Project Description
Christmas Market Analysis Dashboard

This project provides an analytical overview of Christmas sales trends using Tableau. The dashboards focus on transaction trends, customer satisfaction, delivery performance, and category-specific insights. The analysis helps businesses optimize their marketing, pricing, and delivery strategies during the festive season. Key components include:

- Online vs Offline transaction trends over the years.
- Age-specific purchasing patterns.
- Discount and satisfaction comparisons by customer demographics.
- Delivery performance insights by method.
- Geographic sales trends for targeted campaigns.

The project aims to empower decision-makers with actionable insights to boost sales and enhance customer satisfaction.

Setting Up the Project

1.Prepare the Data:

1. I have Cleaned and structured data by using Excel.
2. Blank spaces within the dataset were systematically identified.
3. The identified blank spaces were filled down with the preceding non-blank values.

2.Import Data into Tableau:

1. Opened Tableau Desktop.
2. Click on **Connect to Data** and load your data source from Microsoft Excel.

3.Checking and Adjusting Data Types:

1. Reviewed the data types for all fields in the **Data Grid:** Verified fields like Total Price ,Quantity ,Discount Amount were correctly assigned as **Number (Decimal)** or **Number (Whole)**.
   Adjusted formats by clicking in the Date column dropdown → **Change Data Type** → **Date**

4. Create Calculated Fields:

1.Created fields for metrics like opposite quantity ,online_offline.
2.Created Group for Age Column.

5. Design the Dashboards:

1. Problem Statement:

Identify the total revenue and volume of sales, and assess delivery efficiency across shipping methods (Standard, Overnight, Express).

Explanation:

•Total Price: $1,654,260, indicating a strong revenue stream.

•Total Quantity: 30,106 units sold.

•Delivery Time Comparison:

- **Standard**: 2.9611 days
- **Overnight**: 2.9849 days
- **Express**: 3.0926 days
  Express delivery takes the longest, suggesting a possible need for logistical improvements.

2. Problem Statement:
Identify key customers to target for retention strategies.

Explanation:
•The chart highlights the top 10 customers (e.g., IDs 380, 474, 481) with varying contributions shown by bubble size and color.
•Customer ID **499** stands out, indicating high engagement and purchase volume, a potential candidate for loyalty rewards

3. Problem Statement:
Evaluate the relationship between discounts offered and satisfaction scores across demographics.

Explanation:
•Customer satisfaction is highest in the **60-70 age group** (2.9729), despite moderate discounts.
•The **18-19 age group** shows low satisfaction (2.9070) despite receiving the highest discounts, hinting at factors beyond discounts (e.g., product quality or delivery experience) affecting their experience.
•For age groups **30-50**, satisfaction is relatively stable, correlating with balanced discounts.

4. Problem Statement:
Analyze pricing strategies and their alignment with customer preferences.

Explanation:
•Categories like **Clothing** and **Decor** receive notable discounts, potentially driving higher customer interest.
•Categories such as **Toys** have smaller discounts relative to total prices, suggesting opportunities for targeted promotions to boost sales.

5. Problem Statement:
Determine the cities contributing most to sales and assess regional performance.

Explanation:
•Top 3 cities share a near-equal contribution:
  • City 1: 34.19%
  • City 2: 32.98%
  • City 3: 32.84%
•Revenue is evenly distributed across these cities, indicating a balanced urban reach.

6. Problem Statement:

How does the price and number of transactions vary across different product categories?
Identifying which product categories generate higher revenue or transactions can help optimize inventory and marketing.

Explanation:

This breakdown helps businesses understand product -specific performance, enabling strategic pricing and stocking decisions.

7. Problem Statement:

How does purchase behavior vary across age demographics, and which age groups should be targeted in marketing campaigns?

Explanation:

Understanding age-specific trends can help tailor marketing campaigns and product offerings to high-purchase demographics, maximizing sales impact.

8. Problem Statement:

How are online and offline sales channels performing over time, and what strategies should be adopted to maximize growth?

Explanation:

The decline in offline sales and the rise in online transactions indicate a shift in consumer behavior, suggesting the need to strengthen online platforms.

9. Problem Statement:

How does weather impact sales trends, and which weather conditions lead to higher sales performance?

Explanation:

This visualization helps to understand the correlation between sales and weather patterns, offering insights into how external factors like temperature, rain, or seasonal conditions influence customer purchasing behavior.

