# Excellus Blue Cross Blue Shield Creates Enterprise Architecture and SOA Solution to Consolidate Disparate IT Systems

## Executive Overview

When several Blue Cross Blue Shield programs in upstate New York merged, each organization brought its own business processes and IT systems to the new entity. Because they were so different, yet had to be consolidated, the new entity, Excellus Blue Cross Blue Shield, wanted to first implement a strong business analysis process to clearly identify company functions and processes. They wanted to be able to inventory and visualize their current state architecture in support of system modernization and SOA efforts.

## Problem

Excellus Blue Cross Blue Shield is part of a $4 billion family of companies that finances and delivers health care services across upstate New York, including the major cities of Syracuse, Elmira, Rochester, Utica, and Buffalo. As New York State's largest nonprofit health plan, the organization provides health insurance to more than 2 million people, and employs more than 6,000 New Yorkers.

It is the result of a merger of several health organizations serving upstate New York. Following the merger, Excellus found that there were few enterprise architecture (EA) standards embraced by all of the previously independent entities. The company formed a group within the IT department to focus on EA as it consolidated business and IT systems and reduced the amount of technical diversity within the organization. With multiple platforms and environments, it was extremely challenging to create smoothly running, cohesive business procedures, without a clear understanding of what processes and systems were serving each organization. Many of these legacy systems, some in place for 30+ years, didn't have adequate documentation, so there were parts of the systems that were completely unknown.

"Before making sweeping policy or platform decisions, we recognized the importance of identifying all company functions and the processes used to implement them," explained Eric Stephens, enterprise architect, Enterprise Architecture and Integration Team at Excellus. "This was the first step in our effort to reduce duplicate processes that were a normal result of the merger. We had to develop single systems for claims processing, provider contracting, member registration, and more, but could not do that until we fully understood and mapped the existing processes."

Excellus recognized that a key success factor would be a service-oriented architecture (SOA) approach, offering the ability to devise flexible architectures that rely on smaller parts (services), rather than larger monolithic solutions. Being able to implement the architecture in parts gives the company more choices (buy vs. build) and allows for variation in particular components to adapt to a shifting market demand for products. It was clear that going forward with big systems implementations would drive both risks and financial resources to unacceptable levels.

In addition, the organization established a goal of standardizing practices so that customers and others outside the organization would feel like they were dealing with a single company, rather than multiple entities in a loose federation.

## Solution

Excellus evaluated EA options from several of the leading modeling tool vendors against specific criteria it had established as essential, including a central repository, open systems (no proprietary software), an API feature to program if necessary, Web export capability, an intuitive user interface, and competitive price. Excellus selected the MEGA Modeling Suite.

Next, the IT staff at Excellus trained employees in an enterprise perspective developed a plan for what the architecture should be when completed, and began the process of inventorying the processes and functions.

The SOA implementation, which is the core idea that will be part of many strategies (e.g. EDI, eBusiness/self-service, transaction processing), is supported by MEGA, which is providing the modeling and repository to aid in this implementation. Excellus expects to take advantage of modularity and reduce maintenance costs, and get significant reuse benefits. Stephens likened the before and after of their process as the difference between his garage, where he generally knows where most things are, and an auto parts store, where all parts are inventoried, labeled, and tracked. Before Excellus had a centralized repository the company's understanding of business processes was general and not precise; much closer to Stephens' garage than the auto parts store.

"With the MEGA Modeling Suite, we are gaining a clearer understanding of our processes and have put the information in one place so that we can maintain consistency, starting at the architectural or planning level," he explained. "Previously, we relied on individual people for their knowledge, as well as slides and Visio diagrams, but it was not nearly enough."

Government mandates and regulations specific to health care institutions made the challenge even more complex. There are reporting requirements that call for very precise information, so having the information in a central repository makes it easier to select certain data for various government reports. This will become even more important in the future to manage very large-scale regulatory projects that are expected, like common provider numbers (NPI) and changing the ICD-9 coding system.

