

# **Adventure Works Sales Data Analysis & Dashboard Design**

Delivered Using: Power BI Interactive Dashboards

**Analyst : Dharmesh Parmar**



# Company Overview & Objective

## Company: Adventure Works

Adventure Works is a global cycling and outdoor gear company specializing in the sales of bikes, accessories, and clothing. The organization operates across multiple geographic regions including North America, Europe, and the Pacific, with a diverse customer base ranging from professionals to enthusiasts.



## Business Objective:

To gain meaningful business insights from multi-year sales, product, and customer data, and to support strategic decisions through a comprehensive dashboard solution.

# Project Brief & Assignment

## Project Assignment by Client:

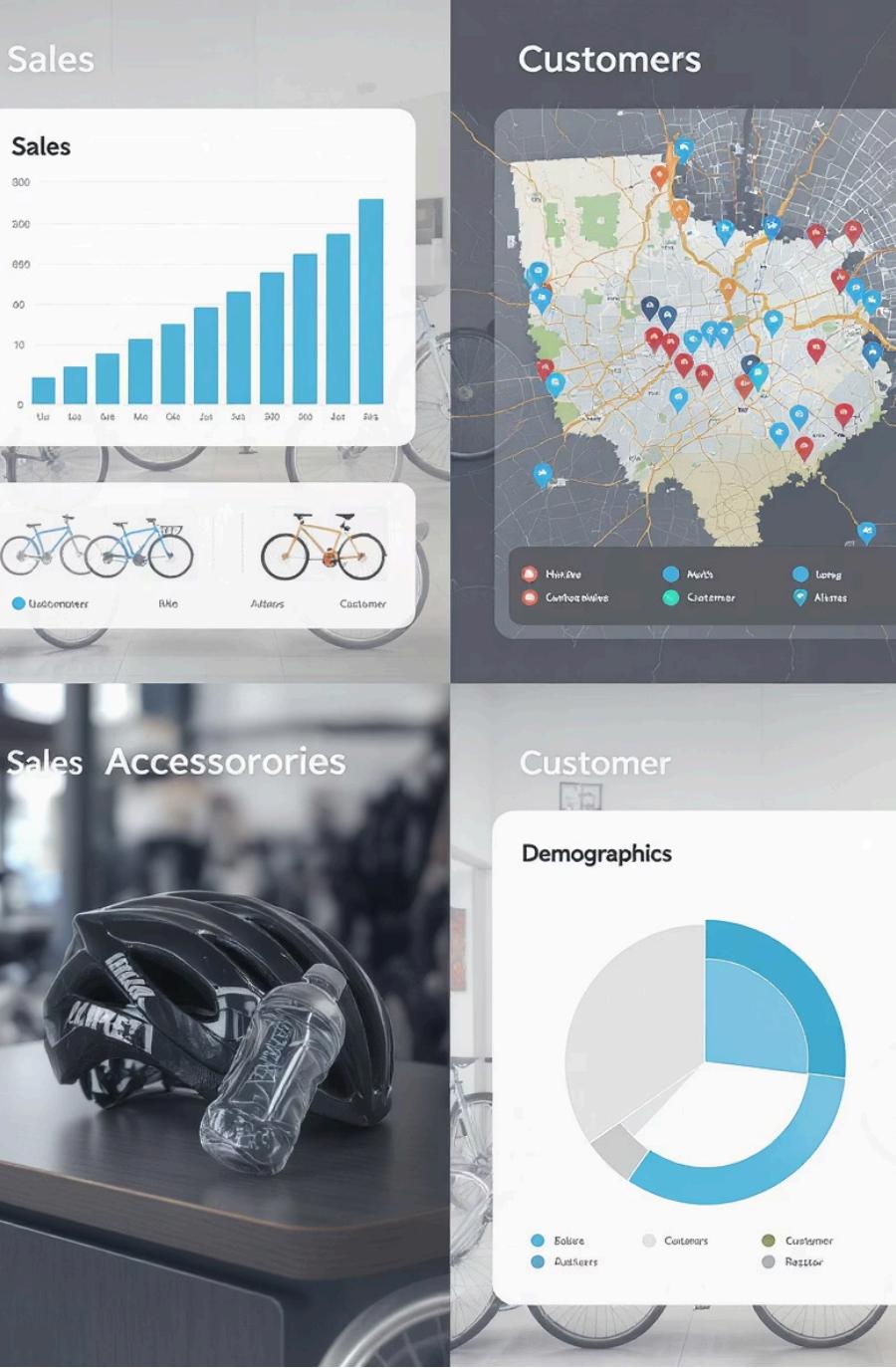
- Analyze AdventureWorks sales and customer data using Power BI.
- Develop a cohesive, user-friendly dashboard suite.
- Provide actionable insights through interactive visuals.



