sisense

INFUSE ANALYTICS EVERYWHERE

Transforming Transportation & Logistic Information Management

With Embedded Analytics

Today the Transportation and Logistics (T&L) industry is facing a “dramatic realignment”based on new technology and shifting customer expectations.

In order for T&L organizations to survive and thrive in these turbulent times, they needthe ability to capture, analyze, and utilize data to help optimize operations in keybusiness areas. This, in turn, presents an opportunity for T&L information management solution providersto deliver advanced self-service analytics to their customers so they can make betterdecisions for their own business.With time being a critical factor, the best option for today’s vendors is to embed analytics into their solution that delivers on the customers’ needs.

WHO SHOULD READ IT:

Marketing and product development leaders of T&L information management solutions thatare looking to enhance their offerings, capitalizing on new markets attempting to capturegreater market share.

THIS PAPER COVERS

- Why information management—specifically data analytics—is one of the biggest challenges and opportunities in T&L today
- How the industry could shift in the next decade according to experts
- Four areas of optimization and seven KPIs that customers need analytics on—right now
- What to look for in an embedded analytics solution to ensure customers get the insights they need for their business

Transportation & Logistics:

Managing Complex Demands

Today's transportation and logistics (T&L) companies operate in a highly complex and competitive market. Customers expect top-notch customer service and transparency, while new competitors are rethinking traditional business models.

To stay competitive, T&L organizations must improve operations, distribution, and fleet management to respond to changes in costs, market consolidation, and global competition.

Recently, Logistics Management identified 'improving customer service' and 'improving business processes' as two of the eight biggest challenges facing the logistics industry.

Specifically, T&L organizations need the ability to stay on top of and take advantage of advances in business processes as well as provide transparency in transportation so customers can track the status of their order from order placement through delivery.

A Moment of Upheaval:

The Opportunity for Supply Chain Solutions Providers

In its report, "Shifting Patterns: The Future of the Logistics Industry," PwC T&L experts projected four possible directions the T&L market could take in the next decade:

- **Sharing the PI(e) –** Driven by the 'Physical Internet' (PI), current T&L players increase efficiency and reduce environmental impact through better collaboration and new business models.
- **Start up, shake up –** New players dominate the market with fresh business models by taking advantage of new technologies.
- **Scale matters –** Current players utilize new technology to help streamline operations and increase efficiencies.
- **Complex competition –** Retailers start meeting their own T&L needs, shifting from customers to competitors.

The fact is information management is the most important capability of any supply chain management solution. More specifically, the ability to capture, analyze, and utilize data is the secret weapon for any T&L business to successfully transform itself in the changing marketplace.

PwC reported 90 percent of T&L companies saw data analytics as redefining the industry as a whole. That means businesses are seeking technology that will help them identify actionable business insights.

What does this mean for T&L information management solutions providers?

It offers an incredible opportunity to help customers transform their business—and the industry as a whole—with information management solutions that deliver data analytics capabilities.

Any way you look at it, there's a common theme among all these scenarios: the ability to manage information.

THE REALITY IS THE T&L INDUSTRY IS IN A MOMENT OF UPHEAVAL.

In 2016, PwC reported the industry was undergoing a "dramatic realignment," thanks to shifting technology, changing customer expectations, and more collaborative operating models.

Four Areas of Opportunity and Optimization for T&L

There are four key areas where information management can transform business:

01

BUSINESS PLANNING

Demand planning, supply planning, materials planning, sales,and operations planning, allocation planning and order promising

02

SOURCING AND PROCUREMENT

Strategic sourcing, procurement marketing intelligence, commercial support, supplier management, procurement operations

03

MANUFACTURING OPTIMIZATION

Lead time reduction, quality, productivity, system optimization

04

TRANSPORTATION AND LOGISTICS

Logistics network design and optimization, transportation network optimization, warehouse optimization and delivery center analytics, carrier sourcing analytics, logistics command center

For your customers to take advantage of all (or even just a few) of their myriad optimization opportunities, you need to offer advanced self-service data analytics. What if your current solution doesn't have the advanced analytics your customers need?

The answer is to embed an analytics solution

Transforming Your Solution into "Optimization HQ" with Embedded Analytics

The best way for businesses to take advantage of these opportunities is by using an information management platform flexible enough to capture and analyze data, translating it into actionable insights.

