

[Data Analysis] Executive Sales Dashboard for a Business with Key Insights from available data

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Project Overview

This project presents an executive-level sales and profitability dashboard built in Power BI. The goal is to evaluate overall business health, identify growth opportunities, assess regional and product performance, and highlight potential operational risks using historical sales data. The dashboard is designed for decision-makers, focusing on clarity, comparability, and actionable insights rather than raw metrics alone.

Business Objectives

The dashboard answers the following key business questions:

- How is the business performing overall?
- Is the company growing, stagnating, or declining?
- Which regions should we invest in more or less?
- Which product categories should be scaled or deprioritized?
- Are there operational inefficiencies affecting performance?
- What are the key risks to future growth?

Github

- The project is available on Github with raw dataset, PBIX file & screenshots available
- https://github.com/Shantanu-Shukla-Code/executive_sales_dashboard/tree/main

Dashboard Structure

The dashboard consists of five well linked pages. The basic layout includes the header, page selection tab, information button and the year slicer. Along with these essentials, the report consists of multiple pages, each serving a specific analytical purpose.

- **Overview**



- Selected-year Revenue, Cost, and Profit
- Business Growth & Profitability metrics such as Growth Percent (Revenue Growth Same Period Last Year), Profit Percent(Selected-Year), Profit YoY% (Same Period Last Year)
- Total Profit by Region Visualiser and Monthly/Year on Year Performance Trends
- Completely interactive and responsive report corresponding to selected region or selected year to analyse overall contribution, performance and growth

- **Regional Analysis**



- Profit Heatmap to analyse profit division by a region or a country
- Profit, Revenue & Profit Percent for each region and top five countries

- Bottom five countries as per their profit percent
- The region page is completely interactive with the ability to select year, country or region to study each region, its statistics and identify markets that need to be scaled as well as markets that needs further analysis before investment

- Product / Item Analysis



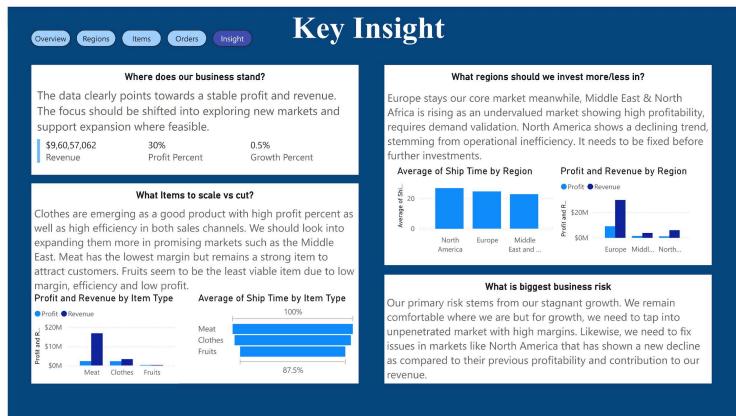
- Revenue, profit and profit percent contribution by item category
- Distribution of item categories across the two sales channel
- The report can be used to understand key items for revenue and profit as well as the items that drag the business down with the help of interactive environment utilising the year slicer & item selection

- Orders Analysis



- Region based shipping time analysis comparing average vs maximum shipping times
- Average shipping time, profit & revenue per each sales channel
- Order priority analysis using the units sold and average shipping time
- The report is used to analyse efficiency of current order delivery operations as per different regions, sales channel, priorities over the years

- Key Insights



- Direct business questions with summarized answers
- Studied actual data and answered questions to cut or expand based on market trends.

Tools & Skills Used

Power BI: DAX, CALCULATE, VAR, SUM, SWITCH, SAMEPERIODLASTYEAR

Data Modeling: Star schema, One-to-many relationships, Data Transformation

Assumptions & Limitations

- The latest year contains partial data; all growth metrics are calculated using same-period-last-year logic to ensure fair comparison.
- Shipping data is used as a proxy for operational efficiency due to limited logistics data.
- Customer-level demand and marketing data were not available, limiting demand-side analysis.

Insights Found

Upon analysis of the data using the dashboard, following insights were found:

- The business is profitable but at a stable growth. There should be a focus on expanding the business into markets more strategically as well as fix some operational issues in the existing markets.

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- Europe was found to be the best market with the majority of the business revenue. We should continue to keep focusing on this market.
 - Middle East & North Africa is a good market to study and invest in. It shows a high profit percentage with good operational efficiency. It has a good market for clothing.
 - North America shows a decline in revenue. However, it is not because of lower demand but due to shipping issues as seen by the delay period. This issue needs to be fixed immediately before further investment
 - Clothes are our important SKU generating both high revenue & high profit. They have high operational efficiency in all sales channels. We should invest into clothing markets in new regions.
 - Meat has the lowest profit margin but it should not be cut down. It acts as a good item to attract customers and funnel them in as seen by the high revenue & quantity sold.
 - Fruits should be cut down from our offerings as they are low profit, low in demand and very costly operations wise.