

# **Business Intelligence Report: Wide World Importers Sales Performance Analysis**

Assignment: COMP3350-2025-Assignment 2

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Report Period: 2013-2016

## **1. Executive Summary**

This report analyzes Wide World Importers' sales performance from [Start Year] to [End Year], focusing on overall trends, geographic distribution, product performance, and customer segmentation. Key findings indicate sales growth from 2013 to 2015, followed by a decline in 2016. Profit trends largely mirrored sales, although the profit decline post-2015 was less pronounced, suggesting potential cost management efforts. Sales are heavily concentrated in North America, with Texas, Pennsylvania, and California being the top-performing states. Analysis reveals discrepancies between top-selling products (dominated by packaging materials) and top-profit-generating products. A significant portion of customers falls into an 'Unknown' category, highlighting a potential data gap. Recommendations include investigating the sales decline, optimizing product strategy based on profitability, focusing geographic efforts, and improving customer data capture and segmentation.

## **2. Introduction**

### **2.1 Purpose**

The purpose of this report is to provide WWI management with insights into the company's sales performance based on an analysis of the WideWorldImportersDW data warehouse.

### **2.2 Scope**

This analysis covers sales data from 2013 to 2016, examining trends over time, performance across different geographic regions (primarily US states), sales and profitability by product, and basic customer segmentation. Sales figures are based on revenue excluding tax unless otherwise specified.

### **2.3 Methodology**

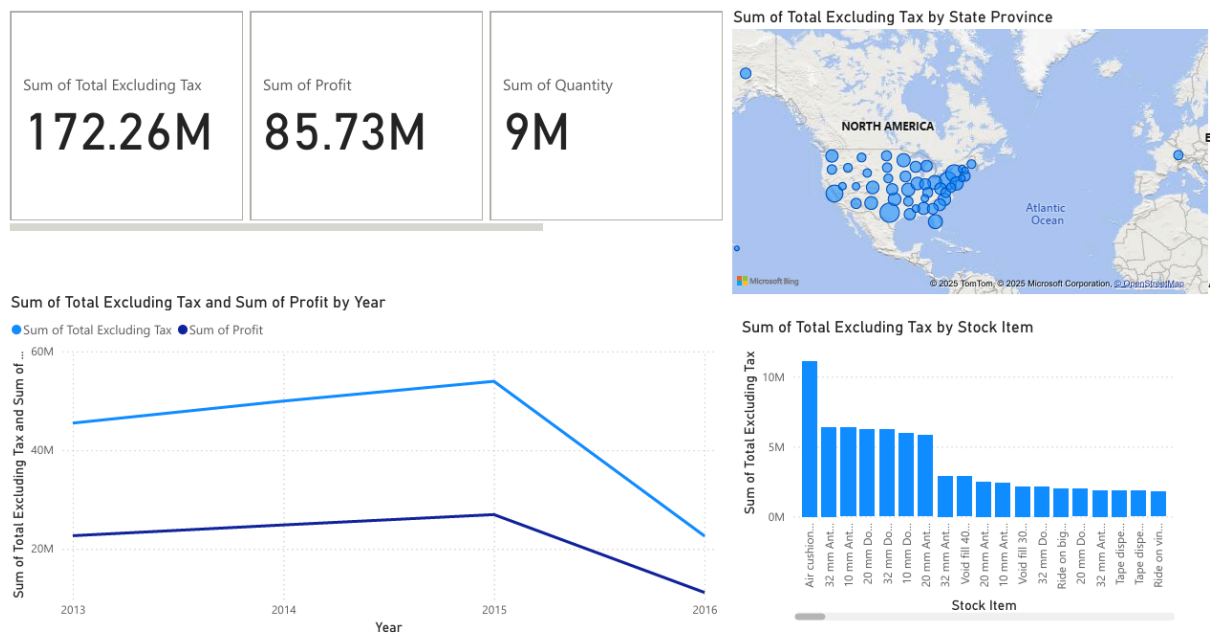
The analysis was conducted using Microsoft Power BI to connect to the WideWorldImportersDW database. Data was imported from relevant Fact and Dimension tables (Fact.Sale, Dimension.Date, Dimension.City, Dimension.StockItem,

Dimension.Customer). Key metrics such as Total Sales (excluding tax) and Total Profit were calculated, and various visualizations were created to identify trends and patterns.

