B2B Customer Purchasing & Seasonal Trends Analysis

SQL Analytics Project | Wide World Importers (WWI)
University of Auckland – Academic Portfolio Project

Project Objective

This project analyses B2B customer purchasing behaviour and seasonal sales trends for Wide World Importers (WWI) using SQL. The goal is to uncover high-value customers, key customer segments, and demand patterns that support data-driven decisions in pricing, inventory planning, and supplier strategy.

Analytical Approach

The analysis was conducted using structured SQL queries across multiple relational tables. The work focused on answering business-driven questions rather than isolated technical tasks.

- Customer-level analysis of total sales, order frequency, and average order value
- Comparison across customer categories (e.g. novelty shops, supermarkets)
- Seasonal versus regular period analysis (2013–2016)
- Geographic performance analysis at state and city levels
- Product-level performance and best-selling item identification
- Use of joins, aggregations, subqueries, and conditional logic

Key Insights

- **Novelty Shops** are the largest revenue contributors, driven by high order frequency and consistent demand.
- **Supermarkets** place frequent orders but have lower average order values, presenting upselling opportunities.
- Sales patterns remain **stable across the year**, with no strong seasonal spikes between October and December.
- Essential packaging products show consistent demand, outperforming novelty items.
- **Texas** is the top-performing state, with Rockwall recording the highest city-level sales.
- The **Air Cushion Machine** is the best-selling product, highlighting the importance of operational supplies.

Business Implications

- Prioritise marketing efforts toward high-frequency and high-value novelty shop customers.
- Develop targeted pricing or bundle strategies to increase supermarket average order value.
- Focus inventory planning on non-seasonal, essential products to maintain revenue stability.
- Replicate successful regional strategies observed in Texas across similar markets.

Tools & Skills Demonstrated

SQL • Relational Data Modelling • Business-Oriented Analytics • Exploratory Data Analysis • Customer & Sales Insight Generation

Disclaimer: This project was developed as part of academic coursework at the University of Auckland and is shared for educational and portfolio purposes only.