

Consulting Project Abstract

B2B Architecture

Our Customer's Problem:

This customer is a world-renowned standards organization developing B2B communication protocols. Their format of specification incurred substantial duplication and did not contain the precision required for proper testing of compliance. The specification format and design patterns used in designing the protocols created an exponential growth of specifications and did not enable reuse.

Why This Was A Problem:

The lack of precision in the specification caused problems for the implementers. It was not clear from the specification exactly who was in the right, and ambiguity had to be resolved as bilateral agreements outside the standards organization. The number of specifications to be supported also caused significant maintenance and cost issues.

Our Solution:

InferData developed a reflective interchange structure that had the potential of reducing the number of standards from thousands to less than 10. We also devised a method of using formal information and transaction models to remove ambiguity from the specification.

a) Created a UML based domain model for PIP 2A9-2A11 used as the basis for development of RosettaNet compliant B2B protocol for interchange of product information. **b)** Define a new architecture for generation of B2B specifications based on OMG's Model Driven Architecture (MDA) principles. The architecture dramatically increased the precision of the specification and also reduced the effort of building specifications. **c)** Provided recommendation directly to the RosettaNet board for choice of technology and conformance to standards.

Results:

The standards committee is now implementing the recommendation. Once it's broadly deployed, it may help shape the way that companies communicate electronically.