

Automating EDI Workflows for a 4PL Powerhouse

Innovecs team developed a secure, automated EDI integration platform for a 4PL provider to streamline document exchange, improve operational visibility, and reduce errors. Enabled rapid scaling and support for diverse partner requirements.



Industry

Supply Chain

Location

USA

Project Duration

2 months project

Cooperation Model

Team Extention

Team Composition

Backend Engineers, Data Engineer, Solution Architect

Expertise Delivered

Backend Development, Data, Integration, Project Management

Technologies & Tools Used

AZURE SERVICE BUS

AZURE SQL SERVER

JAVA

PYTHON

About Customer

The client is a 4PL provider operating in the US, offering comprehensive warehousing, fulfillment, and distribution services. With a strong focus on supply chain efficiency, the company supports a wide range of industries, handling high volumes of inventory and time-sensitive shipments. Their operations rely on seamless data exchange between internal warehouse systems and client ERP platforms to ensure fast, accurate, and cost-effective service delivery.

Project Summary

The client faced growing challenges in managing their EDI workflows, struggling with inconsistent document processing, delayed responses, and limited visibility across the system. Our team developed and deployed a secure, automated EDI integration platform tailored to their operations. The solution not only enabled seamless processing of inbound and outbound documents but also ensured traceability, reduced manual intervention, and support costs. As a result, the client significantly improved data accuracy and strengthened relationships with business partners.

Challenge

Client's team struggled with managing complex EDI workflows, including the reliable processing of inbound documents like orders and receipts, the timely generation of outbound files, and the lack of visibility into what's happening at each step. Failures in EDI transmission or parsing often go unnoticed until they cause operational delays, customer dissatisfaction, and escalation. Manual reprocessing can be slow and error-prone.

Solution

- ▶ Delivered a fully automated EDI integration platform that processes inbound documents to create business records such as receipts or orders, and generates outbound EDI files when specific events occur, such as order completion.
- ▶ Ensured the platform supports both AS2 and SFTP protocols for secure document exchange, offers full visibility into processing status, and allows users to view both raw and parsed EDI data.
- ▶ Enhanced the platform with tools for reprocessing failed inbound files and regenerating outbound documents as needed.
- ▶ Enabled automated alert sending in case of transmission or processing failures.

Technologies Used

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Results



Accurate and timely document exchange,

reducing delays and disruptions.



Reduced operational costs

thanks to lowered manual intervention and support effort.



Fewer EDI-related errors and failures,

minimizing customer dissatisfaction.



Improved customers relationships,

driven by greater confidence in the reliability of their digital supply chain.

Business Value

» **Automated Document Exchange:**

Automatically processes inbound and outbound documents, ensuring accurate and timely communication with customers.

» **Full Process Visibility:**

Provides end-to-end transparency into EDI workflows, enabling real-time monitoring, faster issue detection, and operational control.

» **Secure and Scalable Architecture:**

Supports AS2 and SFTP protocols and adapts to new client-specific EDI formats, making it suitable for growing and evolving partner ecosystems.

» **Operational Resilience:**

Sends automated alerts on failures and ensures consistent performance through stable data integration, minimizing downtime and support load.

About Innovecs Supply Chain

Innovecs Supply Chain, a sub-brand of Innovecs, helps businesses to enhance their supply chain operations through integration, AI-driven innovations, mobile/web development, data management, cloud solutions, EDI, and other services. With a presence in the US, UK, EU, Israel, Australia, and Ukraine, it is recognized in the IAOP's Global Outsourcing 100, driving value and efficiency in a competitive market.



Quick facts

13

Years of cross-industry experience

25

Delivery locations worldwide

650+

Highly skilled developers, engineers, architects

150+

Happy clients

92%

NPS score

127%

Business growth over the past three years

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