Executive Power BI Dashboard for Business Insights

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This document presents an interactive Power BI solution built to analyze revenue, product performance, and customer retention. It consolidates KPIs, trends, and geospatial insights in a clean, executive-friendly dashboard.

1. Business Context

The goal of this project was to create a single dashboard where decision-makers could track key performance indicators (KPIs), monitor revenue trends, analyze product sales distribution, and measure customer retention over time.

2. Overview Page

The Overview page presents the main KPIs (Total Revenue, Orders, Distinct Customers, and Average Ticket) and allows users to quickly spot revenue trends by year and compare acquisition channels side by side.
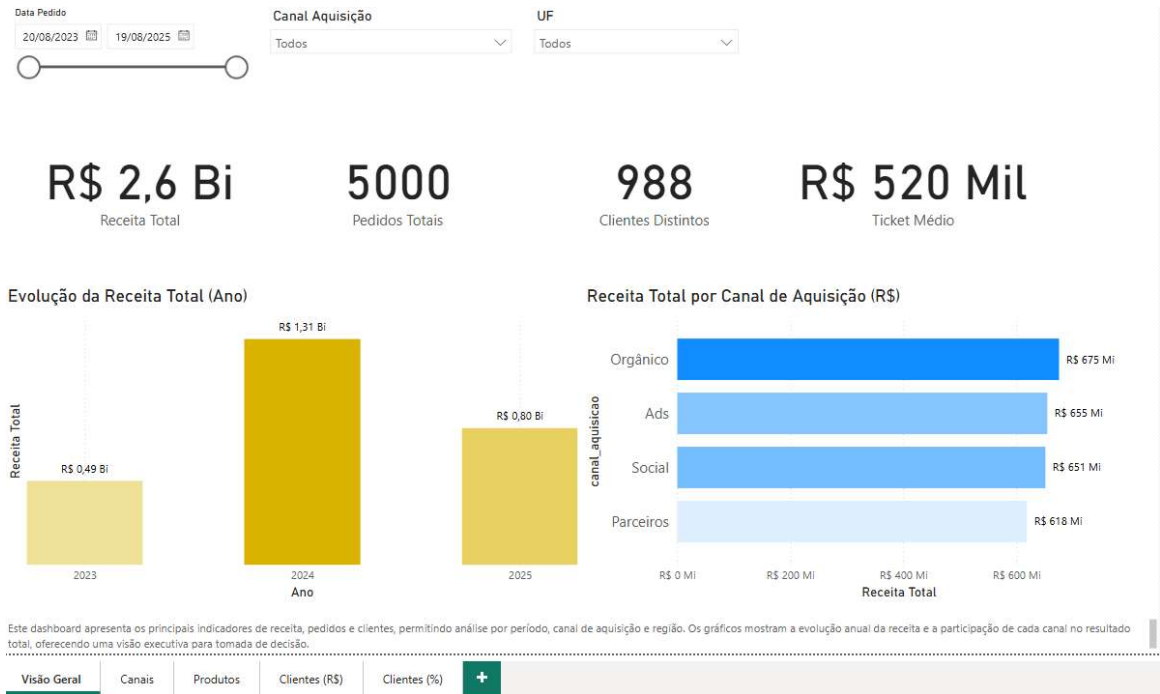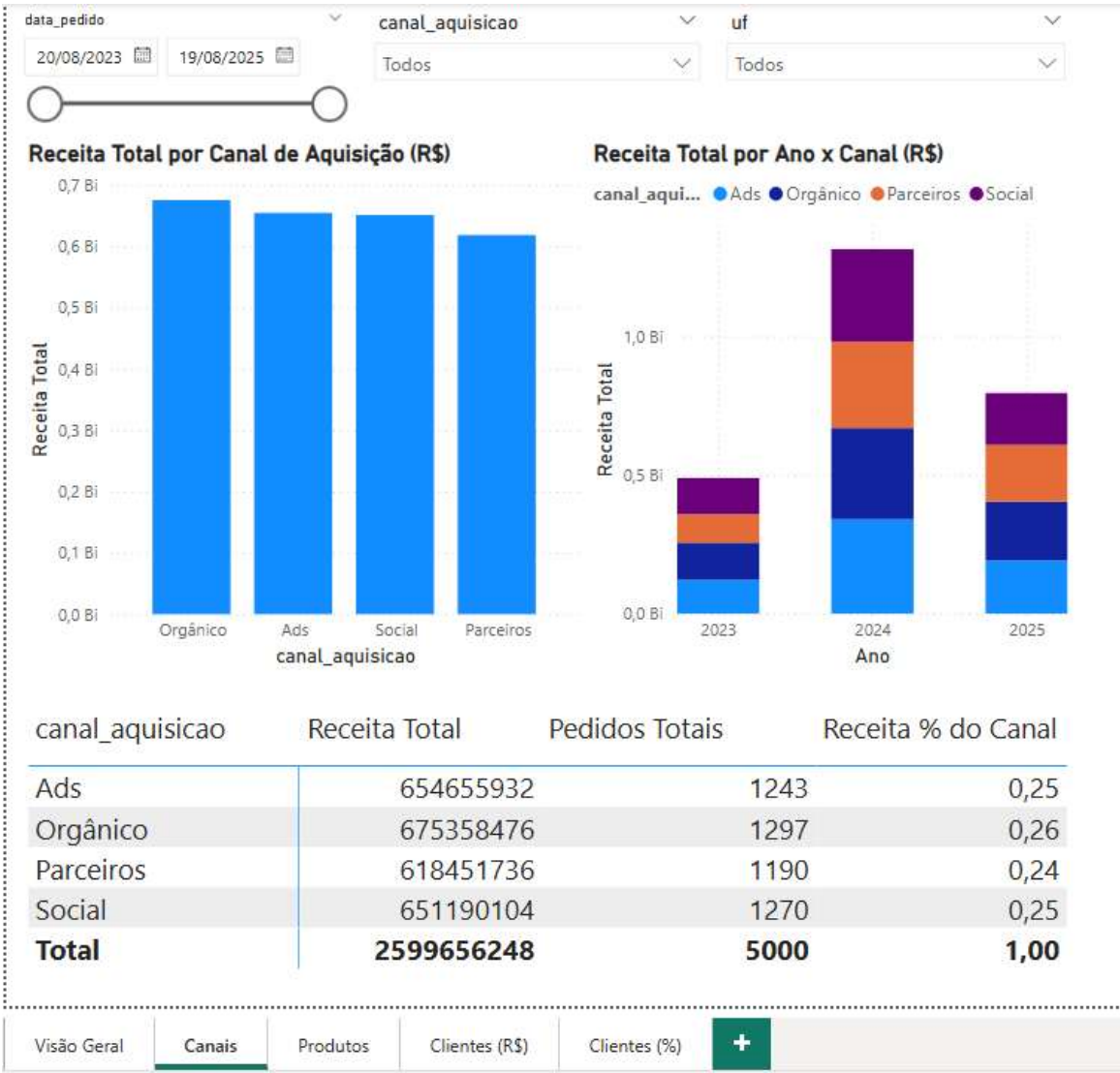

