



An Xcellent Way of Saving Millions in One Year

High quality data on thousands of trucks enables leading time-definite truckload service provider to dramatically cut gas costs and truck idle time to become greener

FAST FACTS

BUSINESS INITIATIVES

- Reduce gas costs and increase operating margins
- Provide reliable data for accurate decision making

TECHNOLOGY STRATEGY

Implemented the Informatica Platform, in this instance consisting of Informatica Data Quality®, the Informatica Identity Match Option, and Informatica Data Explorer™ to create a single, unified development environment for trusted, high quality data. The Informatica Data Quality solution standardizes address components relating to trucks, such as common abbreviations, common formats, and consistent usage across records and tables. The Informatica Data Quality Identity Match Option prebuilt rules enable U.S. Xpress to increase data accuracy and accelerate implementation. Meanwhile Informatica Data Explorer investigates, discovers, and maps any data record from any source, for reliable, trusted data.

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— Tim Leonard, vice president for information technology, U.S. Xpress Enterprises, Inc.

Consider the U.S. Xpress Enterprises’ Dilemma

The truck stops here. In the case of U.S. Xpress Enterprises, Inc. (U.S. Xpress), it was certainly the case. However, the company had no means of determining where its trucks had stopped, or for how long. With thousands of trucks on the highways, that was an immense problem. Most importantly, in the low-margin, gas-hungry truckload services business, it meant money was wasted on engine idle time, trucks weren’t being used as efficiently as possible, and customer service was suffering. The heart of the problem was data quality. U.S. Xpress had a reliable in-cab system to tell them everything about truck movements—from when a cab braked, to when it stopped, engine errors, and location. The data relating to vehicle location wasn’t clean though and couldn’t be trusted for decision making. And because of that, it was impossible to bring the truck idle time down and operating margins up.

BENEFITS

- Saved millions annually in truck idle time using unified, reusable data quality environment
- Delivered return on investment in only three months
- Saved millions using data profiling to enhance truck maintenance system data quality
- Deployed in four and a half months with team who had previously been unfamiliar with Informatica data quality solutions
- Anticipates new enterprise data warehouse may save between \$9 million and \$20 million over two years
- Reduced emissions and supported the organization's environmental commitments
- Provided a comprehensive, accurate picture of the content, quality, and structure of its enterprise data
- Solved business problems faster by empowering the business to participate in data quality processes
- Enabled business analysts and data stewards to see, influence, and react to the impact of data quality on their applications and processes

NUTS AND BOLTS

- Solution: Data quality
- Product: Informatica Data Quality, Informatica Data Quality Identity Match Option, and Informatica Data Explorer
- Sources: DriverTech in-cab reporting system
- Target: Data warehouse

By standardizing on Informatica, U.S. Xpress has introduced a comprehensive system for managing truck idle time. Location information is now standardized, allowing teams to immediately identify where a truck is located, where it's travelling to and from, and the amount of idle time. Deployed in only four and a half months by individuals who were previously unfamiliar with data quality management, the solution has significantly reduced the percentage of time U.S. Xpress' thousands of trucks stand idle, saving the company millions every year—equivalent to a return on investment in only three months. Proving the reuse flexibility of the data quality solution, it has also saved the company millions annually as part of its fleet maintenance system. And if that wasn't enough, an enterprise data warehouse which is currently in the pipeline for development using Informatica, may potentially save the company up to \$20 million over two years.

Deployed Informatica In Just Four Months

You sometimes have to dig below the surface to find any tangible benefit of an IT project. A bit of money saved here; some improvement in productivity there; perhaps a slightly improved customer service experience. Tim Leonard has no such problem. As the vice president for information technology at U.S. Xpress Enterprises, Inc., he can point to some remarkable achievements at the company. "We deployed Informatica technology over a period of four and a half months, to help tackle our truck downtime," he says. "Almost immediately afterwards, we cut the percentage of time our trucks stand idle from the high eighties, to just over 50 percent. That is saving the company millions every year—equivalent to a return on investment in only three months. To say the U.S. Xpress board are ecstatic would underestimate how well the project has been received."

Cutting truck idle time even by as little as four percent is saving this time-definite truckload services company millions. So what's behind this remarkable achievement? To understand this, it's necessary to understand more about this Tennessee-based business, its fleet of trucks, and the information management environment surrounding the business. As the organization's trucks rack up the miles, providing time-definite, long haul, and regional services, they're inevitably idle for certain periods of time. The driver may have stopped for a rest overnight, to make a delivery, or is maybe waiting outside a customer site to gain access. During that time, the engine is inevitably running, burning precious gas and putting an additional burden on the vehicle.

