



Global Services

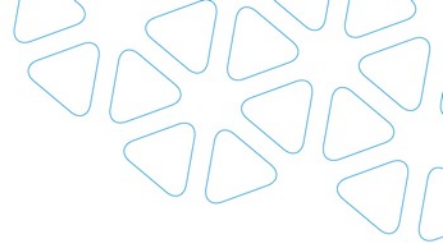
CAPSTONE #1

Traktor TEK Sales Data Analysis

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Overview

Web UI:

- Web App UI – weekly sales entries by product and team
- Sends data to an app sales table in the database which copies entries to the main sales table through SQL triggers

Dashboard:

- Focal points: sales by region and by team
- Slicers filter data by year and by quarter
- Product sales comparison by team

Database Design

- One Sales Fact Table and 4 Dimension Tables
- Sales table tracks sales by year and week
- Product is divided into a price table and a product description table
- Sales period table is for time reference only, it is not included in the analysis
- Main analysis table is created through a SQL query to be used in EXCEL for creating dashboards



1 . UI

UI

Home Sales

Add weekly sales by product in the form below:

Sales Team Lead:

Product Code:

Quantity of product sold:

Year:

Week:

Database Design

- Select Team Lead
- Select Product Code
- Select quantity, year and week
- Sales data is loaded into an app sales table which populates the corresponding fields in the main sales table through SQL triggers



UI Challenges and Solutions

Functionality and Design

- The ability to choose more than one product in the same session
- Connection between product and warranty sold
- Validators to check user input and send messages to prompt for the correct type of entry
- On the back end – calculations for time periods to populate necessary fields in the main sales table
- Send the sales data to the main sales table through SQL triggers
- Design choices to match the overall brand



2 . Dashboard



Dashboard Challenges & Solutions

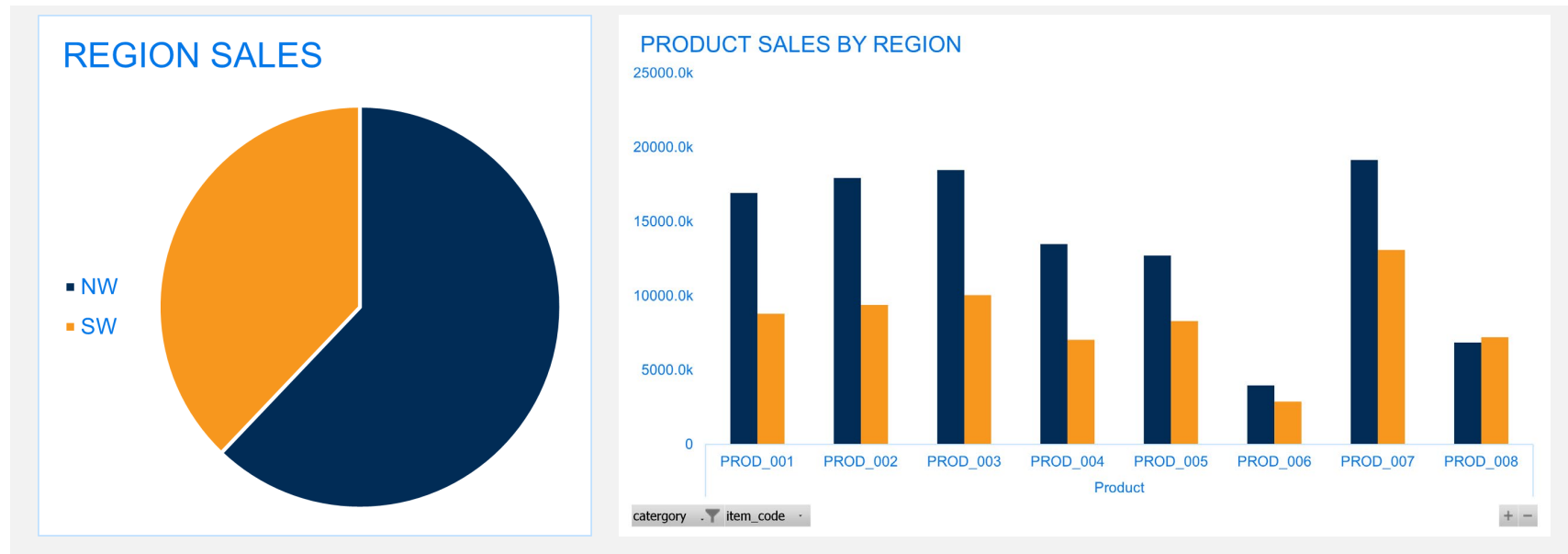
Telling more than one story

- One main analysis table is feeding the RAW data to EXCEL
- Several Pivot Tables are driving different views of the analysis
- Slicers for Year and Quarter filtering are connected to all pivot charts
- Category grouping allows for switching between products and warranties
- Connection between products and their respective warranties
- Design choices to match the brand style guides