High sales (e.g., 576,425) could indicate favorable conditions (like clear weather or holiday seasons).
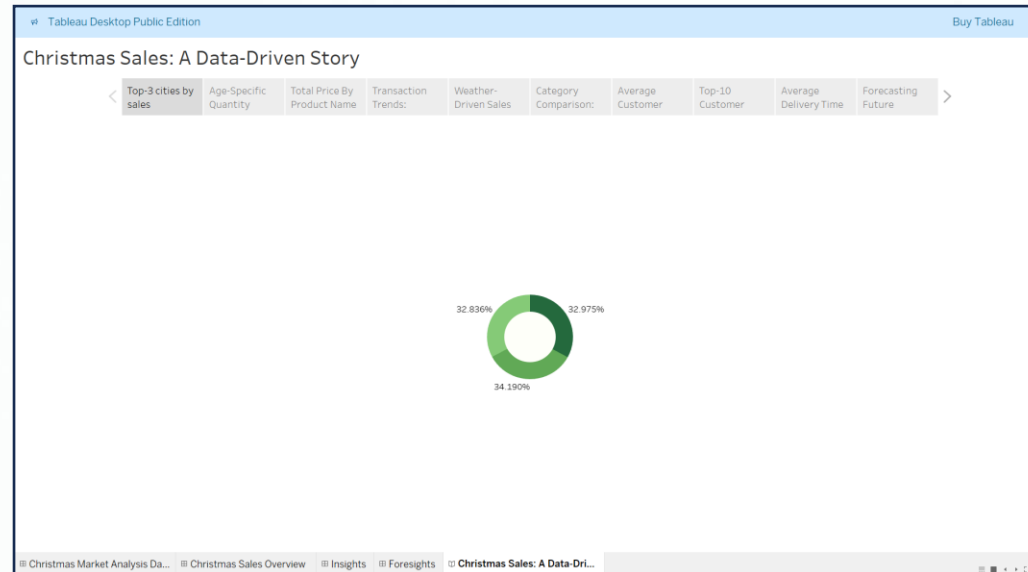
Lower sales (e.g., 535,787) might correlate with less favorable conditions (like extreme cold or rain).

Businesses can use this data to plan inventory, promotions, and marketing campaigns during specific weather conditions to maximize revenue.

SNAPSHOTS
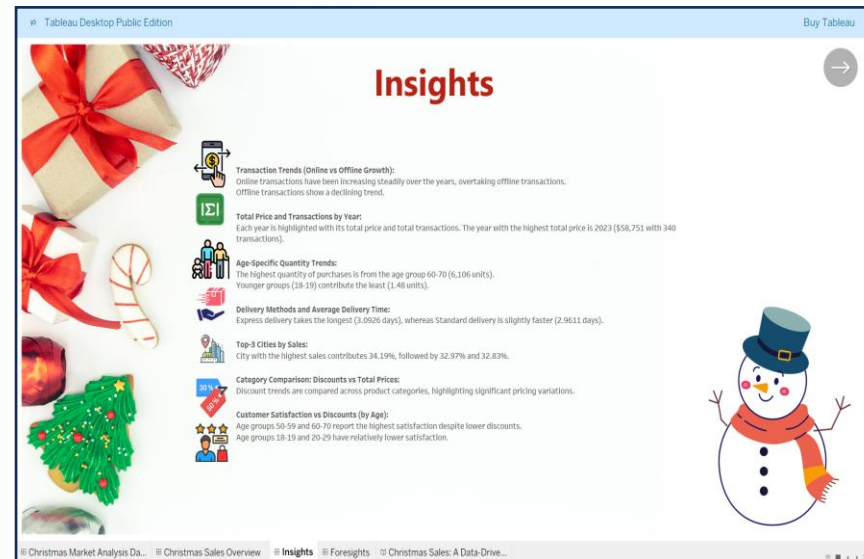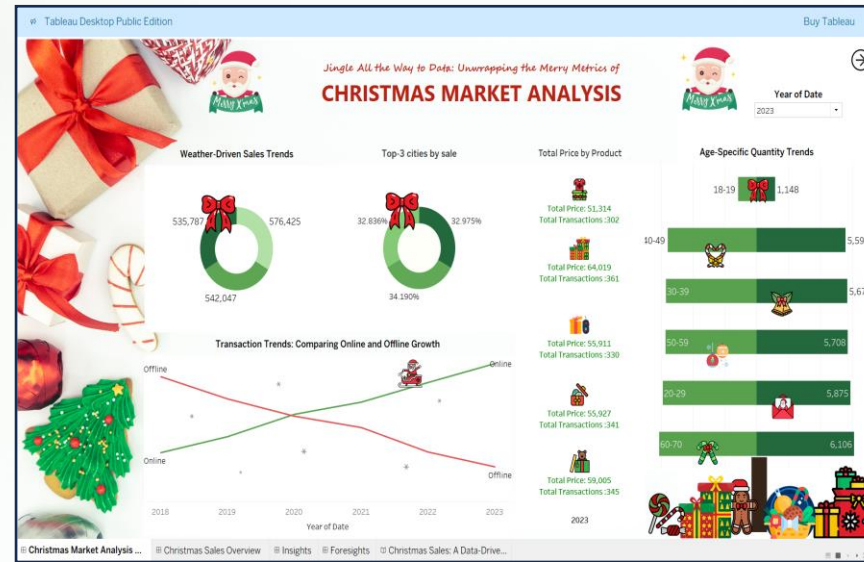
This story aims to provide comprehensive insights into the various factors influencing holiday sales, including payment methods, weather conditions, and future projections. By leveraging data-driven insights, businesses can optimize their strategies and enhance customer engagement during the festive season.

THANK YOU!

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