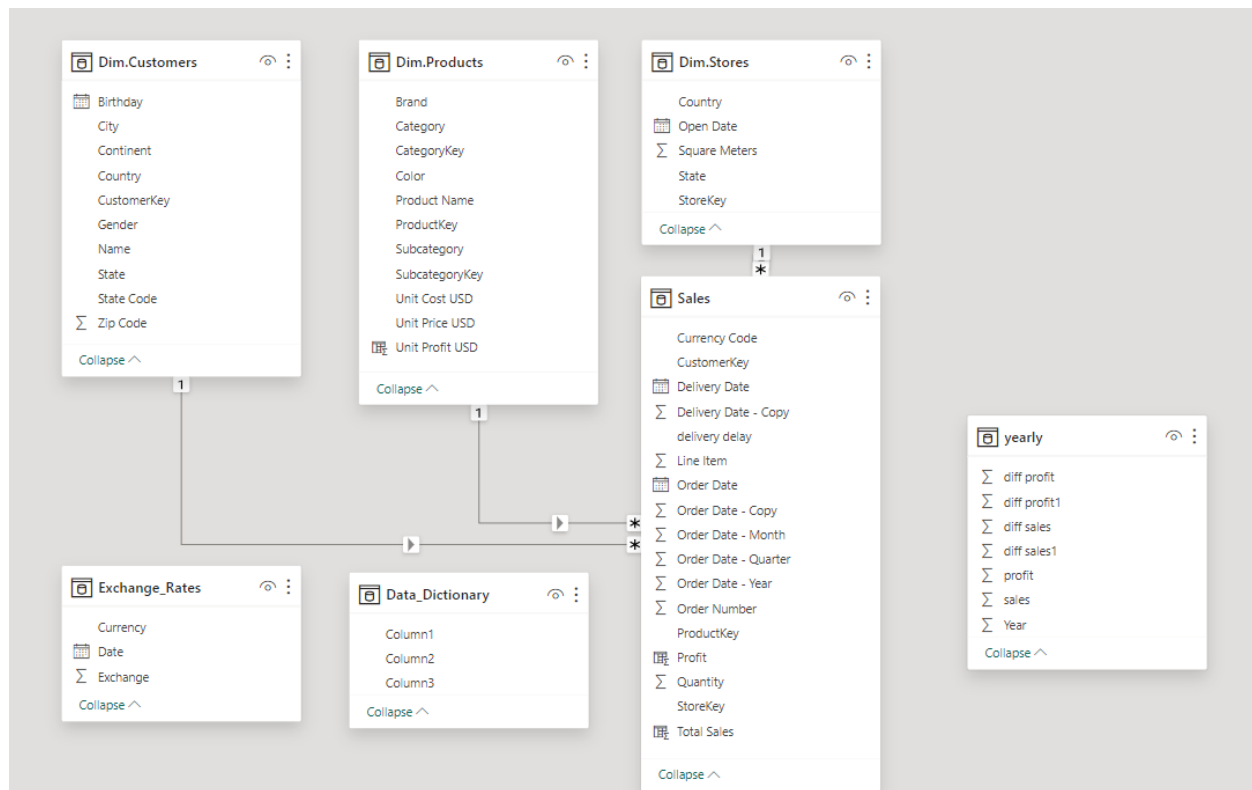- Sales and Profit Trends for 5 consecutive years

Inventory Dashboard

For related departments such as inventory, purchasing, suppliers and distributors to forecast seasonal product trends for inventory management in each regions, to set KPI regarding delivery time and for stock fulfilment. The dashboard including;

- Delivery time (Days): Average, minimum and maximum day of order preparation before shipment