Traktor TEK Sales Dashboard

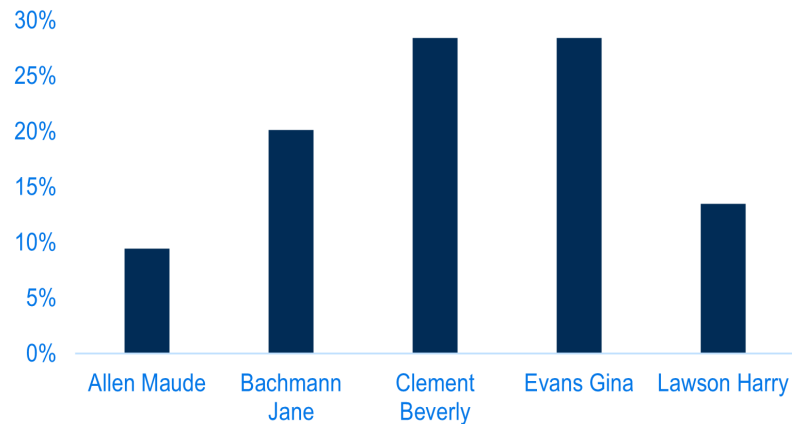
Sales by product, team and region is the main focus of the analysis



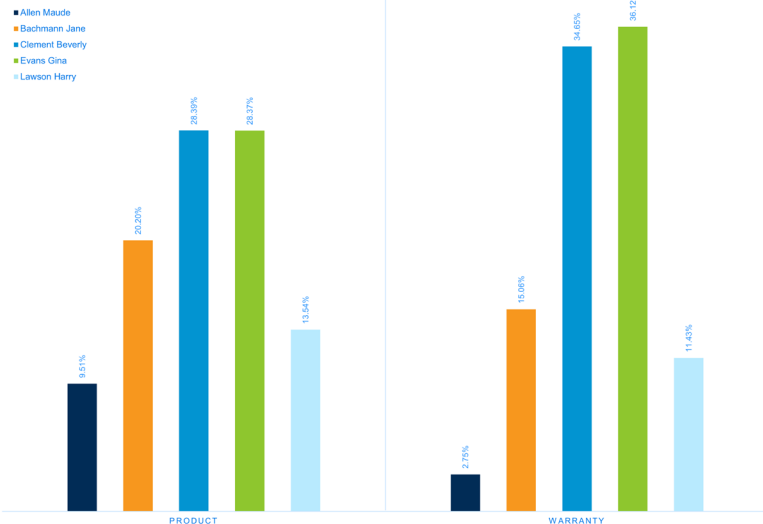
Traktor TEK Sales Dashboard

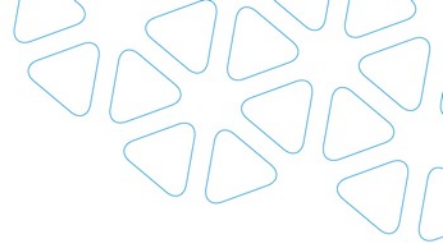
Overall sales by team and broken down by product

SALES BY TEAM



PRODUCT SALES BY TEAM





Sales Analysis

Trends and Conclusions

- **Regions :** The NW region is accounting for almost 2/3 of the sales
- **Teams:** there are two teams that are accounting for nearly 60 % of all sales and performing almost 2.5 times better than the teams selling the least amount of products
- **Time:** sales follow a consistent pattern overall. Although data is limited to only 2 years.
- **Products:** 4 products perform well in comparison, 2 perform very weakly (prod 6 and prod 8). Product 7 is the best performing product.
- **Warranties:** account for very small percentage of overall sales. Need improvement

3 . Database Design



Database Challenges & Solutions

Functionality and Simplicity

- Simple snowflake schema or modified Star
- There is still one main fact table – Sales which is the focal point of transactions as well as analysis
- 3 main Dimension Tables – Sales Team, Product and Unit Price that connect with Sales to create one main OLAP table for data analysis
- App Sales table to copy entries from UI to Sales Fact Table
- Sales Period Table for reference only
- Price is changing by sales year and quarter
- Each product has its respective warranty
- Historical data clean up and prep

EER Diagram

