US Christmas Tree Sales (2010–2016) – Case Study

Problem Statement

The goal was to analyze real vs. fake Christmas tree sales in the US from 2010–2016 to identify consumer trends, pricing dynamics, and revenue growth opportunities.

Data & Methodology

- Dataset: US Christmas Tree Sales (2010–2016).
- Tools: SQL, Excel, Power BI.
- Key metrics:
  - **Total Sales Revenue** by year and tree type.
  - **Average Tree Price** trends.
  - **Number of Trees Sold** (volume).
  - **Year-over-Year Change** in sales and revenue.
  - **Market Share** of real vs. fake trees.

Key Findings

1. **Revenue Trends**
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   - Fake trees consistently generated higher revenue despite lower unit sales, driven by higher average prices.
   - Real trees sold in much larger volumes, but lower prices kept their revenue smaller.
2. **Market Share Dynamics**
   - Fake trees grew their revenue share from ~35% in 2010 to nearly 48% in 2016.
   - In 2013, fake trees peaked at **69.83% market share**, while real trees hit their lowest at **30.17%**.
   - This indicates a strong consumer shift toward convenience and durability.
3. **Price vs. Demand**
   - Fake trees maintain demand even at higher prices
4. **Consumer Behavior**
   - Real trees appeal to tradition and seasonal experience.
   - Fake trees appeal to long-term value, reusability, and modern lifestyles (urban households, sustainability concerns).

Insights

- Market tradition and authenticity (family rituals, holiday experience).
- Offer convenience services (delivery, setup, recycling)
- Highlight eco-friendly sourcing and sustainability.