BearingPoint_®

BIG Data for Transport Cost Planning and Accounting

Challenges in Transport Cost Planning

Typical challenges within transport cost planning are:

- What are the suppliers, plants and customers of the future?
- What are the relevant production and sales figures?
- What are the requested delivery times and frequencies?
- How can transport volumes be bundled?
- What tariffs and capacities have to be considered?
- What is the share of transport costs per unit in the future?

Shippers have the goal of forecasting their transport costs based on production plans or sales forecast. Both are created several years or months before the transport itself is executed, so that assumptions and predictive analytics are required. Furthermore, shippers want to break transport costs down to their unit costs so that an allocation to the bill of material is required.

Third-Party Logistics (3PLs), on the other side, have to supply the future demand of the shippers and, therefore, have similar questions on a different level such as where to strengthen the network, where to close locations, where to increase or decrease capacities and where to prolong contracts with subcontractors and carriers.

In addition, shippers and 3PLs want to track their planned transport costs vs. the actual transport costs and want an early warning as to if and why they are running out of the planned transport budget. All together – a complex challenge.

Our approach

LogCOST is able to derive transport costs directly from the production and sales forecast. For both we use forecasts down to SKU-level to derive transport volumes. On the inbound side, the bill of materials, planned production output and relevant suppliers are linked to derive transport volumes. The same method is used for intercompany transports. For the outbound volumes, forecasts per region to derive transport costs for the finished goods are used. LogCOST merges this information to create transports and to assess them with company specific, detailed transport tariffs. As a result, inbound, intercompany and outbound cost on SKU/product level are calculated. The second benefit of LogCOST is to control and to report planned and actual transport costs in one tool. This feature allows companies to identify and to analyze at an early stage if, where and why they are running out of budget.

Plan / Actual data:

- · Planned transport costs: Simulation level Actual transport costs:
- Real data level

Input

- Automated data plausibility check with configurable
- Data can be imported via
- interfaces (e.g. ERP Systems) Erroneous Data is provided as export by the system to the data again

LogCOST combines the core functionalities of the areas input, transport generation, calculation and result...

Transport generation

- All modes of transport Transport volumes are allocated by flexible configurable business rules
- Transport conditions (e.g. heavy cargo, utilization,

Calculation

- Automated distance calculation if no real information is available
- Transport cost calculation with individual customizable parameters (e.g. networks, tariffs)
- real data (actual values)
- Scenario functionality (Evaluation of different planning scenarios)

Results

- Individual, customizable reporting
- Generation of automated
- · Evaluation with graphs and
- · Export functionality (e.a. in

for Plan / Simulation level as well as for real data level and

can be configured flexibly.

Transport Cost Planning/ Accounting

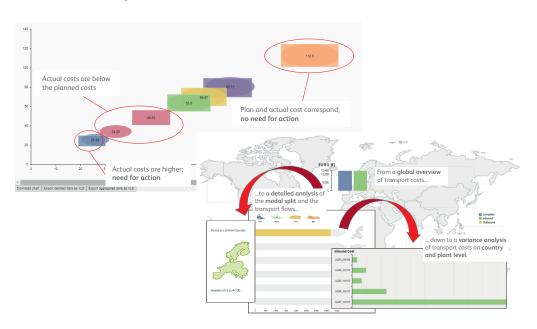
- Transport cost planning and accounting in one tool
- Transport cost planning linked to sales and production forecasts
- Transport cost planning down to SKU-level
- End-to-end transport costs including inbound, intercompany and outbound/ distribution
- Easy comparison of forecast and actual costs
- Customer profitability manaaement
- Transport costs per supplier, plant, lane, region, customer, etc

Why is it new and unique?

- Comparable complex calculation used to take several days due to the InMemory Technology of SAP HANA it is now done in real time
- System architecture allows simulation of transport costs down to SKU-level
- Realistic and complex tariff tables can be processed
- Integrated predictive analytics
- Integrated engine for creating transports
- Integrated distance tables and algorithm
- Different levels of data quality can be represented and merged
- Plan and actual data are stored in one tool without being mixed, enabling companies to plan more accurately and compare planned and actual values at any time
- Powerful reporting module and state-of-the art client application for modern HTML 5-Browsers, based on SAP UI 5
- BearingPoint's LogEC (Logistics Emissions Calculator) is based on the same platform and can
 additionally be activated to calculate your carbon footprint, helping you to find the optimum
 trade-off between costs and emissions of your logistics activities

Use Cases

Changing suppliers, sales and product volumes or new networks and tariffs – there are many factors which have influence on your planned and actual transport costs. Using LogCOST´s "What-If scenarios" enables you to have the most important KPIs at hand and to track their development in different simulations as well as your real data.



About BearingPoint

BearingPoint consultants understand that the world of business changes constantly and that the resulting complexities demand intelligent and adaptive solutions. Our clients, whether in commercial or financial industries or in government, experience real results when they work with us. We combine industry, operational and technology skills with relevant proprietary and other assets in order to tailor solutions for each client's individual challenges. This adaptive approach is at the heart of our culture and has led to long-standing relationships with many of the world's leading companies and organizations. Our 3350 people, together with our global consulting network serve clients in more than 70 countries and engage with them for measurable results and long-lasting success.

www.bearingpoint.com

BIG Data

- Add-on of LogEC allows
 CO2 and transport cost
 planning and accounting in
 one tool
- All modes of transportation
- Global coverage
- Mass data handling and high performance
- What-If scenarios in realtime
- Static and dynamic reports
- Multi-time period
- Predictive analytics
- Interface from and to SAP
- User friendly through modern HTML5 interfaces
- Several operations modes available:
- On premise
- Private cloud
- Cloud

Contact

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