## Deliverables:

A fully functional Power BI report with:

- Cleaned and modeled data from 9+ Excel files.
- 4 Main Dashboard Pages for navigation and analysis.
- Icon-driven interface with filters, slicers, and drill-through capabilities.



The image shows four dashboard modules from the Adventureworks system:

- Sales**: A bar chart titled "Sales" showing weekly revenue trends from Jan to Mar.
- Customers**: An interactive map of a city with colored bubbles representing order volumes by region (Europe, North America, Pacific).
- Sales Accessories**: A product details dashboard showing a pie chart of Demographics for accessories.
- Customer**: A customer details dashboard showing a pie chart of Demographics for customers.

# Dashboard Modules Overview

- 1 Excel Dashboard (Home Page):**
  - Key metrics: Revenue, Profit, Orders, Return Rate
  - Visuals: Weekly trends, category breakdown, top products
- 2 Map Dashboard:**
  - Interactive bubble map displaying order volumes by region
  - Region filters: Europe, North America, Pacific
- 3 Product Details Dashboard:**
  - Product-level trends: Orders, Profit, Returns vs. Targets
  - Drill-down: Weekly performance analysis
- 4 Customer Details Dashboard:**
  - Customer segmentation by income and occupation
  - Top 100 customers by revenue, order trends over time

# Project Files Used

## Provided Excel Files Included:

- Sales Data (2020, 2021, 2022)
- Product, Customer, Calendar, Category, Territory, Returns Lookups



## File Integration Tasks:

Cleaned and transformed data using Power Query

Built relationships in the Power BI data model

Ensured consistency in date, product, and customer mapping

# Dashboard Instructions & Navigation Design

## User Navigation Experience (Client Requirement):



### Refresh Button (⟳)

Reloads visuals dynamically



### Slicer Toggle (🔍)

Displays or hides filter pane



### Dashboard (📊)

Returns to Excel Home Page



### Map (🌐)

Opens geographic order map



### Product Details (📦)

Drills into selected product trends



### Customer Details (👤)

Customer-specific metrics and segmentation

## Additional Instructions Provided to Client:

- Filter the dashboard using slicers before making decisions.
- Use top tabs and icons for intuitive movement across dashboards.
- Hover for tooltips where insights are embedded in visuals.
- Use date sliders to analyze trends by time periods.

# Analyst Approach & Execution

## Execution Strategy:

- Applied DAX for dynamic measures (Monthly KPIs, Return %, etc.)
- Focused on performance visualization and business alignment
- Built clean, consistent, and responsive dashboard layouts



## Key Analyst Goals:

- 1 Ensure clarity, interactivity, and business utility
- 2 Meet client-provided structure and functionality expectations
- 3 Optimize for non-technical stakeholders through intuitive design

# Summary & Handover

## Final Outcome Delivered:

- 4 fully interactive dashboards aligned with AdventureWorks' goals
- Navigation logic with business-specific user experience
- Embedded instructions and filter-driven visuals
- Actionable insights across revenue, geography, product, and customer dimensions



## Next Steps for Client:

- Use dashboards for quarterly reviews and strategy planning
- Extend model to future years or additional categories if needed