

HR Global Store

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Premium Shipping Option Idea Suitability

Analysis Summary

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Table of Contents

Executive Summary	1
Objectives	1
Data Overview	2
Visualizations and Analysis.....	4
Findings.....	8
Idea Suitability Conclusion	9
Recommendations	9

Executive Summary

The project aimed to determine if adding premium shipping would benefit HR Global Store. The analysis revealed whether premium shipping could be a viable option.

It highlighted how different shipping methods affect profits and costs.

Additionally, the analysis uncovered important insights into customer behavior, including their spending patterns and preferences regarding shipping options. This information helps understand whether customers are willing to pay extra for faster or enhanced shipping services.

The final report summarizes these findings and offers clear recommendations on whether to implement premium shipping helping HR Global Store make an informed decision about enhancing shipping options.

Objectives

- Check if premium shipping could make HR Global Store more profitable.
- Compare how different shipping options affect costs and profits work according to current shipping methods.
- Find out what customers are willing to spend on shipping.
- Give recommendations on whether to add premium shipping based on the data.

Data Overview

The data used in this project came from HR Global Store's shipping and sales records. The main sources included

- ✓ **Shipping Records**

Detailed information on shipping costs, delivery methods, and order frequencies. This data helped analyze how different shipping options impact overall costs.

- ✓ **Sales Data**

Records of total sales and profits associated with each shipping method. This data was used to evaluate the relationship between shipping costs and revenue.

- ✓ **Customer Spending Information**

Data on how much customers spend on shipping for different orders. This provided insights into customer preferences and their willingness to pay for premium shipping options.

Types of Data Collected

Shipping Costs: Costs associated with each order

Retail Sales Figures: Sales for each product, total sales amounts and profit margins for orders.

Order Data: Order Quantity, Customer Info of each order & order priority

Product Data: Product category and the info about the product container used for shipping

Customer Investment: The amount customers spend on different shipping options & customer type

Preprocessing Steps Taken

Data Cleaning: Removed any duplicate entries and corrected inconsistencies in the shipping and sales records.

Normalization: Standardized data formats and units to ensure consistency across all datasets.

Handling Duplicate Values: Addressed duplicate data by excluding records from the analysis.

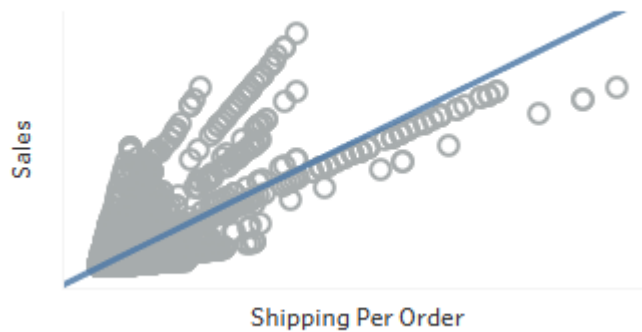
Data Integration: Combined data from different sources to create a comprehensive dataset for analysis.

Visualizations and Analysis

key visualization charts

➤ Chart 01

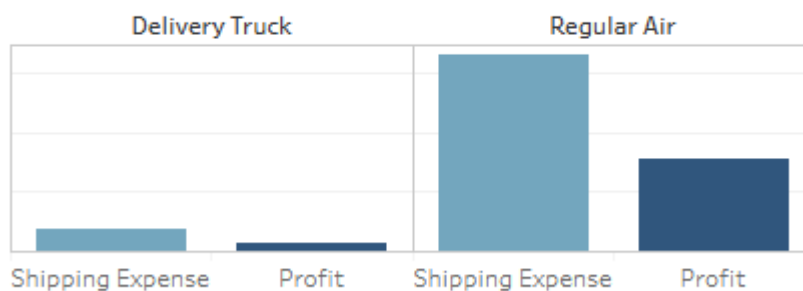
Shipping Price Effect on Sales



The scatter plot showing shipping cost per order versus total sales is a crucial part of the analysis because it helps determine if there is a relationship between what customers pay for shipping and the total amount they spend on their orders. This insight is key to understanding whether introducing premium shipping could be beneficial for HR Global Store.

