



# Solving the World's Toughest Product Design Challenges:

National Instruments Uses a Scalable Hybrid Data Integration Platform to Deepen Customer Relationships



*"Informatica made it easier for our customers and suppliers to do business with us. The improved service experience helps us increase satisfaction and loyalty, and is paving the way for deeper, more strategic relationships."*

**James Humphrey**, Principal Software Architect, National Instruments

## Goals

Establish a scalable and multi-tenant enterprise data integration (EDI) solution to make it easier for customers and suppliers to do business with National Instruments

Evolve from an engineering product-centric organization to a customer-focused organization

Exploit product and customer data across service functions for a better customer and supplier experience

## Solution

Informatica Intelligent Cloud Services replaces legacy B2B infrastructure into a flexible, future-proof enterprise platform

Improve communication among customers and suppliers using Informatica Cloud B2B Gateway

Establish architectural principles for integration and consistency in the use of enterprise tools

## Results

Availability of product and customer information makes it easier for customers and suppliers to do business with National Instruments

Increased IT team efficiency through a streamlined, standardized approach to application integration and proactive monitoring

Expedited on-boarding process of new suppliers

## Business Requirements:

- Create a deeper level of engagement with customers and suppliers
- Scale IT platform to accommodate growth of suppliers, from 20 to over 200
- Migrate Manufacturing, Finance, and Commerce teams to new enterprise platform to increase support for customers and suppliers

## About National Instruments

For over 40 years, National Instruments has provided high-performance automated test and automated measurement systems to help solve the world's foremost engineering challenges. The company's open, software-defined platform uses modular hardware and an expansive ecosystem to help turn powerful possibilities into real solutions. Customers spanning industries including healthcare, automotive, consumer electronics, and aerospace, rely on National Instruments' integrated hardware and software platform to refine and deliver products to market.



## Informatica Success Story: National Instruments

Countless technological breakthroughs, from powerful mobile computing devices and efficient smart grids to autonomous vehicles and fighter jets, have been developed using National Instruments test and measurement equipment. Around the world, engineers and scientists rely on the company's hardware and software platform to make their dreams a reality, and to align their products to global megatrends such as 5G, the Internet of Things (IoT), electrification, and multi-industry convergence. National Instruments solutions are vital to the product engineering process, allowing technological roadblocks to be overcome; test functions to be automated; product precision and quality to be designed; and time to market to be accelerated.

To meet growing customer demand for complete engineering solutions versus individual test and measurement products, National Instruments decided to transform itself from a component seller to a systems provider. The strategic repositioning not only required a deeper level of engagement with customers, but new underlying infrastructure to support the offering.

"To help customers solve larger business challenges, and to create a service experience conducive to a long-term partnership, we needed to reorganize our data to match a customer and systems focus," says James Humphrey, Principal Software Architect, National Instruments. "Subsequently, our leadership team approved a data management strategy to help propel our business transformation."

## Creating a platform for customer engagement

An important step in the transformation plan was to upgrade National Instruments' existing B2B infrastructure, and turn it into a modern, flexible, future-proof platform from which the company could interact with customers and suppliers, and provide complete test and measurement engineering solutions. Scalability was a requisite for the project, as National Instruments foresaw increasing the number of partners using EDI from 20 to over 200.

Manufacturing would be the first department to be migrated to the new platform replacing an existing EDI solution that was expensive and inflexible. Other departments such as Finance and Commerce would then begin to use the new platform to better serve customer needs for easier and more efficient order and invoice processes.

To enable its vision, National Instruments selected Informatica Cloud B2B Gateway, a Software-as-a-Service solution that helps manage order-to-cash and procure-to-pay workflows. Informatica was chosen because of National Instruments' earlier success with Informatica to link its Salesforce system with other CRM applications.



*"Every time I interact with Informatica, I learn something new, or discover a better approach we could take. You expect an element of discovery with any technology partner, but the sheer enthusiasm, energy, and volume of great ideas from Informatica really set it apart."*

**James Humphrey**

Principal Software Architect  
National Instruments

"We chose Informatica because we were already familiar with the company and its software, and knew that Informatica Cloud B2B Gateway could help us achieve interoperability between our Oracle EBS backend, on-premises secure agent, and the cloud—leveraging our existing investment in the Informatica platform was a vital step in our journey to become a systems provider," says Humphrey.

Informatica Cloud B2B Gateway would allow customer and supplier accounts to be set up on the new platform; communication protocols to be defined; the electronic data interchange to be monitored and managed; and trading messages to be processed within back-end systems. Meanwhile, Informatica's web-based UI would facilitate the migration and onboarding of the Manufacturing, Finance, and Commerce teams.

### **Applying consistency to application integrations**

Since its deployment, Informatica helped National Instruments establish architectural principles for integration and consistency in the enterprise tools used. Historically, the company employed SQL developers to integrate applications manually. However, the customized patterns and templates they created could not be replicated elsewhere, resulting in significant platform disparity and complexity.

"We had a lot of tribal knowledge about how to integrate various systems, but it wasn't shared, and we lacked the ability to track when and where integrations were being performed," says Humphrey. "Informatica gave us a master template and common tools for integration work that led to improved internal efficiency and better technical outcomes. It's also allowed us to implement central monitoring, set up alerts, and improve response time to issues."

### **Making it easy for customers**

National Instruments recognized that many customers and suppliers have processes based on EDI or portals that utilize EDI. Supporting their preferred way of doing business is a strategic business advantage in a competitive market.

"Establishing a scalable, multi-tenant EDI solution based on Informatica's platform has made it easier for customers and suppliers to do business with us," explains Humphrey. "The improved service experience helps us increase satisfaction and loyalty, and is paving the way for deeper, more strategic relationships."





### Inside The Solution:

- Informatica Intelligent Cloud Services
- Informatica Cloud B2B Gateway

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#### **James Humphrey**

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## Achieving business transformation through partnership

Along the transformation journey, Humphrey and his team have been impressed by Informatica's responsiveness to service requests and its shared approach to problem solving. Additionally, Humphrey has been astonished by the breadth of advancements and improvements made to the Informatica platform, and number of new tools and services introduced over recent years – many of them suggested by Informatica customer advisory boards, of which National Instruments is a part.

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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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