

FedEx

FedEx InSight lets FedEx customers track inbound, outbound, and third-party packages via FedEx.com. Relying on data-matching technology to connect information from shipping receipts with FedEx InSight registration records, the service has been linked to significant increases in use of FedEx services by some of their largest customers, even as it builds customer loyalty. FedEx chose Trillium Software[®] to support FedEx InSight with the fastest, most reliable data matching, focusing on intelligent data investigation, matching precision, and subsecond real-time processing.



Project Type

Web Interface for Real-Time Package Tracking

Industry

Logistics and Transportation

Challenges

Precision Matching
Processing Speed
Time to Launch

Cost Savings All Day Long

How does FedEx make the case for IT spending? Cost savings is a large component. In particular, an innovative Web-based customer service, called FedEx InSight, has repeatedly been demonstrated to align with significant increases in the use of FedEx services by some of the company's most valuable customers.

With FedEx InSight, business customers can go online for a full view of all outgoing, incoming, and third-party shipments. Customers actually prefer interacting with FedEx InSight over other channels. In fact, they like the new service so much that they forego lower rates from competitors to have access to the FedEx InSight tracking service.

Cutting costs at the same time that it increases customer loyalty, InSight is rightly considered by FedEx to be a milestone technology. The innovative Web service lets business customers instantly access all of their current FedEx cargo information. They can tailor views and drill down into freight information, including shipping date, weight, contents, expected delivery date, and related shipments. Customers can even opt for email notifications of in-transit events, such as attempted deliveries and delays at customs and elsewhere.

The Perfect Match

InSight works because FedEx can link shipper and receiver data on shipping bills with entries in a database of registered InSight customers. The linking software

FedEx chose to underlie InSight had to be superior in terms of its ability to recognize, interpret, and match customer name and address information. Fast processing speed and flexibility were also top criteria. After a broad and thorough evaluation of vendors in the data quality market, the delivery giant chose Trillium Software[®].

The real matching challenge was not with the records for outgoing shippers, who could be easily identified by their account number. Linking shipment recipients to customers in the InSight database was far more difficult. It relied on name and address information, which is notoriously fraught with errors, omissions, and other anomalies—especially when entered by individual shippers around the globe.

“The point of pain was being able to match on addresses because the reality is that what we get on the FedEx airbills is not very standardized,” explains Andy Lesser, Senior Technical Analyst at FedEx.

But FedEx airbills also had another problem: too much information. “For the purposes of matching customers to shipments, the airbills contain a lot of garbage,” says Lesser. Information such as parts numbers, stock keeping units, signature requirements, shipping contents, delivery instructions, country of manufacture, and more, obscures the name and address data, making it difficult to interpret that free-form text and correctly identify name and address information.

Success Story: FedEx**A Deeper Look at Data**

No matching software was going to be successful for FedEx airbills without some intelligent interpretation of free-form text and standardization. This was a point Trillium Software® demonstrated to FedEx during the sales cycle. It explained how matching is more accurate when it acts on more complete and standardized data.

The Trillium Software System® first investigates data entries word by word—not just line by line—in order to understand maximum data content. Valid content is often “hidden” when it is entered in the wrong field or free-form text fields. The Trillium Software System reveals this hidden data by identifying individual data elements in each shipping bill, interpreting the real meaning of each element, and ensuring that all valid data elements are part of the matching equation. The software then standardizes content into a consistent format.

Beyond Address Correction

FedEx also chose the Trillium Software System for its Precision Matching capabilities, which would lie at the heart of InSight. The shipping giant knew it needed more than address verification software that would only confirm that an address was internally consistent and correct according to postal authorities.

In the logistics industry, accuracy is everything; FedEx needed to reliably identify customers based on a variety of data elements, including business names, office suite numbers, and other address elements. Its chosen data quality solution had to be able to identify and distinguish between, for example, companies on different floors of an office tower or divisions within a geographically dispersed corporate campus. It had to be able to link customers based on detailed analyses of abbreviations, nicknames, synonyms, personal names, street addresses, and other information.

The Trillium Software System had all of these capabilities, in addition to usability

features which allowed FedEx to quickly and iteratively tune and test the matching process until the match results met the company’s stringent requirements.

Split-Second Processing

Speed was another factor in FedEx’s decision. In order to efficiently handle the volume of FedEx’s daily transactions, the software had to be able to identify and resolve matches at subsecond rates. Trillium Software was the only vendor that could demonstrate this capability, opening up the Trillium Software System to process millions of records per day—as many as 500,000 records per hour.

Surgical Precision

“That we could customize [business] rules and surgically make changes was a big, big winning point,” says Lesser. The Trillium Software System let FedEx target specific data issues and quickly modify rules to resolve them. The business rules, written in plain text, were understandable, traceable, and repeatable. Because Lesser and his team could see what the rules were and how they worked, they were more confident about the matching process. “There’s a certain amount of confidence you have to have in the product,” Lesser says. “You have to trust in what it’s doing.”

Rapid Roll-Out

From the time it purchased Trillium Software, FedEx took only about four months to fully implement its solution. Trillium Software professional services helped Lesser get started. After just three days, he was ready to work on his own: “Once I understood it, it was just a matter of applying that knowledge,” he stated.

Still, Lesser also gives Trillium Software Customer Support a lot of credit: “The Trillium Software tech support is just terrific. Most of my support is done through email and someone always gets back to me quickly. If I call, there’s no kind of triage. I tell them what language I speak, and then I get to talk to someone.”

**Award-Winning InSight**

FedEx has won several e-commerce awards for its innovation, and FedEx customers rave about their experience with InSight. In fact, FedEx has discovered that customers will forego lower shipping rates from a competitor because they prize the ability to so easily track their incoming and outgoing shipments with InSight.

FedEx has also realized concrete gains from its investment. Repeatedly, implementation of InSight has been shown to align with significant increases in use of FedEx services by some of the company’s largest customers.

International Expansion

Based on the success of InSight for US and Canadian customers, FedEx plans to expand the service to include other countries. It can quickly extend the Trillium Software System to support these new initiatives by simply adding global modules. With geographic validation for every country on the globe and in-depth support for more than 35 countries in Europe, Asia-Pacific, and the Americas, the Trillium Software System can keep up with FedEx InSight, wherever it goes.

About Trillium Software®

Dedicated to increasing the value of information assets across organizations, Trillium Software®, a division of Harte-Hanks, is the most trusted provider of technologies for continuous global data analysis, cleansing, enhancement, and monitoring. Today, many of the world’s leading companies use the Trillium Software System® and Trillium Software Discovery to help build and augment data-dependent business systems that sustain financial growth in demanding business environments.