### 3. Key Findings & Analysis

#### 3.1 Overall Sales and Profit Trends

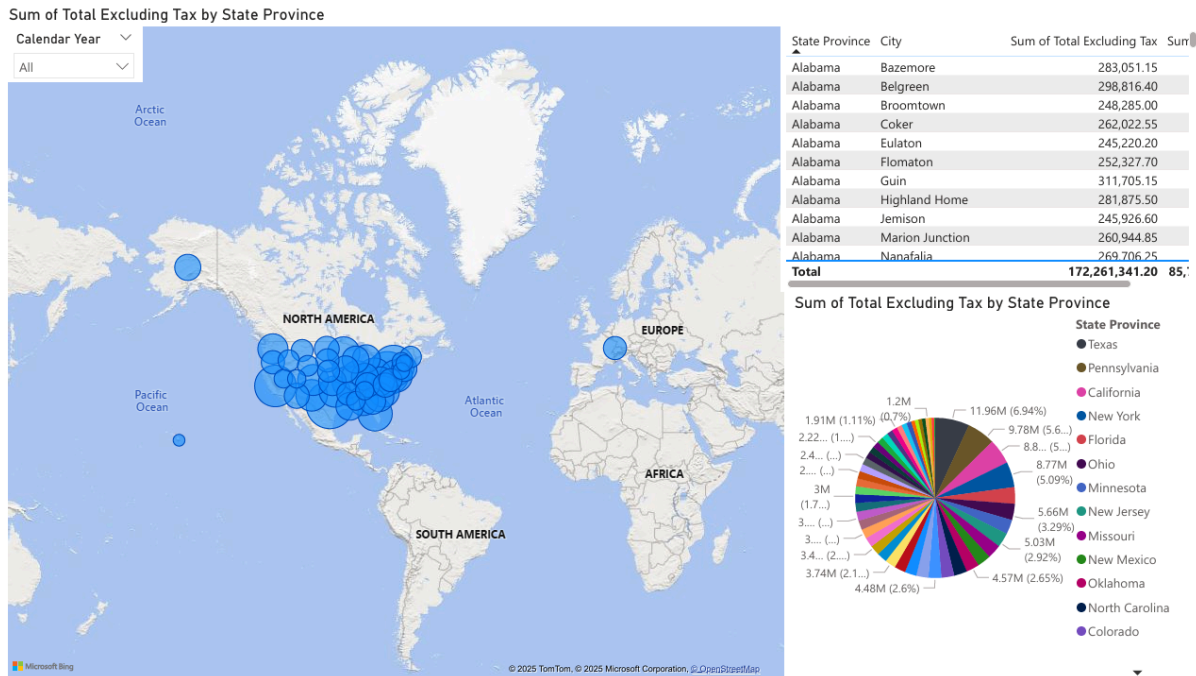
- Sales Trend: WWI experienced a period of slow but steady sales growth between 2013 and 2015. However, this trend reversed in 2016, with sales beginning to decline.  
(Supporting Visual: Line chart showing Total Sales vs. Year/Month)
- Profit Trend: Profit followed a similar trajectory, increasing slowly from 2013 to 2015 before declining. Notably, the rate of profit decline from 2015 to 2016 appears slightly less steep than the rate of sales decline during the same period. This could suggest successful cost-cutting measures or changes in product mix impacting overall margins positively relative to the sales drop.  
(Supporting Visual: Line chart showing Total Profit vs. Year/Month, potentially overlaid with Total Sales)



#### 3.2 Geographic Performance

- **Regional Concentration:** Sales are predominantly concentrated within North America.
- **Top Performing States:** The top three US states contributing the most to total

sales revenue are Texas, Pennsylvania, and California, respectively.  
 (Supporting Visuals: Map highlighting sales by state; Bar chart ranking states by Total Sales)

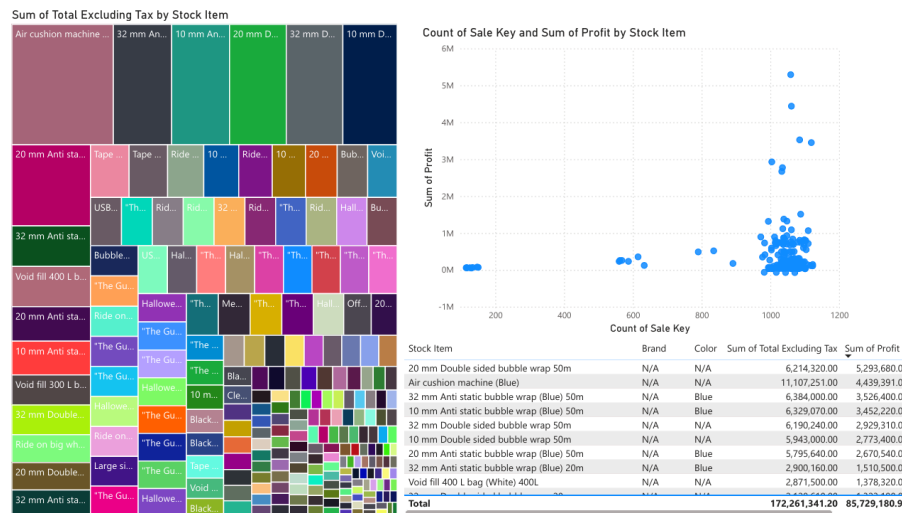


### 3.3 Product Performance Analysis

- Top Selling Products:** The highest volume of sales revenue comes primarily from packaging materials. The top 5 products by sales revenue are:
  1. Air Cushion Machine (Blue)
  2. 32mm Anti static bubble wrap (Blue) 50m
  3. 10mm Anti static bubble wrap (Blue) 50m
  4. 20mm double sided bubble wrap 50m
  5. 32mm double sided bubble wrap 50m
 (Supporting Visual: Bar chart ranking Stock Items by Total Sales)
- Top Profit Generating Products:** There is a notable difference when ranking products by total profit generated. While some overlap exists, the order changes, indicating varying profit margins across items. The top 5 products by profit are:
  1. 20mm double sided bubble wrap 50m
  2. Air Cushion Machine (Blue)
  3. 32mm Anti static bubble wrap (Blue) 50m
  4. 10mm Anti static bubble wrap (Blue) 50m
  5. [You need the 5th item from your analysis here]
 (Supporting Visual: Bar chart ranking Stock Items by Total Profit; Scatter plot

