**Sales & Product Analysis Dashboard**

**Project Description**

This interactive dashboard provides a comprehensive analysis of **sales and product performance** over a 3-year period using **8,399 rows of transactional data**. The report was developed using **Power BI** and designed with a **snowflake schema data model**, integrating multiple dimension tables with the central fact table for accurate and efficient reporting.

The dashboard enables stakeholders to track **key business KPIs**, identify **top-performing products and customers**, analyze **regional performance**, and monitor **sales growth trends**. It offers actionable insights that can drive strategic business decisions related to product categories, sales channels, and customer engagement.

**Key Features & Highlights**

* **Data Modeling**:
  + Built a **snowflake schema model** with fact and dimension tables for Categories, Subcategories, Customers, Products, and Regions.
  + Established proper relationships to enable cross-filtering and drill-down analysis.
* **KPIs Tracked**:
  + Total Quantity Sold (85K+)
  + Total Revenue (28M+)
  + Total Line Sold (106K+)
  + Return Quantity (1.8K)
  + Unique Customers (18K+)
  + Units Per Order (3.4)
  + Top Customer by Quantity
* **Visuals Implemented**:
  + **Donut Charts** – Category-wise and region-wise distribution of sales.
  + **Treemap** – Top products by sales quantity.
  + **Bar & Column Charts** – Revenue by country, region, and subcategories.
  + **Line Chart** – Revenue and quantity trends over time (quarterly).
  + **KPI Cards** – High-level summary metrics for quick business insights.
  + **Interactive Filters** – By country, region, category, and quarter.
* **Business Insights Derived**:
  + United States leads with the highest total sales (30K+ units).
  + **Accessories** dominate sales, accounting for ~67% of total quantity.
  + Certain products (e.g., **Mountain Bikes, Tires & Tubes**) contribute significantly to revenue.
  + Seasonal and regional variations highlight **sales peaks and troughs**, helping in demand forecasting.
  + Identification of top customers enables **customer segmentation and loyalty strategies**.

**Tech Stack**

* **Power BI Desktop** – For dashboard creation and interactivity.
* **Power Query** – For data cleaning, transformation, and shaping.
* **DAX** – For creating calculated measures (Revenue Growth %, Units per Order, Rolling Totals).
* **Snowflake Schema Data Model** – To manage multiple relationships and dimensions.

**Business Impact**

This dashboard helps:

* 📈 **Business Managers** – Monitor performance at the product, customer, and regional levels.
* 📊 **Sales Teams** – Focus on high-performing products and customer retention.
* 🎯 **Marketing Teams** – Target regions and products with growth potential.
* 🏢 **Executives** – Gain a high-level overview of the company’s sales and product performance trends.

👉 This project demonstrates strong skills in **data modeling, visualization, KPI tracking, and storytelling through data** in Power BI.Screenshots / Demos Show what the dashboard looks like.

Example: 