

## Case Study

# Product Development, Application Management, and IT Operations Management Enable a Logistics Brokerage Company to Handle 2.5X More Shipments



## Customer Overview

### Customer

A logistics brokerage company

### Profile

The client provides logistics solutions to freight forwarders and customers in a variety of industries across the United States

### Industry

Transportation

### Services

Product Engineering, Application Development, BI, and IT Operations Management

## Business Need

The logistics and transportation solution provider works to connect shippers with carriers while improving customer and carrier experience through collaboration, transparency, and technology. For the order-to-cash shipment lifecycle, the client used various systems to manually manage business operations across shipment booking, capacity procurement, customer engagement, carrier and capacity management, freight tracking, and accounting.

Dependence on a legacy technology platform restricted visibility into different business processes, making it difficult for users to share data across isolated systems in real time. To overcome these challenges, the transportation client sought a centralized system to help automate manual processes, speed up integration between siloed systems, broaden visibility, increase operational efficiency, and strengthen its competitive edge.

The client approached Synoptek for the application development and project engineering project. It also wanted Synoptek to manage IT operations end-to-end and implement, manage, deliver, and support IT services to meet the business needs. Additionally, the client requested Synoptek update and enhance the new centralized system to meet evolving internal user requirements and sustain market uncertainties.

## Solution and Approach

To meet the client's requirement for a centralized business solution, Synoptek began the engagement by conducting a detailed product discovery of existing business processes. We also carried out a thorough IT process assessment as well as reviewed their IT organization to understand their challenges and goals.

Based on the assessment, we laid out a product blueprint to develop a web-based Transport Management System (TMS) that combines all operations in one system. This system can help improve operations, drive business, and provide better customer service.

## Application Development and Product Engineering

Via integrated workflow management, we enabled the integration of significant applications across CRM, carriers, capacity and shipment management, accounting, user and document management, performance, and customer management:

### Customer Management System

- Integrated CRM processes for seamless customer onboarding, streamlined tasks to align sales and service activities, automated communication system for insights into real-time shipments, and enabled sales teams to get deeper visibility into the customer funnel.

### Carrier Management System

- Integrated carrier relationship management and carrier onboarding for better business visibility and optimization and enabled smart dedicated capacity management through predictive allocation and historical load pattern analysis.

### Rate Management and Analytics

- Developed a state-of-the-art rate management platform to enable a realistic and predictive rate calculation system using data science and advanced analytics.

### Shipment Management System

- Automated incident creation, assignment, and mitigation to streamline incident and issue management.
- Updated the shipment tracking system to provide real-time truck location, route planning, visibility, and collaborative display on the map.

### Accounting

- Integrated the accounting system including AR, AP, billing, invoice, and cash management and developed an intuitive cash application to enhance the efficiency of payment processing for customers.

### User and Document Management

- Built a document management and repository system for work orders, bills of materials, and invoices.

### Mobile App for Workflow Management

- Designed crisp shipment management workflows for mobile interface, including dedicated flows for LTL (Less-than-Truckload) and Drayage transportation scenarios, ensuring smooth handling of diverse freight requirements.

### Performance Management

- Built individual, team, and organization performance dashboards, incentive reports, and activity and daily performance reports with calibration.
- Built executive dashboards for deeper business visibility.

### Customer Portal

- Built a dedicated customer portal for easy access to shipment status and billing documents.
- Enabled easy permission controls and analytics for activities performed by the customer.

## BI and Data Warehouse Management

With the TMS solution generating massive amounts of data that needed to be analyzed, Synoptek provided an array of BI and data warehouse services to give the client insight into various metrics and make evidence-based business decisions to improve performance. As part of this engagement, we generated 40+ reports for carrier reps, sales reps, managers, and executives.

## SharePoint and RPA

Synoptek also supported the client's SharePoint instance, setting up and maintaining the Intranet and the internal employee portal. We also enabled Robotic Process Automation of many internal activities, including customer communication, POD delivery, portal updates, invoice collection, and cash management.

## Managed Application Support

To ensure high uptime, availability, and security and ensure the TMS application scales as business needs grow, Synoptek also provided a comprehensive suite of advisory-led Managed Application Support Services.

### Routine System Administration

- Conducted routine administration for version/release management, service updates, security reviews, health checks, etc.

### Data Management

- Managed and optimized data across imports/exports, data cleansing, archiving, storage, and retention.

### Application Monitoring

- Evaluated and assessed functionality, user sessions, batch jobs, and database and integrations.

### Helpdesk Support

- Set up and managed a 24/7 helpdesk to address user queries and issues.

### Environment Management

- Monitored and managed the TMS app's underlying dev/test/stage/prod environment, carrying out necessary SQL/query insights and tracking health metrics.