of Sales vs. Profit Margin by Stock Item could also be insightful)

- **Implication:** High sales volume does not automatically equate to high profit contribution. Packaging materials drive sales volume, but their individual profitability relative to other items like the Air Cushion Machine requires attention.

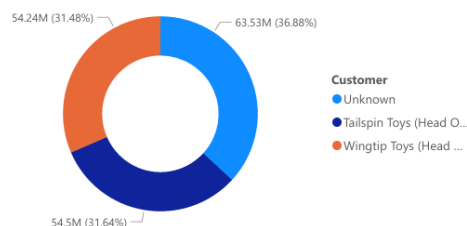


### 3.4 Customer Segmentation Insights

- **Dominant Segments:** A large portion of sales (36.8%) is attributed to customers categorized as 'Unknown' within the Buying Group or Category dimension. This represents a significant gap in customer understanding.
- **Key Known Segments:** Following the 'Unknown' group, the most significant customer segments identified are 'Tailspin Toys' (31.6%) and 'Wingtip Toys' (31.4%).

(Supporting Visual: Pie chart or Bar chart showing Total Sales distribution by Customer Category/Buying Group)

Sum of Total Excluding Tax by Customer



Buying Group	Category	Customer	Sum of Total Excluding Tax
N/A	N/A	Unknown	63,528,695.70
Tailspin Toys	Novelty Shop	Tailspin Toys (Head Office)	54,497,209.60
Wingtip Toys	Novelty Shop	Wingtip Toys (Head Office)	54,235,435.90
<b>Total</b>			<b>172,261,341.20</b>

## 4. Discussion

The analysis reveals several critical points for WWI. The sales decline starting in 2016 warrants immediate investigation to understand its root causes – potential factors include market saturation, increased competition, economic shifts, or internal factors. While the slower decline in profit relative to sales post-2015 is potentially positive (suggesting margin protection), it needs confirmation that this isn't solely due to accounting changes or unsustainable cost-cutting.

The geographic concentration in TX, PA, and CA highlights key markets but also potential risks associated with over-reliance on a few states.

The divergence between top-selling and top-profit-generating products is common but requires strategic consideration. High-volume, lower-margin items (like bubble wrap) might be essential for customer retention or attracting business, but their pricing and cost structure should be reviewed to maximize overall profitability.

The large 'Unknown' customer segment is a major concern, hindering targeted marketing, sales strategies, and relationship management. Understanding who these customers are is crucial. The clear identification of 'Tailspin Toys' and 'Wingtip Toys' as major segments provides a solid base for focused B2B marketing and relationship efforts.

## 5. Recommendations

Based on the analysis, we recommend the following actions:

1. **Investigate Sales Decline (High Priority):** Conduct further analysis (e.g., by product category, customer segment, salesperson) to pinpoint the drivers of the sales decline starting in 2016. Examine external market factors and internal operational changes during that period.
2. **Validate Profit Trend:** Analyze cost structures and product mix changes between 2015-2016 to confirm the reasons for the slower profit decline relative to sales. Ensure cost management efforts are sustainable.
3. **Optimize Product Strategy:**
  - Analyze the profitability of the top-selling packaging materials in detail. Explore opportunities for slight price increases, cost reductions (supplier negotiation, operational efficiency), or bundling strategies.
  - Promote and ensure availability of high-profit items, such as the '20mm double sided bubble wrap' and 'Air Cushion Machine'.

#### **4. Refine Geographic Focus:**

- Maintain strong focus and resource allocation towards the top-performing states (TX, PA, CA).
- Analyze lower-performing states to identify potential growth opportunities or reasons for underperformance.

#### **5. Improve Customer Data & Segmentation (High Priority):**

- Implement processes (e.g., at order entry, salesperson follow-up) to capture category/buying group information for customers currently marked as 'Unknown'.
- Develop targeted strategies to strengthen relationships and potentially increase sales within the key 'Tailspin Toys' and 'Wingtip Toys' segments.

## **6. Conclusion**

WWI demonstrated growth up to 2015, but the subsequent sales decline requires attention. While profit margins appear somewhat resilient, strategic decisions regarding product mix, geographic focus, and particularly customer understanding are crucial for navigating future challenges and returning to a growth trajectory. Addressing the data gap in customer segmentation and optimizing product profitability should be key priorities for management moving forward.