➤ Chart 02

Customer Shipping Investment & Profit of Shipping Methods

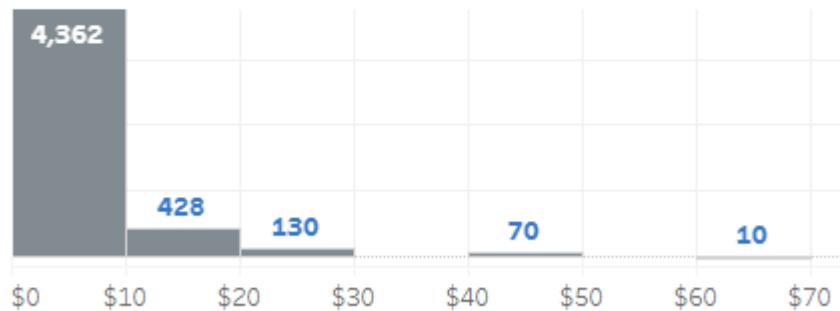


This side-by-side chart compares total profit and total shipping costs for the two shipping modes that HR Global Store currently uses: delivery truck and regular air. By visualizing these two modes side by side, the

chart allows for an easy comparison of how each mode performs in terms of profitability and cost.

➤ **Chart 03**

Shipping Cost Frequency



This histogram displays how often orders are placed at different shipping price levels. It shows the frequency of orders for each price range, giving a clear view of which shipping prices are most common among customers.

➤ **Chart 04**

Bulk Order Profit Analysis



The histogram shows the relationship between the quantity of products ordered by customers and the profit generated within specific quantity ranges. Each bar represents a range of order quantities, and the height of each bar indicates the total profit earned from orders within that range.

➤ **Chart 05**

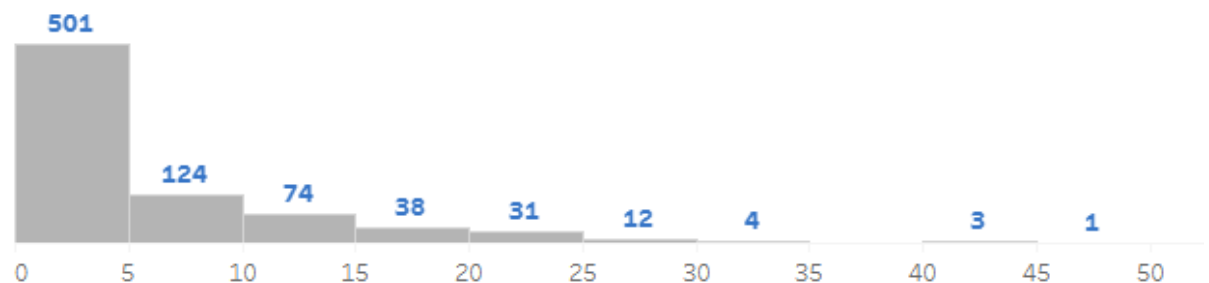
Order Priority

Critical	17.264%
High	22.269%
Low	18.860%
Medium	19.982%
Not Specified	21.625%

The heatmap visualizes order priority levels across different orders, with each color representing a different level of priority (e.g., low, medium, high, critical). The intensity of the color indicates the frequency or volume of orders at each priority level, making it easy to see which priorities are most common.

