

GoLogistics -Your One Stop Destination

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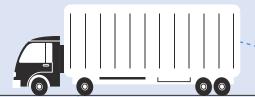
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Introduction and Problem
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Introduction and Problem Statement

Introduction

'GoLogistics,' is a third-party logistics (3PL) company, which handles various supply chain functions, including warehousing, transportation, order fulfilment, etc. GoLogistics' primary role is to process delivery orders from e-commerce clients and manage their deliveries. These companies specialize in optimizing logistics processes, reducing costs, and improving overall efficiency for their clients. As part of this, GoLogistics collaborates with multiple delivery partners who operate within specific regions in particular cities.

Problem Statement

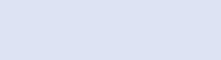
A payment issue with delivery partners has raised financial concerns, leading the finance team to suspend payments due to suspected overpayment. Your role is to analyse payment data, verifying claims of overpayment, identifying the underlying reasons, and proposing solutions that address the concerns of both the operations and finance teams. Our primary objective is to, "Rectify payment discrepancies, ensure equitable compensation for our partners, and foster improved collaboration between teams and vendors to enhance sustained operational effectiveness."



Business Terms



Here are three important terms





TCO

Total Cost of Ownership, or TCO, is the purchase price of an asset plus the costs of operation over its lifetime.



Break-even Analysis Depreciation

A calculation to determine the number of units or amount of revenue required to cover total costs.



The reduction in the value of an asset over time, particularly due to wear and tear.

Calculations and How To



Calculations and How To

PER KG RATE Calculation

I utilized the INDEX(MATCH()) function to retrieve the per kg rate for deliveries based on the branch area from a separate sheet. This allowed for dynamic referencing and ensured accuracy in the rates applied.

PROFIT Calculation

Finally, the profit was calculated by subtracting the total cost from the payout using = PAYOUT - TOTAL_COST

VEHICLE COST Calculation

I inserted an additional column named VEHICLE_COST between PAYOUT and TOTAL_COST to facilitate more detailed cost analysis.

- = FUEL_COST + MAINTENANCE
- + EMI

TYRE COST Calculation

The tyre cost rate is calculated on a per kilometer (km) basis.

- Given Tyre Cost Rate = 0.3 Rs./km
- Formula:
 Tyre Cost = (Distance Covered) X
 (Tyre Cost Rate)

TOTAL COST Calculation

The total cost included vehicle costs and manpower costs.

The formula used was:

= VEHICLE_COST + MANPOWER_COST

SERVICE CHARGE Calculation

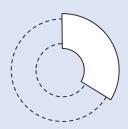
The service charge rate is also calculated on a per kilometer (km) basis.

- Given Service Charge Rate = 1 Rs./km
- Formula: Service Charge = (Distance Covered) X (Service Charge Rate)

Charts and Graphs



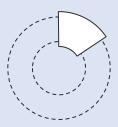
Payment Discrepancies of Business Partners



36%

Underpaid

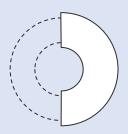
Percentage of Business Partners that are being underpaid



14%

Normal

Percentage of Business Partners that are being paid the correct amount



50%

Overpaid

Percentage of Business Partners that are being overpaid



Possible
Reasons &
Solutions for Issues



Four possible Reasons



Regional Differences

Deliveries in remote or less dense regions can incur higher costs, leading to higher payouts for partners operating in these areas.



Maintenance and Operational Costs

Partners with higher than average maintenance and operational costs could show lower profitability, indicating potential overpayments.



Fixed Cost not proportionate to Delivery Volume

Partners with high fixed costs (e.g., vehicle EMIs, driver salaries) but low delivery volumes could show a lower profit margin, suggesting overpayment when compared to high-volume partners.



Inconsistant measurement of Delivered Weight

Variations in how the delivered weight is measured or recorded can lead to discrepancies.



Four possible Solutions



Regional Differences

Adjust payment models to account for regional cost differences, ensuring fair compensation while controlling overall costs.



Maintenance and Operational Costs

Implement regular vehicle maintenance schedules and negotiate better rates for fuel and other operational expenses.



Fixed Cost not proportionate to Delivery Volume

Re-evaluate fixed cost structures and ensure delivery volumes justify these costs. Consider variable compensation models based on delivery volume.



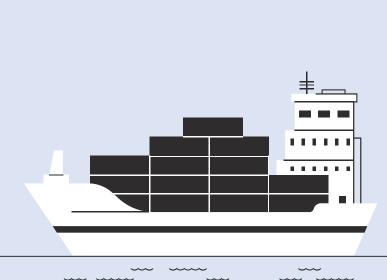
Inconsistant measurement of Delivered Weight

Standardize the process for measuring and recording delivered weight to ensure consistency



"The line between disorder and order lies in logistics"

-Sun Tzu





Key to Grow is to Identify and Correct Mistakes