Logistics Boost

Our Client is the Ministry of Transport and they want to improve the logistical efficiency. You can talk about an approach to calculate the demand for roads at any point in time.

CASE TYPE	COMPANY NAME	DIFFICULTY LEVEL
Unconventional	Kearney	★ ★ ★

Logistics Boost

Precision Logistics Upgrade

Case Type	Company Name	Round	Difficulty Level
Unconventional	Kearney	Partner	

Problem Statement

Our Client is the Ministry of Transport and they want to improve the logistical efficiency.

What are the primary objectives and key performance indicators (KPIs) that the Ministry of Transport seeks to achieve in enhancing logistical efficiency

In this case, it's about improving logistical efficiency, particularly for intercity travel, and the goal is to calculate the demand for roads at any given time

To improve efficiency, we can consider the width of the road as one factor, and there may be others such as traffic congestion, road conditions, and the volume of vehicles on the road. These factors have a considerable influence on reducing travel time.

You can talk about an approach to calculate the demand for roads at any point in time.

We can consider different factors in doing so. We can consider the number of vehicles that use the road on a daily, weekly, and monthly basis.

Different types of vehicles that use the road, such as cars, trucks, buses, and motorcycles. They are considering the land use and zoning in the area. Residential areas, commercial centres, and industrial zones will have different traffic patterns and road usage. High-density areas are likely to have higher demand for road infrastructure

Elaborate a bit on the industry

We can focus on identifying the industries that rely heavily on road transport for importing materials, work in progress, or finished goods. We can Select 2-3 industries in the city that are significant regarding the volume of goods transported via roads. Within those industries, we can determine whether the primary mode of transport for these goods is by road. We can also consider factors like population growth, urban development, and changes in transportation preferences

You can be specific to arrive at some numbers?

We can identify 2-3 industries for which a lot of material, whether work in progress or finished material is something that's imported. And then within those industries identifying, whether the mode of transport is via road. Through this, we can have the number for the demand in the city. And if we know they come by trucks, we can probably just divide by the average volume that a truck can carry and get to how many vehicles are coming in through the road

Alright. We can end the case here. Thank you

HERE'S A TIP!

To enhance logistical efficiency for the Ministry of Transport, focus on analyzing key factors such as road width, traffic congestion, and industry demands to accurately gauge road usage and improve infrastructure planning

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CASE FLOW

CASE FACTS

1. Your client is Ministry of transport
2. Roads are the primary medium

Time

- **Road Capacity**
  - Increase no. of lanes
  - Develop alternate route for busy roads.
  - Dedicate lanes for
  - different vehicles
- **Road Quality**
  - Increase in quality of material used
  - Regular maintenance of roads
- **Stoppage Time**
  - Toll booth
  - Government check points
  - Red lights & traffic jams: More traffic policemen to control traffic
- **Total Average Distance**
  - Optimization of road networks
  - Increasing average dist. covered
- **Transit Permits**
  - Reduction in no. of permits required
  - Reduction in time taken to get permits

Stoppage Time

- **No. of toll booths**
  - Optimisation of tool booth network
- **No. of lanes**
  - Increase in no. Of lanes at each tool booth
- **Processing/ Toll collection time**
  - Seperate lanes as per different types of vehicles
  - Mobile toll collection personal