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Freight Spend Analytics

Freight spend is a result of several disparate and complex operations. Many companies have tremendous variability in their operational spend as they deal with the following:

1. Multitude of carriers delivering services at different contract terms and prices
2. Diverse geographic regions serviced through different possible routes
3. Varied portfolio of products requiring different modes of transportation
4. Multiple Technological Platforms leading to difficulties in tracking compliance to contracts and realization of contracted savings

Companies often struggle to answer questions such as the following:

- transportation sourcing plans?
- How many “leakages” did we have from rate, volume, and unapproved carrier variances?
- Which carrier was most often overcharging?
- Which loads, which carrier, which lane, which “Ship from” locations provide cost out opportunities?
- What impact do unexpected use of external/non empaneled carrier have on my spend profile?
- Who are our top 5 carriers with the highest contract variance?
- What are the trends/behavioural patterns indicating fraud risk?
- How does actual spend compare to historical and anticipated cost in the designated lane?

Identifying opportunities is not enough
– An active close looped freight spend compliance solution is needed to reduce the leakages and deliver savings.

Potential Benefits

- Red flags and early warning signals for non-compliance with defined matrix
- Intuitive navigation capabilities enables deep diving into the freight data and identify outliers based on various parameters like carrier, route and transport mode.
- Trend indicating the spend w.r.t to time, carrier, route and locations / lot / lanes
- Scorecard based views enable easy comparison of carrier performances based on different factors
- To analyze company stock and location data to suggest optimal routing

Fast, low risk approach

- Rapid deployment in 8 - 10 weeks
- Get a complete turn-key solution in place rapidly
- Integrate and organize data across systems
- Leverage prebuilt analytics and integration technology
- Focused IT and business resource support
- Deep domain experience
- Managed Service as a delivery model

Risk Analytics Approach

Freight spend analytics solution is managed analytics application that helps companies identify overall trend of spend, outliers, and exception to contractual terms.

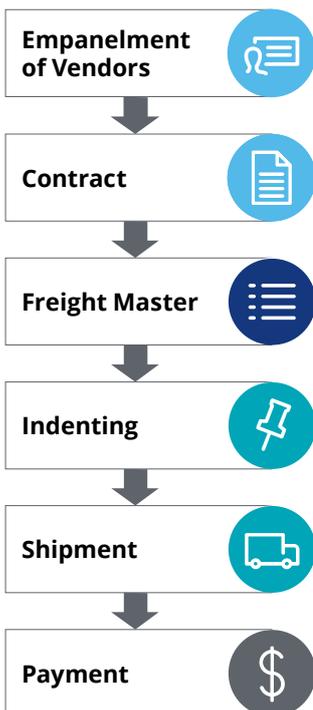
Getting started requires an understanding of the following:

- Detailed process understanding for identification of relevant risk in the process (Financial and operational risk)
- Categorization of risk to define the key objectives of the analytical procedures
- Develop analytical scenario for trends, outlier and exceptions to the processes
- Assessment for potential risk / KPI indicators

Analytical approach

- Analyze all freight routes and transactions across a number of dimensions, relative annualized spend, time series analysis spend by Freight Carrier, and relative spend by Entity by Region and city.
- Identify and quantify recoveries by recalculating & analyzing freight charges based on contractual agreements.
- Identify ways to optimize “less than truckload” shipments for overall effectiveness.
- Provide insights to the management by developing deeper understanding of freight expenses to identify opportunities for improvement with (efficiency and control environment)
- Identify high-risk business areas, products, freight carriers, business lines, and geographies to focus efforts.
- Analyze overall freight expenses to identify anomalies.
- Substantiate findings using facts based analysis and quantification of exposures.
- Assess the effectiveness of business monitoring procedures and processes.
- Shift from stagnant or point-in-time reviews to focused implementation of on-going monitoring.

Process



Risk Category

Reverse Auction (#)	<ul style="list-style-type: none"> • Ineffective Auction due to Collusion/Cartelization, leading to higher lane wise freight rates
KPI Based (#)	<ul style="list-style-type: none"> • Performance based operational risks on Delays, Detention, Shortages etc. • Revenue Leakage risk in Recovery of these additional charges
Master Update (#)	<ul style="list-style-type: none"> • Changes in the fuel price not reflected accurately in the freight master • Freight Master Manually Updated by unauthorized personnel
Efficiency Analysis (#)	<ul style="list-style-type: none"> • Excessive freight payment due to wrong category of truck being used for transport of goods • Inefficient truck utilization leading to revenue leak
Pricing Override (#)	<ul style="list-style-type: none"> • Excessive freight payment by manually updating the freight rate at the shipment level

Risk Scoring

Vendors that are tagged in multiple risk scenarios and are cumulatively in the high risk zone

Data Insights

Lack of a standardized process leading to an incomplete view of the actual freight spend



Freight Analytics - Reporting Dashboards

Dashboard Overview

The overview dashboard provides a dynamic view of data statistics for Freight Spend

- No. of Carriers, Shipments, Routes
- Month Wise Spend Analysis
- Major KPIs like Truck Utilization, Indent Rejections, Delays, etc.
- Incorrect Recoveries and Excess Payments made to Transporters
- Statistics related to Average Weight/ Average Freight Cost per shipment, etc.

Reverse Auction Results - Analysis

Pre-Empanelment Process (Vendor Selection)

The dashboards help analyze the results of the auction process across different routes by highlighting instances where the minimum reduction in Bid Amount has occurred and identifying correlations with auction participation.

Vendor-level behavior in the auctions can be analyzed across routes and instances of collusion and cartelization are highlighted.

Most cost in-efficient vendors and routes having higher per ton per km rate are also highlighted to identify root cause.

Eg: Delay Penalty Recovery Analysis

Vendor KPIs and Payments

The performance of vendors with respect to KPIs such as Delays, Rejections, Shortages, and Damages will be highlighted in the Vendor KPI dashboards.

Excess Payment or Incorrect Recovery of Penalties will be highlighted with respect to Transporters, Lanes, and Supplying Plants.

Eg: Truck Utilization Analysis

Efficiency Analysis

Efficiency Analysis provides details of truck utilization with respect to both Volume and Weight Utilization.

The dashboards help in categorizing truck volume / weight utilization in high, medium and low category and also highlights correlations of truck utilization with particular plant or route across data.

E.g.: Incorrect Vehicle Type Billing Analysis

Need Versus Billed Analysis

These dashboards highlight exceptions like

- Incorrect Vehicle Type billed leading to excess spend
- Same Vehicle having different Tare weights
- Overrides on Freight Master Rates leading to excess spend

A detailed analysis of all these exceptions are provided Lane/Plant and Transporter wise allowing deep dive into the root cause of the problems leading to excess spend



Number of Shipments: 11,283

Shipments mapped with Indent: 3,965

Mapping %: 35.14%

SAP truck capacity < TP truck capa...: 79

Issue % SAP vs TP Veh type: 1.99%

Month of Shipmen...

Weight Utilization...

Volume Utilization...

Transport Name

Vehicle Type from Transportation data

Veh Met Desc SAP	16 MT	21 MT
9 MT	45	1
16 MT		22
20 Tonne Truck		7

Month Trend

Top Plants by Amount

Top Vendors by Amount

Top Lanes by Amount

of Carriers: 34
of Locati...: 24
of Shipme...: 15123
of Routes: 230
Total Freight Char...: 4236280

Top 10 Routes

Top 10 Carriers

Transportation mode - Transactions

Transportation mode - Revenue wise

Estimated Vs Actual (Location Wise)

Cost Split - Month Wise

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