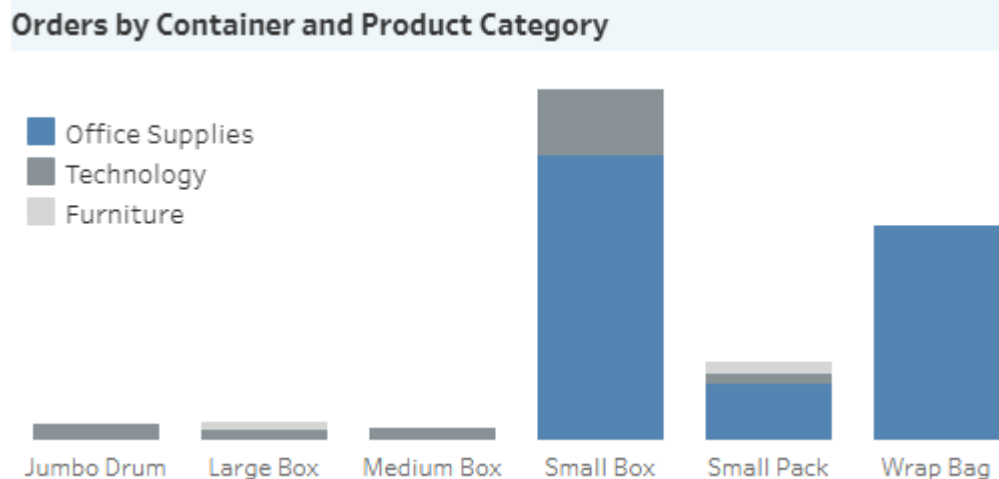
➤ **Chart 06**

Loyal Customers Analysis



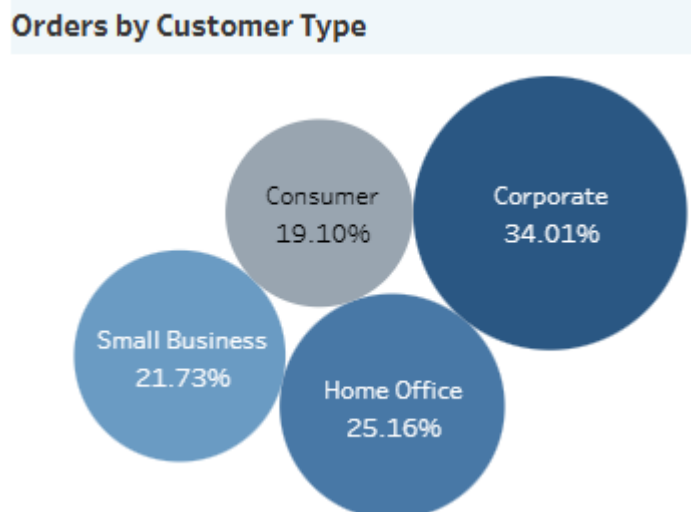
The histogram displays the frequency of orders made by each customer, showing how often individual customers place orders over a given period. Each bar represents a range of order frequencies, and the height of the bar indicates how many customers fall within that range.

➤ Chart 07



The bar chart displays the number of orders categorized by the type of container used for shipping, with product categories represented by different colors in the legend. Each bar represents a specific container type (e.g., small box, large box), and the segments within the bars indicate the distribution of product categories within those containers.

➤ Chart 08



The size of each bubble indicates the number of orders placed by each customer type

Findings

Positive Findings

- The positive correlation between shipping cost and sales suggests that customers are willing to spend more on shipping if it results in higher sales. This supports the potential success of a premium shipping option.
- With 39.4% of orders being critical or high priority, there's likely a demand for faster shipping, which premium shipping could fulfill.
- The histogram shows that larger quantities (30-60) are linked with higher profits, and there are loyal customers who make frequent orders, indicating they might value and be willing to pay for premium shipping.
- The packed bubbles chart shows that most customers are from home office, small business, and corporate sectors, with consumers making up only 19%. Business customers (home office, small business, corporate) might place higher value on faster and reliable shipping due to their operational needs. Premium shipping could be more appealing to these segments, aligning with their requirements for timely and efficient delivery.

Negative Findings

- The average shipping cost is \$5.47, accounting for 21.13% of the total cost. The shipping cost is a significant portion of the total cost. Implementing a premium shipping option would need to offer clear added value to justify any additional expense to customers. Without substantial benefits, the extra cost might not be attractive to customers.
- Premium shipping may not appeal as strongly to business customers who might already have existing shipping preferences or agreements. The lower percentage of consumer customers means that there may be less demand for premium shipping within the current customer base.
- The major order containers are small boxes, small packs, and wrap bags, with office supplies and technology items being purchased more frequently. Premium shipping might be less effective if the packaging and product categories do not align with the needs for faster shipping. For

instance, if small packages or office supplies do not require expedited delivery, customers may not see the value in a premium option.

- 287 customers make more than 5 entries, while 501 customers have 0-5 entries. Although there are frequent buyers, if they do not show a strong preference for faster shipping or are price-sensitive, they may not be willing to pay for premium shipping.

Idea Suitability Conclusion

Based on the provided insights, the premium shipping idea has both potential advantages and notable challenges. The decision should not be made easily that premium shipping is profitable because there are deep challenges that should be faced. However, with careful refinement of the idea this new option can be beneficial.

Recommendations

- Focus on offering premium shipping benefits more on bulk orders. Hr global store is already earning high revenue from bulk orders. By enhancing the premium shipping option for large orders, the service can be positioned as an asset for high-volume customers, ensuring it meets their needs and justifies the added expense.
- Focus more on offering premium shipping through the regular air method. Since regular air is used by a wide range of customers, positioning the premium option within this shipping method will maximize its reach and appeal. This strategy leverages an existing, popular service to introduce premium benefits to a broader customer base.
- Enhance the premium shipping option by including additional services that justify the higher cost, such as guaranteed delivery times, advanced tracking, or exclusive packaging options. Offer a tiered pricing structure where customers can choose from different levels of premium service based on their needs.

- Develop targeted marketing campaigns specifically for the consumer segment to increase awareness and interest in premium shipping. Offer introductory discounts or loyalty rewards to entice this group to try out the premium option.
- Create customized premium shipping solutions that cater to the specific needs of different product categories. For instance, offer expedited shipping for high-value or time-sensitive items and ensure that packaging and shipping methods align with the product's requirements.
- Launch a pilot program for the premium shipping option with a select group of loyal or high-value customers. Collect feedback on their experience and willingness to pay, and use this information to refine and improve the service before a broader rollout.
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