### Governance and Change Management

- Set up robust procedures to help users transition seamlessly to the new application environment.

### Infrastructure Management

- Managed and monitored hardware, software, and networks, avoiding downtime and improving productivity and efficiency.

## Business Benefits

The implementation of the centralized Transport Management System solution has created a tremendous impact on the client's business. Not only has the solution helped boost revenue, but it has also improved productivity by over 110%, with the ability to generate and support more business at 50% of the team size. At the same time, we have helped grow the brokerage firm's customer base and empowered customers to recognize the firm as a technology leader in the brokerage logistics industry.

As soon as the solution was implemented, over 85 users representing five teams were switched over from the legacy application to the new platform in two offices over a weekend. In due course, Synoptek helped terminate 60% of licenses for the legacy system in 45 days and 90% in 90 days.

Today, the entire business is dependent on this solution which has helped the client in:

- Integrating 21 different third-party systems with a single web application and improving overall business efficiency.
- Ensuring high application performance, functionality, and uptime via comprehensive application management support.
- Automating the tracking of 80% of trucks – eliminating the need for the tracking team to call each driver multiple times to check status and ETA.
- Optimizing its entire IT infrastructure stability and performance, ensuring IT operations run continuously and securely.
- Automating 60% of the shipment-building process while providing statuses and POD to over 65% of the shipments without human involvement.
- Ensuring increased service availability and optimal performance, leading to better business efficiency.
- Automating 80-85% of the shipment cycle process, increasing efficiency and saving time.
- Cutting down on manual efforts and automation of day-to-day activities, allowing employees to drive all their focus on customer service, not worry about the underlying technology.
- Processing 250% more daily transactions than a year before and eliminating unnecessary stress and time spent during the booking process.
- Easily tracking freight on the road and receive alerts to transit exceptions or unforeseen delays from one location.
- Leveraging BI dashboards to manage business changes due to micro and macro-economic conditions successfully.
- Getting end-to-end visibility into rep and carrier performance that helps ensure timely shipment to customers while saving time manually calculating commissions and focusing on more business-critical tasks.
- Allowing customers to get real-time insight into the status of their shipments through the customer portal.

The TMS solution is designed, developed, and supported to ensure it can operate 24/7—even if the support team is not operating 24/7. Today, five teams are using the system concurrently: sales, service, operations, tracking and customer support, and billing and accounting.



**250% more daily**  
transaction processing



**80% of truck**  
tracking automated



**99.99%**  
application uptime



**60% of the**  
shipment building  
process automated



**80-85% of the**  
shipment cycle process  
automated

## Appendix

We enabled a gamut of new technology features (listed below) to help enhance business benefits such as streamlining operations, improving visibility, and elevating customer experience through optimization.

- Business coupled system workflows
- Exception management modules for real-time resolution of shipment anomalies
- Automated tracking board and exception management
- Real-time rate management and quoting
- Live online shipment tracking
- Automatic proof of delivery (POD) reporting
- Automatic detention alerts
- Third-party carrier tracking
- Route evaluation and geofencing
- GPS package and asset tracking
- Customer shipment activity reports
- Delivery performance reports
- Invoice automation
- Automated payment processing and AR automation
- Implementation of a tracking board
- User and carrier profiling
- Tier segmentation
- Freight tracking
- Heat map visibility
- Inbuilt report generation and management system.

Here's what the CIO had to say:



I'd like to thank the entire team at Synoptek for their persistent, consistent, and tireless efforts in making the project a great success. The system developed and supported by Synoptek has been one of the best-performing software system projects I have been associated with, and the platform continues to expand, with new modules and new integrations constantly being added. Synoptek's teamwork is what has made all this possible.

The efforts the team has put in via long hours and sleepless nights have been visible in their quick responses and thoroughness in checking little details, which has helped us in quickly solving problems and maintaining the integrity of the system. Their continued excitement in working and dependable service is the reason why the project has been such a huge success. Thanks to Synoptek, our customer base has grown and our customers are finally recognizing us as a technology leader in the brokerage logistics industry.

The cash application feature that was developed on top of TMS has helped us reduce the Accounts Receivable invoicing workload by 45%. Thanks to Synoptek, we have been able to process over 46,000 shipments, support over 21 million miles of truck driving, and service 400+ customers using over 5000 carriers. Overall, this has been a very successful partnership and very effective business relationship; it has given us a platform and the IP for an integrated business operation that will allow us to be nimble, agile, and competitive in the rapidly evolving Logistics industry and propel us to the forefront of technology evolution.

## About Synoptek

Synoptek delivers accelerated business results through advisory-led, transformative full-life-cycle systems integration and managed services. We partner with organizations worldwide to help them navigate the ever-changing business and technology landscape, build solid foundations for their business, and achieve their business goals.