AdventureWorks - Business Insights 360

Presented by Kurushika

Agenda

Company Background

Overview of AdventureWorks' global operations

Problem Statement

Current challenges facing leadership

Goals to Achieve

Building an end-to-end BI solution

Datasets & Tools

Resources used for analysis

Data Model

Relational structure of our solution

Business Terms (KPIs)

Key performance indicators

Dashboard Requests (Views)

Different perspectives for stakeholders

Key Insights

Major findings from our analysis

Recommendations

Suggested actions based on insights

Gratitude

Acknowledgments and thanks

Company Background

Global Manufacturing

AdventureWorks is a global manufacturing company.

Product Focus

Produces cycling equipment and accessories.

Distribution Channels

Operates across retail, reseller, and online channels.

Problem Statement

Leadership lacks real-time insights into KPIs.

Difficulty tracking revenue, profit, orders, and returns.

Limited ability to analyze customers and products by region.

These challenges prevent AdventureWorks from making timely, data-driven decisions that could improve business performance.

Goals to Achieve

Build an end-to-end BI solution in Power BI.

Create a comprehensive business intelligence platform

Transform raw data into a relational data model.

Structure data for optimal analysis and reporting

Define KPIs with DAX.

Create precise measurements using Data Analysis Expressions

Deliver interactive dashboards.

Provide intuitive visualization tools for data exploration

Enable executives to make data-driven decisions.

Empower leadership with actionable insights

Datasets & Tools

Dataset

Microsoft AdventureWorks

- Sales
- Customers
- Products
- Returns
- Territories

Tools

Power BI Desktop
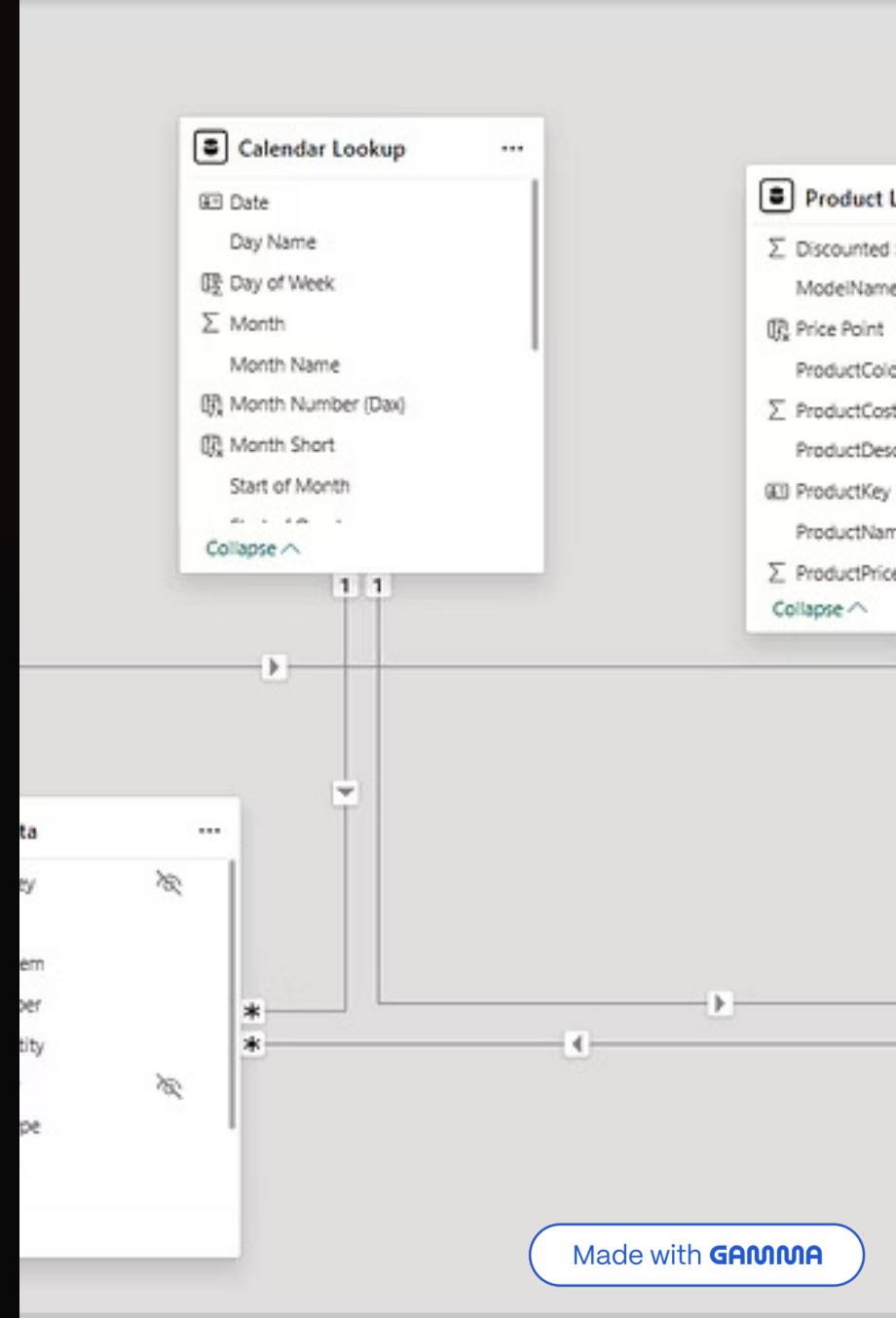
Power Query

DAX

Excel

Data Model

Our star schema data model connects fact tables (sales, returns) with dimension tables (products, customers, territories, dates), enabling comprehensive analysis across all business aspects.

Calendar Lookup ...

- Date
- Day Name
- Day of Week
- Month
- Month Name
- Month Number (Dax)
- Month Short
- Start of Month

Collapse ∧

Product L...

- Discounted
- ModelName
- Price Point
- ProductColo
- ProductCost
- ProductDesc
- ProductKey
- ProductNam
- ProductPrice

Collapse ∧

Business Terms (KPIs)

₹24.9..
Revenue
Total sales across all channels

₹10.5M
Profit
Net earnings after expenses

25.2K
Orders
Total transactions processed

2.2%
Return Rate
Percentage of products returned

17K
Unique Customers
Individual buyers served

₹1.43K
Revenue per Customer
Average spend per buyer

Dashboard Requests (Views)

1

Finance View

Revenue, Profit, Returns

2

Sales View

Performance trends and YoY growth

3

Customer View

Segmentation and top customers

4

Product View

Best & worst performing products

5

Executive View

Consolidated high-level KPIs

Key Insights

Revenue reached **₹24.9M** across all regions.

Profit stood at **₹10.5M** with healthy margins.

25.2K orders fulfilled, return rate at **2.2%**.

Helmets & Tires strong sellers but higher returns.

US, UK, Germany, France = top contributing regions.

17K unique customers, average revenue per customer **₹1.43K**.

Gratitude

Thank You

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