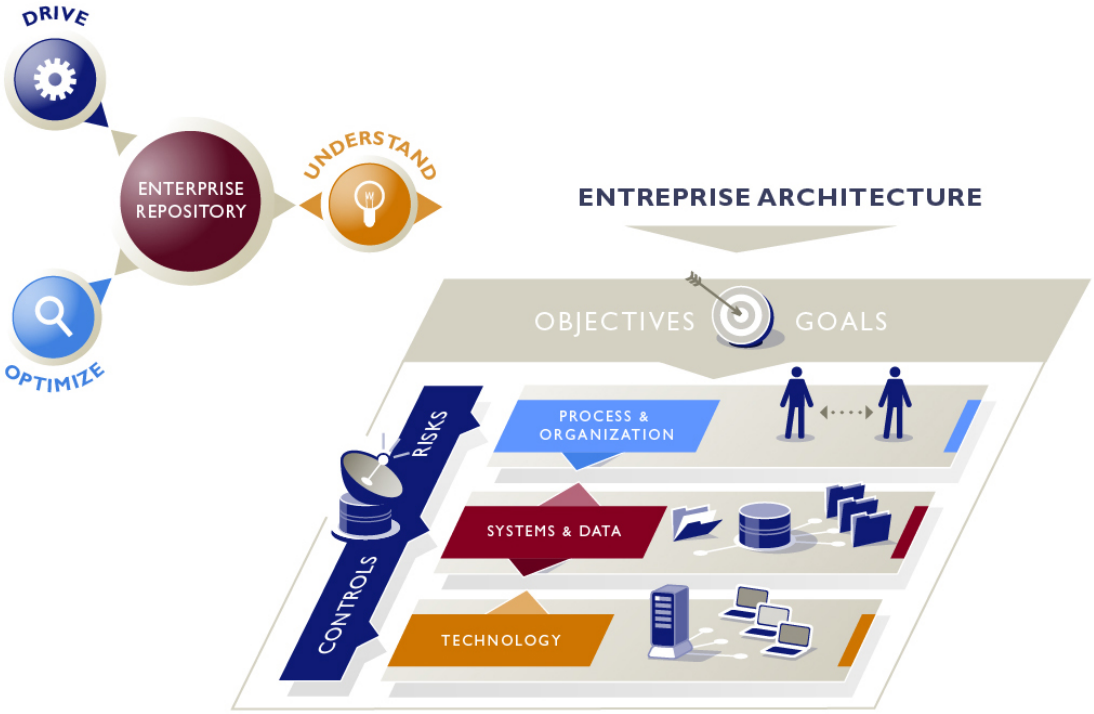


**Figure 1. Excellus BCBS used the MEGA Modeling Suite to model and store process information**

*Excellus BCBS had a goal to consolidate resources following a merger. It used enterprise architecture tools from MEGA International to describe and model its business, from processes and organizational structure, to systems and information, to the IT infrastructure supporting everything. This allowed the company to*

*identify potential changes and understand the effects of these changes before implementation. All information is stored in the MEGA repository, providing a strong, continuing business process analysis capability that allows executives to better understand the business and drive change.*

## Results

Today, the Excellus data repository contains nearly 600 applications, although as the company continues to reduce duplication, it expects to trim this to around 400.

The EA group within IT, individuals in health plan operations, and others in continuous process improvement are the primary users of the MEGA Modeling Suite. Currently, this numbers about 20 people, however Excellus expects the number of business users to be far greater when the entire program is completed.

In addition to helping to meet the goals of a well-defined EA that provides value throughout the organization, Stephens believes the use of the MEGA Modeling Suite is helping Excellus make better use of resources (people, money, time, equipment) and improve access to company information, and the use of a repository has helped the IT staff recognize and eliminate redundancies and inefficiencies., However, the greatest benefit that the solution is bringing to Excellus is business agility, which enables the organization to maintain a competitive edge, reduce time to market for new products, and respond to market changes rapidly. It allows the company to identify the impact of organizational change through modeling, before making actual changes, avoiding problems and saving time and money. Additional savings are accruing because of the ability to remove redundant hardware and software, and repurposing staff for value-added activities.

Stephens observed that “We can’t change what we can’t see and we can’t plan for the future unless we have good information about our company today.”