

Connecting Communities with The Global Marketplace



“Informatica has helped us control risk – the risk of losing customers, the risk of runaway costs, the risk of losing strategic advantage – all by unlocking our valuable operational data and making it available throughout the enterprise.”

Jeff McIntyre
Assistant Vice President
BNSF Railway Company

BNSF – Transporting the Products and Materials that Help Feed, Clothe, Power and Supply Communities across North America

BNSF Railway Company (BNSF) is one of North America's leading freight transportation companies. BNSF operates in 28 states and two Canadian provinces. Today's BNSF Railway Company, a subsidiary of Burlington Northern Santa Fe Corporation, is the product of some 390 different railroad lines that merged or were acquired over a span of more than 150 years. BNSF offers shipping services over one of the largest rail networks in North America, and contributes to the economy in massive ways. Some examples of this impact: BNSF hauls enough coal to generate 10 percent of the electricity produced in the United States. It moves sufficient fertilizer every year to nourish a field the size of the state of Kansas and enough lumber to build 500,000 homes. It delivers enough grain across the country and to ports for export

to make a year's supply of bread for 9.5 million people.

The economic and environmental benefits of using rail-based freight transportation have become sufficiently compelling to fuel an escalating demand for BNSF's services. Trucking issues, such as volatile fuel prices, highway congestion and insurance rates, also are leading to a surge in long-haul rail shipments. To meet this growing need, BNSF has launched significant maintenance and expansion projects across its vast network; renewing track and bridges, installing new technology and making countless other improvements. With a focus on safety, efficiency and sustainability, BNSF is investing for the future.

Unlocking Information Potential

On the surface, knowing the location of a half-million pound locomotive and its average load of 130 cars would seem to be an easy task. However, when multiplied by BNSF's 6,400 engines, 85,000 freight cars, and dispersed across 32,000 miles of track, the



Overview

One of North America's largest railway companies wanted to offer customers Web-based, self-service information to track shipments and place orders. Built data integration platform to extract transportation system information, populating a high performance data store in near real-time.

Business Initiatives

- Give internal and external customers access to accurate real-time data
- Reduce operational costs and impact
- Prepare for new company-wide SAP implementation

Technology Strategy

- Integrate mainframe resident, disparate operational data repositories
- Offer Web-enabled self-service access to a high performance data store
- Utilize intuitive GUI and development environment to optimize productivity

Inside the Solution

- Informatica® PowerCenter® Advanced Edition with Real Time & Metadata Manager options
- Informatica PowerExchange® with DB2, Oracle and VSAM data capture options
- Informatica Address Verification

challenge becomes exponentially more complex. For years, BNSF had offered its customers Web-based, self-service information that customers could use to track their shipments and place orders. However, as the pace of business increased, customers came to expect real-time accountability, and internal teams needed accurate data to make informed, timely decisions. In the legacy environment the data critical for running BNSF's business was locked in its transportation application, and had to be ported to a data warehouse for use by customer-facing systems. Because BNSF outsources much of its transactional processing – and thus is on a “pay as you go” basis for mainframe CPU use – the processing between the two repositories was expensive. BNSF could no longer deliver top-level customer service, and extraneous mainframe cycles were driving up costs.

In response to these issues, BNSF undertook a project to accomplish a number of strategic goals. The company envisioned an environment where patrons, customer service representatives, and business managers would have near real-time access to critical network-wide operational data. It built a scalable platform to extract data from the transportation system and propagate the data into a high performance data store in near real time. This would reduce the stress on the mainframe system and act as a one-stop shop through the organization for all applications that needed this data.

Results

BNSF customers now have continuous online access to the status of their shipments, accurate to within a 15-minute window. According to Jeff McIntyre, a BNSF assistant vice president: “The new capabilities are allowing us to serve our customers the way they need to be served.” Customers rarely contact the BNSF call centers, preferring instead to manage their shipments through BNSF's online self-service functions. A predefined portfolio of hundreds of reports is available to run against the data, and customers are allowed to customize their own reports with diverse search parameters. In addition to supporting the Web-enabled goods and services tracking system, the operational data store is being utilized for many other customer-facing and internal applications, such as traffic flow analysis and schedule management. By offloading the legacy mainframes, operational costs have been slashed by 30 percent.

The Role of Informatica

Informatica® PowerCenter® Advanced Edition delivers a robust platform for enterprise data integration and incorporates metadata-analysis and data-ready reporting. The deployment of Informatica PowerExchange® facilitates retrieval of enterprise data without the need to develop custom data-access programs. “Informatica provides us with a scalable framework for leveraging the tremendous amount of data generated by the transportation

systems that literally run the railroad day to day,” says Bill Heinrich, director of technical services for BNSF. “We now have a unified platform that addresses the entire data integration lifecycle.” Informatica's ability to handle diverse data types and structures also is being leveraged to synchronize and migrate legacy mainframe data, in preparation for a new company-wide SAP implementation.

The BNSF team chose Informatica for a number of strategic reasons:

- **Neutrality and openness:** Not wanting to be locked into a single vendor solution, Informatica's platform natively interfaces with a huge number of applications and data formats.
- **Rapid ROI:** Informatica's sophisticated development environment and intuitive GUI made the solutions easy to implement and easy to use.
- **Stability, scalability and flexibility:** BNSF looked for a partner with a longstanding track record of excellence, with solutions that could grow and adapt to any changes in the railroads strategic direction.

At BNSF, a Data Platform Committee provides data governance oversight; its mission is to mitigate risk and ensure the growth of the company by carefully evaluating plans for the handling of data assets. After an exhaustive evaluation, the committee agreed with the IT team that Informatica was the best choice.



Digital transformation is changing our world. As the leader in enterprise cloud data management, we're prepared to help you intelligently lead the way. To provide you with the foresight to become more agile, realize new growth opportunities or even invent new things. We invite you to explore all that Informatica has to offer—and unleash the power of data to drive your next intelligent disruption. Not just once, but again and again.

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