From a solution provider standpoint, the easiest way to transform your offering is to embed self-service analytics, turning your solution into a single-source "optimization headquarters" for any KPI your customers want to improve: iv

- **Total delivered cost -** At the enterprise level, this is one of two KPIs (the other being customer service) that determines a company's overall profitability. This high-level metric includes operating costs, demand variability, supply variability, and inventory. In addition, it's important that customers can also measure total cycle time (the total amount of time it takes for a product to move through the supply chain) to support total delivered cost optimization.
- **Customer service -** Also monitored at the enterprise level, this KPI is comprised of demand variability, supply variability, and performance-to-plan. Best practices suggest measuring customer service with metrics for on-time full deliveries or line-item fill rates since they are the most meaningful aspects of customer service. Ultimately, customers can use both total delivered cost and customer service metrics to help align with their strategic goals.
- **Supply variability -** This KPI measures inventory status against lead times and promise dates. This includes performance metrics for production plans, schedule attainment, asset utilization, capacity utilization, vendor deliveries, and item availability at stocking locations.

On-time Delivery

Goal: Improve service to customers

Objective: Minimize delivery delays

- Demand variability - Demand variability includes metrics for inventory, lead times, process capability adherence and improvement, plan conformance, actual demand versus forecast demand, forecast accuracy, and forecast error.
- Operating costs - All departmental costs are factored into this metric, including distribution, procurement, warehousing, transportation, and manufacturing costs. Using these measurements, it is possible to calculate the cost of goods sold, cost per unit, or cost per kilogram—all useful KPIs relative to total cost.
- Performance-to-plan - This KPI includes measurements on how well the company adheres to procurement, distribution, warehousing, transportation, and manufacturing schedules.
- Inventory - Inventory includes metrics like total inventory, inventory turns, record accuracy, obsolete inventory, working inventory, non-working inventory (which paired with working inventory measures inventory quality), and item availability.

These are just an overview of key KPIs that your customers could capture, measure, and analyze as part of their successful transformation. These metrics serve as important guideposts to improve and optimize operation as necessitated by the shifting marketplace.

Procurement Optimization Dashboard

Goal: Identify opportunities across all departments, procurement is involved to increase savings

Objective: Identify savings opportunities, increase contract spend where a savings opportunity exists, consolidate suppliers

Warehouse Operations Dashboard

Goal: Improve warehouse eÿciencies

Objective: Collect data for all warehouse logistics (distance between areas, manpower, shifts, orders per day, peak times, status of product on shelves, etc.) to “nd ways to improve operations and order completions

Choosing the Right Embedded Analytics Solution for Your Offering

When choosing an embedded analytics solution, consider these seven criteria:

1. High embeddability.

It's crucial to choose a solution developed with embeddability in mind. This can include API-"first development and easy white labeling to decrease your time-to-market.

2. Seamless integration.

Choose a solution that will integrate seamlessly with your platform. Carefully consider any integration issues that arise during the selection process—they can not only increase your time to market but also pose problems and create limitations as your offering evolves.

3. Data unification.

The right solution will handle data from different areas of operation and unify any data silos. This is crucial for customers to be able to identify new optimization insights from multiple areas of the business.

4. Extensibility.

This is especially important not only because your offering will evolve over time but also because the T&L industry itself is shifting.

5. Security.

Choose a solution that offers built-in security, saving you and your customers time with capabilities such as limiting data access according to role, group, or department.

6. Value focused.

Make sure your embedded analytics solution can deliver metrics on the KPIs discussed earlier that relate to the functional area(s) of your offering.

7. Self-service enabled.

Critical to their success, customers need self-service analytics with features like intuitive user dashboards, data with drill-down capabilities, and built-in reporting.

Conclusion

The shifting T&L industry provides you—and your customers—with an opportunity to reimagine and/or creating new opportunities to grab greater market share. To harness this potential, integrate advanced self-service embedded analytics into your offering. This gives customers the ability to capture KPI metrics and uncover optimization insights to transform their business while you capitalize on delivering greater value to your market.

About Sisense

Driven by the idea that data analytics could be made fast, easy, and fluent, Sisense is dedicated to radically improving data analytics capabilities through innovation. After perfecting a disruptive In-Chip data engine and pairing it with a proprietary Single-Stack™ architecture, Sisense wowed the market with an instantly deployable, end-to-end BI solution powerful enough to tackle big and disparate datasets but simple enough to be used by almost anyone. Recently named a Visionary BI vendor by Gartner, Sisense continues to lead the market with advanced technologies and innovations to enhance the customers' experience and simplify BI for all users across the value chain.

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