Technical Solution

- **DAX Measures:**
    - Total Revenue = SUM(order_items[price])
    - Total Orders = COUNT(orders[order_id])
    - Average Ticket = DIVIDE([Total Revenue], [Total Orders])
- **Visuals:**
    - **KPI Cards:** Display total revenue, total orders, distinct customers, and average ticket.
    - **Clustered Column Chart:** Shows revenue evolution by year, enabling quick identification of trends.
    - **Bar Chart:** Displays revenue split by acquisition channel for performance comparison.
- **Filters:**
    - **Date, Channel, and State (UF) slicers** were implemented for full interactivity, allowing users to segment metrics dynamically.
- **Goal:** Provide an executive-friendly, high-level view of business performance, focusing on revenue evolution and key indicators.

3. Channel Analysis

This page breaks down revenue by acquisition channel and year, helping stakeholders identify which channels perform best over time and optimize marketing spend.

Technical Solution

- **DAX Measures:**
  - Revenue % by Channel = DIVIDE([Total Revenue], CALCULATE([Total Revenue], ALL(customers[canal_aquisicao])))
- **Visuals:**
  - **Column Chart:** Displays total revenue per channel for quick comparison.
  - **Stacked Column Chart:** Shows annual revenue per channel to track distribution changes over time.
  - **Table:** Combines key metrics (Revenue, Orders, Revenue %) by channel for a detailed view.
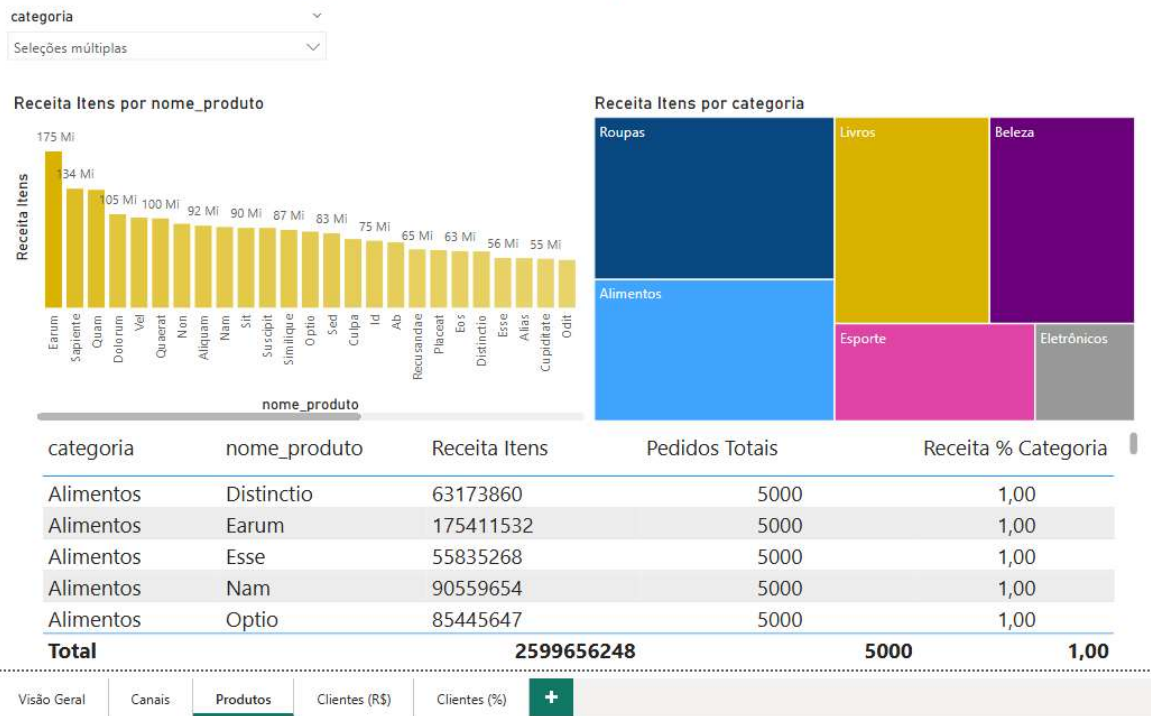
- **Filters:**
  - Dynamic slicers for date and state (UF) to analyze channel performance by region and period.
- **Goal:** Analyze the contribution of each acquisition channel, identify trends, and support marketing decision-making.

4. Product Analysis

The Product page highlights the top-selling products and the contribution of each category using bar charts and a treemap. This enables product managers to spot opportunities and underperforming categories quickly.

Análise de Receita por Produto e Categoria

Identifique os produtos mais vendidos e a participação de cada categoria na receita total.

categoria	nome_produto	Receita Itens	Pedidos Totais	Receita % Categoria
Alimentos	Distinctio	63173860	5000	1,00
Alimentos	Earum	175411532	5000	1,00
Alimentos	Esse	55835268	5000	1,00
Alimentos	Nam	90559654	5000	1,00
Alimentos	Optio	85445647	5000	1,00
Total		**2599656248**	**5000**	**1,00**

Visão Geral — Canais — **Produtos** — Clientes (R$) — Clientes (%) — +

Technical Solution

- **DAX Measures:**
    - Revenue % by Category = DIVIDE([Total Revenue], CALCULATE([Total Revenue], ALL(products[categoria])))
- **Visuals:**
    - **Bar Chart:** Top products by revenue to highlight best-sellers.
    - **Treemap:** Visualizes revenue share by category, making it easy to spot leading categories.
    - **Table:** Detailed breakdown of products with revenue, orders, and category contribution.
- **Filters:**
    - Category slicer to allow focused analysis per product category.
- **Goal:** Identify top-performing products and categories, supporting decisions about inventory and promotions.

5. Customer & Retention Analysis

The Product page highlights the top-selling products and the contribution of each category using bar charts and a treemap. This enables product managers to spot opportunities and underperforming categories quickly.

Technical Solution

- **DAX Measures:**
    - Cohort = FORMAT(customers[data_cadastro], "YYYY-MM")
    - Months Since Cohort = DATEDIFF(EOMONTH(customers[data_cadastro], 0), EOMONTH(orders[data_pedido], 0), MONTH)
- **Visuals:**
    - **Map:** Displays revenue distribution geographically by state (UF).
    - **Matrix (Cohort Analysis):** Shows customer retention and revenue over months since cohort registration.
- **Filters:**
    - Date, acquisition channel, and category slicers for advanced segmentation.
- **Goal:** Monitor customer retention, analyze purchasing behavior by cohort, and identify regions with the highest revenue potential.

6. Conclusion

This Power BI dashboard consolidates critical metrics into a single interactive report, allowing executives to make data-driven decisions. It supports revenue optimization, product portfolio management, and customer retention strategies.

Note: Data used in this project is fictitious and created solely for portfolio demonstration purposes.