



# Application Development and Product Engineering Services Enable a Logistics Brokerage Firm to Consolidate Processes and Build Automation

## CASE STUDY

**Customer:** A logistics brokerage company

**Industry:** Logistics and Supply Chain

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

**Services:** Application Development, Product Engineering, BI and Datawarehouse

## Business Need

The logistics solution provider works towards connecting shippers with carriers, while improving customer and carrier experience through a combination of collaboration, transparency, and technology. However, the client was using various systems to manage their business operations such as shipment process management, customer management, carrier management, freight tracking, and accounting. Also, most of the day-to-day tasks were carried out manually which was not only time-consuming but also prone to error.

The client lacked visibility across different business processes and had a difficult time in sharing data across isolated systems. They needed a centralized system that could help automate manual processes, speed up integrations, broaden visibility, and strengthen competitive edge. The client approached Synoptek for the Application Development and Project Engineering project.

## Solution and Approach

*In order to meet the client's requirement of a centralized business solution, Synoptek began the engagement by carrying out a detailed study of existing business processes. Based on the assessment, we decided to develop a web-based Transport Management System (TMS) combining all their operations in one system that can overall help them improve operations, drive business, and provide better customer service.*

*Our initial approach was simple: to touch upon the basics for development of the solution that includes: Shipment Management, Customer Management, Carrier and Capacity Management, Freight Tracking, and Accounting. But due to changing industry demands and new requirements, we pivoted multiple times in the first phase.*

## Application Development and Product Engineering

The integrated Workflow Management and ERP system integrates 21 major applications across CRM, Carrier and Shipment Management, Accounting, User and Document Management, Performance, and Customer Management

- CRM – including Customer Database
- Carrier Management System
  - Carrier Database and Carrier onboarding
  - Carrier Contract Management and Repository
  - Carrier Compliance Application including Carrier Safety & Insurance Records
- Shipment Management System
  - Event Management
  - Shipment tracking system to provide real-time truck location
  - Truck Match system including available truck entry
  - Map Display with Truck Route mileage calculation
  - Historical Lane Pricing system
  - Accessorial and Value Add Services billing
  - ZIP and Postal Code Database – includes location and time zone
- Accounting
  - Integrated Accounting System – includes AR, AP, Billing Management, Invoice Management, Cash Management
- User and Document Management
  - Document Management & Repository System including Workorder, BOL, Invoices
  - User Admin database – includes role-based permissions
  - Mobile App for Workflow Management
  - Automated communication system – includes e-mail notification, SMS communication
  - Electronic Data Interchange (EDI) for Logistics Industry
- Performance Management
  - Individual, team and organization performance dashboards
  - Individual incentive reports
- Customer Management
  - Customer Portal to provide shipment status and billing documents to customers

We enabled a gamut of new technology features including

- Business coupled system workflows
- 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

## BI and Data Warehouse

With the TMS solution generating massive amounts of data, that needed to be analyzed, Synoptek also provided an array of BI and Data Warehouse Services to enable the client to get insight into various metrics and make evidence-based business decisions to improve performance. As part of this engagement, we:

- Generated around 25 reports for carrier reps, sales reps, managers, and executives
- Identified where the data was coming from and developed packages to stage the data in the data warehouse
- Collated data from all data model tables, defined relationships and calculated measures and business logic for all reports
- Developed Power BI reports using the desktop version and published them on Power BI service

The TMS solution is designed, developed, and supported to ensure it can operate 24x7 - even if the support team is not operating round the clock. When the COVID-19 pandemic struck, the solution helped the client in ensuring employees could work remotely – without any issue.

Today, the system is being used concurrently by five teams including Sales, Service, Operations, Tracking & Customer Support, and Billing & Accounting. 80% of the client's trucks are tracked automatically – eliminating the need for tracking team to call each driver multiple times to check and status and ETA.

The solution is also helping the client build over 60% of shipments automatically, while providing statuses and POD to over 65% of the shipment - without any human involvement.

*Experienced Synoptek team with effective communication, timely statuses and documented issue tracking has given us ability to manage re-design and changes initial requirements. This has been at the core of success of the entire project and program. The Cash Application feature that was developed on top of TMS has helped us reduce Accounts Receivable invoicing workload by 45%. Thanks to Synoptek, we have been able to process over 46,000 shipments, supported over 21 million miles of truck driving and serviced 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 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.*

~CIO

## Business Benefits

The implementation of the centralized Transport Management System solution has created tremendous impact on the client's business. Not only has the solution helped in boosting revenue; it has resulted in improving productivity by over 110% with the ability to generate and support more business at 50% of the team size.

As soon as the solution was implemented, over 85 users representing 5 teams were switched over from legacy application to the new platform in two different offices over a weekend. All legacy information was live in the system. 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
- 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
- Eliminating unnecessary stress and time spent during the booking process with latest technology implementation
- Easily tracking freight that is on the road and receiving alerts to any transit exceptions or unforeseen delays from one location.
- Having access to BI dashboards that provide real-time data to management to keep an eye on day-to-day operations; the client is able to successfully manage business changes due to micro and macro-economic conditions – just due to the visibility they are able to achieve using various dashboards and the analytics platform
- Getting end-to-end visibility into rep and carrier performance that helps ensure timely shipment to customers while saving time on manually calculating commissions and focusing on tasks that are more business-critical

## About Synoptek

Synoptek is a global systems integrator and managed IT services provider, offering comprehensive IT management and consultancy services to organizations worldwide. The company works in partnership with clients of all sizes – from mid-market to Fortune 100, and for over two decades, its focus has been to provide maximum business value to its clients, by enabling them to grow their businesses, manage risk and compliance, and increase their competitive position. Synoptek is committed to delivering improved business results and unmatched service to every client, every time.

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