- Average delivery time (Days) trend by Year
- Top Seller Products analyzing by quantity sold
- Quantity Sold per Category by month and year
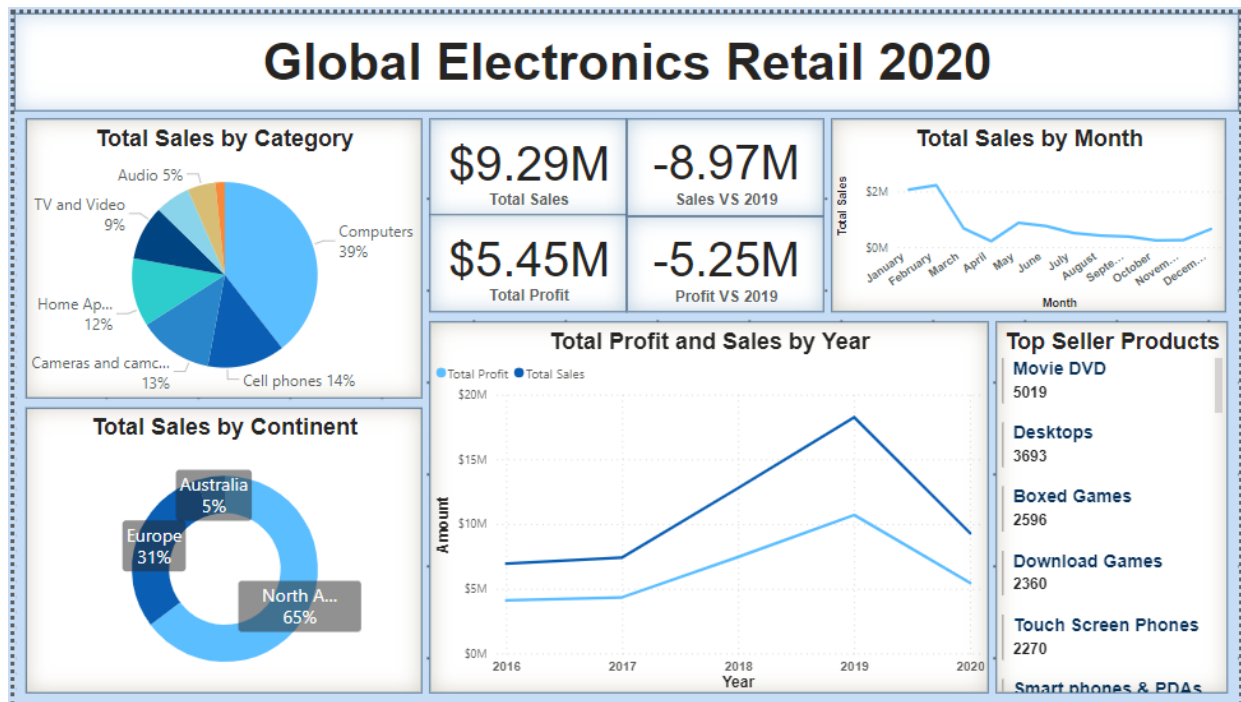- Selection of sales location

DATA MODELING

The figure below shows tables in this dataset and relationship between them

Note: Calculated, currency exchange, and data dictionary tables have no relationship established

REPORT

DASHBOARD

Inventory Summary 2020

Average Delivery (Days) by Year

4
2020 Average Delivery (Days)

4
Min Delivery

13
Max Delivery

Top Seller Products
Movie DVD
5019

Desktops
3693

Boxed Games
2596

Download Games

Location
☐ Select all
⌄ ☐ Australia
⌄ ☐ Europe
⌄ ☐ North America

Quantity Sold per Category by Month

Quantity Sold per Category by Year
- Audio
- Cameras and camcorders
- Cell phones
- Computers
- Games and Toys
- Home Appliances
- Music, Movies and Audio ...
- TV and Video

REFERENCES

Global Electronics Retailer [Data Set]. (2024, March 31). Maven Analytics. Retrieved April 24, 2024, from https://mavenanalytics.io/data-playground?tags=10btmr8wmkqkEgJMfgtOv2