# ‘Top Supply Chain Project’ 2024- Supply & Demand Chain Executive

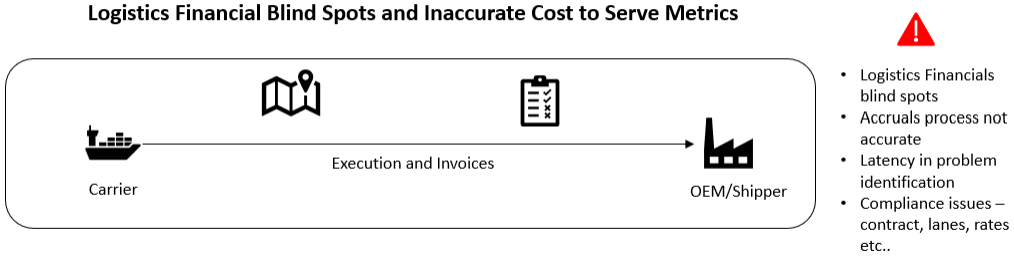
**Customer: Detroit based Global Automotive OEM**

**Use Case: Logistics Financial Blind Spots and Inaccurate Cost to Serve Metrics - International Shipments**

## Challenge:

When shipment milestones are reached in long lead supply chains, carriers submit invoices to the shipper. Shipments can take anywhere between 30 to 120 days, or more, depending on what happens during that shipment journey. In between invoices, shippers lack visibility into the costs they are accruing, leading to challenges in financial forecasting. Having visibility into expenses being accrued and financials associated with a shipment before they are invoiced is extremely critical to the logistics cost to serve process.

This OEM’s logistics organization was experiencing similar challenges and could not understand the financials associated with their long lead supply chain associated shipments. There was a lot of cost variance resulting from their carrier invoices vs. what they had planned for. They ended up doing audits and all accessorial costs had to go through a very manual validation process. For each period, this took 3 to 4 months of effort requiring 20+ dedicated resources.




The OEM also realized that sometimes carrier contracts would be out of sync because carriers were sourcing lanes that were not reflected in the contract, or they were not entering the correct lane information which became evident during the review of the carrier’s execution data.

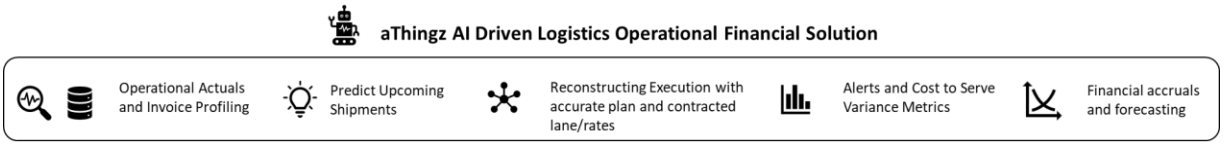
The OEM was struggling to get a grasp of it all. They needed a solution to help them approve these financials accurately so they could plan their ongoing monthly outlooks for those shipments in an appropriate manner and identify all anomalies. Enter aThingz . . .

## Solution

aThingz rapidly activated its Sales, Logistic, Operations Planning and Execution (SLOPE) solution. aThingz started by creating a digital twin of OEM’s carrier execution network to compare OEM’s planned vs. actual execution and identify the root cause of these deviations. Master data and data quality were extremely important in this process and data profiling was done to build an accurate replica of OEM’s carrier network.

When OEM’s shipments are executed, aThingz SLOPE solution intercepts shipment information from OEM’s freight forwarder and carrier partners. SLOPE then uniquely reconstructed the entire shipment execution based on all the master data, planning, and rate information that OEM already has available to them. SLOPE performs reverse network planning to determine things like “Was it actually the contracted

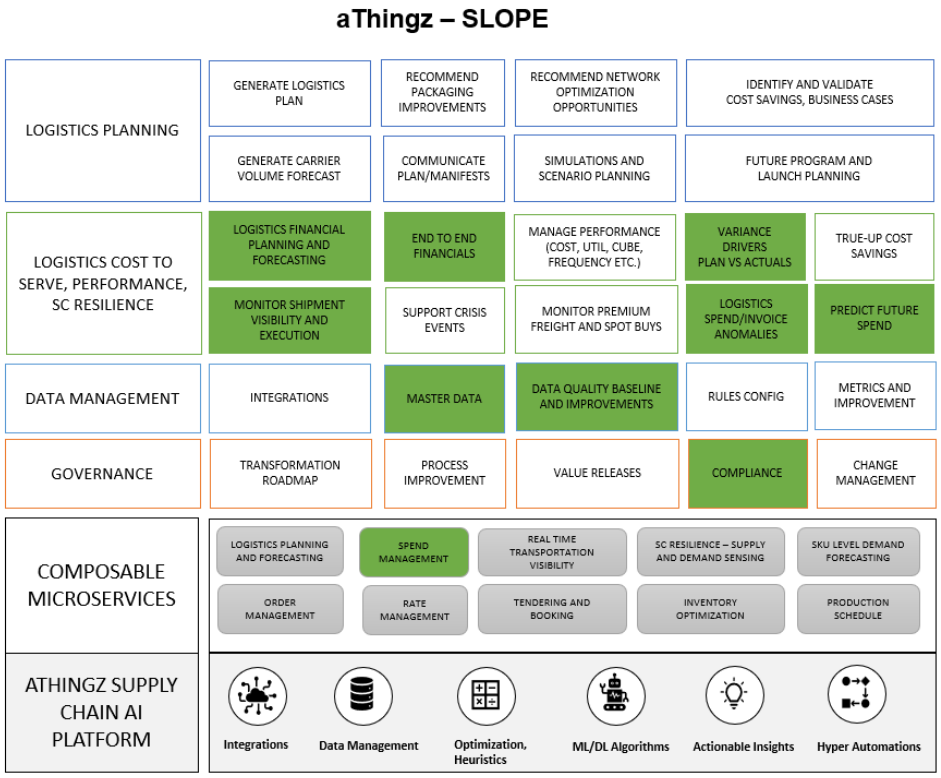
carrier who executed the shipment, did they do any spot buys, did they do something else? If the cost ended up being different than what was planned, did volumes change?" aThingz SLOPE solution uses accurate rates and validate lanes/modes of shipments to see if the freight forwarder/carrier adhered to a shipper's plan all while providing financial estimates with explanations.




SLOPE then takes this to the next level by using AI, and Machine Learning, to predict and validate the number of shipments or containers that will flow through OEM's network for the upcoming month as well as the cost associated. This becomes another input for financial accruals. Machine Learning brings in critical knowledge of what is contained in OEM's contracts to tie out, suggest, and predict what is the route and what should be used for costing.

aThingz SLOPE solution ties the carrier network to appropriate shipper rates, and contracts, so shippers like this OEM can accurately understand what happens during the shipment process and easily explain the operational costs and financials.

The boxes highlighted in green below depict the aThingz solution and microservices that were activated to address the above-mentioned problem statements/challenges



## Results:

- Improvement of financial accuracy by 20% - currently sustained at 95% accuracy
- Continuous improvement and Auto cleansing of overall network data quality and master data – currently sustained at 90% + accuracy
- Automation of several error prone manual efforts – productivity gains to the tune of several 100s of hours per month
- Reduction and Elimination of Logistics Blind Spots
- Improved Carrier Compliance – Actuals and Invoice against Plans and Contracts
- Improved Logistics Cost to Serve Metrics
- Proactive mitigation of out of mode and carrier capacity issues
- Improved cash flow with accurate financial accruals and reporting