PROBLEM AREA

Optimizing Last-Mile Delivery Planning for Cost Reduction

Domain & Process Logistics >>> Last-mile

Tool Stack Used SQL + Tableau

PROBLEM

A logistics company's last mile process became inefficient. The cost of delivering package to remote areas exceeded expected amount by 25%.



Fig. A typical logistic process

Last-mile ODA*** delivery cost became very high **Branch** Customer (at remote location) 100% **25% Expected Cost** Overpayment

Implication

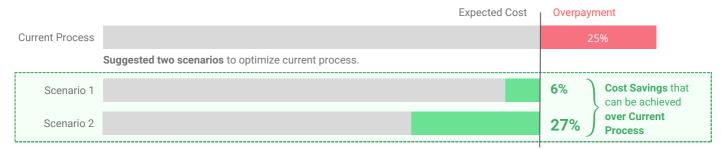
• Overpayment to partners led to a decreases in profitability of the business.

Objectives

- Find why the cost has become high and what was its impact on the payouts of the partners.
- Calculate payouts to be given to the partners for making deliveries in the current month.
- Improve the current process to reduce the cost even further.

APPROACH

Steps	Findings & Impact	Deliverables
Understood the process of delivering consignments to ODA areas	On any given day, a last-mile delivery partner can make only 2 trips.	NA
Checked if partners followed the process established for making deliveries in ODA areas	In ~95% of clusters, partners are violating the process	Dashboard 🖸
Calculated current payouts to be made to the partners	The report was needed by finance team for releasing payouts to the partners	Excel Report
Analyzed the impact of process violation on the payouts to the partners	Payouts to partners was 25% more than expected. That was ₹30 lacs!	Storyboard/Deck
Reduced the cost further by making improvements to the current process	Cost could be further reduced by ~27 % (₹30 lacs)	Storyboard/Deck



100%

GROWTH EXPERIENCED

Understood Last-Mile Delivery Process

Got a sense of understanding on the business model of logistics companies, especially the last-mile process..

Increased SQL Proficiency

Got a good confidence boost in using SQL. Spent more than 4hrs searching "how to do ... in sql."



Storytelling with data

Heard a lot about storytelling before, but using it to create an impact felt extremely satisfying. Would explore it more!

APPENDIX

Terminologies

*Branch: Small warehouse

**Cluster: Big or main warehouse in the state

***ODA: Outskirt Delivery Area (remote location)

Others

Link to SQL queries. ☐

Have a Feedback?

Let's connect! Would love to hear it.

Contact information is in the banner!