To manage the fleet, U.S. Xpress uses an in-cab system called DriverTech. The system provides a range of services, including automatic engine diagnostics and reporting, navigation, driver performance monitoring—even a way for drivers to view training videos. The challenge for U.S. Xpress was that the data being fed back to the headquarters in Chattanooga could not be trusted due to the quality of the data. "The data was coming in from the DriverTech system, but the location data wasn't being cleaned or presented in a standard way when it reached us," Leonard explains. "Without reliable data on details such as the trucks' location and idle time at the stopping point, it was impossible to report accurately on vehicle movements and bring the truck idle time down."

Pervasive Data Quality with Accurate Global Matching and Address Cleansing

Leonard had the answer up his sleeve. In a previous company, he had deployed an Informatica data integration solution with a considerable degree of success. He knew Informatica would be the ideal choice again, although this time it was their data quality solutions that caught his attention. The Informatica pervasive data quality solutions provide U.S. Xpress with accurate global matching and address cleansing. It identifies duplicate customer data across different truck locations via locale-aware, prebuilt data matching rules for the company's data, and enriches that data with global address cleansing and integrated geo-coding. Searching and matching data is also straightforward, based on next-generation statistical matching algorithms that ensure accurate matching results.

The solution standardizes address components, such as common abbreviations, common formats, and consistent usage across records and tables. Simultaneously, it validates addresses, tracks common errors and trends, and generates latitude/longitude geo-codes. The source tables remain unchanged, while the cleansed address is stored in a new table. The Informatica solution displays all these plans graphically to show the components and data flow—all of which results in an intuitive, easy-to-use data quality system. "We involved a team member who had never used a data quality solution before and they deployed the majority of the project in only 40 days. It's incredibly user-friendly," says Leonard.

The Informatica data quality solution is being used in conjunction with an Informatica data profiling solution to investigate, discover, and map any data record from any source. This gives U.S. Xpress a comprehensive, accurate picture of the content, quality, and structure of its enterprise data. One example where this has been used is the company's vehicle maintenance system. The Informatica data profiling solution identified a poorly-performing transaction system, where there were few relationships between the tables. By acting on these results, the maintenance system has become more stable, allowing many of the staff who maintained the system to be re-deployed to other tasks, and saving the company millions every year. "In another area of the business, we found some data that hadn't been touched for seven years," says Leonard. "The Informatica solution allows us to profile the data, determine whether it is still relevant, and then drop it into our master data management system."

Identifying a Truck that Remained Idle for Seven Days

The Informatica solution enables business analysts to quickly set up and share web-based scorecards to measure the quality of the operational data and deploy common data quality rules to all applications. This way, data quality issues are visible to the business process owners, who in turn can be held accountable for improving data quality. For example, up to 800 operations staff responsible for managing logistics operations across the U.S. now share a scorecard-based dashboard of the truck idle time. This helps expose and root-out the areas where the 'gas guzzlers' are concentrated and where the greatest degree of saving can be made. "We have recently created an alert process to pinpoint instances where a truck remains idle for more than 24 hours. The system even managed to record one instance where a truck had been running idle for seven days. It's a real step-change in establishing an effective and lasting data quality program," says Leonard.

With tangible savings of millions every year for the truck idle time project, this single, unified platform for data quality has caught the attention of the business. Seeing the success and first hand and understanding how easy it is to participate in data quality processes, the business now want to be more involved in data quality projects, own the projects, and see the rewards. That's good news for Leonard and his team, as he explains. "Our chief operating officer recently said to me, 'In my 20 years at U.S. Xpress, it's the first time I've seen data being used the way it should be. IT has done a great job'. And that comes from someone who's not the greatest fan of IT!"

On the back of this wave of success, Leonard and his team are now turning their attention to a real-time, next-generation data warehouse, based on Informatica data integration. And the savings here may even potentially dwarf those achieved on the truck idle time project. "Informatica technology will enable U.S. Xpress to streamline the process of accessing, discovering, cleansing, and integrating data—and populating the data warehouse. By introducing an enterprise-wide, dashboard-based view of our business, we are potentially looking at cost savings of between \$9 million and \$20 million over two years," says Leonard.

Learn More

Learn more about the Informatica Platform. Visit us at www.informatica.com or call +1 650-385-5000 (1-800-653-3871 in the U.S.).

About Informatica

Informatica Corporation (NASDAQ: INFA) is the world's number one independent provider of data integration software. Organizations around the world gain a competitive advantage in today's global information economy with timely, relevant and trustworthy data for their top business imperatives. More than 3,900 enterprises worldwide rely on Informatica to access, integrate and trust their information assets held in the traditional enterprise, off premise and in the Cloud.



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