
A HEALTHCARE PAYER ORGANIZATION IN THE SOUTHEAST

Ultramatics was engaged to provide services to implement a comprehensive Enterprise Application Integration Strategy using middleware technologies.

Challenge

Integration and a consistent approach towards integrating business applications was not the focus during solutions development. Solutions were created in different organizations. The approaches and priorities were not necessarily aligned in a seamless manner with the rest of business and corporate strategies. Complicated HIPAA mandates threw a wrench into implementation of business solutions.

Approach & Solution Set

Ultramatics carefully analyzed the organizational dynamics to determine the root cause of the challenges at hand and determined the following:

- ▶▶ The IT projects were funded based on business initiatives and solutions were created in isolated teams. These teams had different competencies, timelines, technology suites and priorities.
- ▶▶ There was no focus to build an Integration Architecture that could be leveraged by multiple projects. This led to a vicious circle, where there was no opportunity to build an Integration Architecture due to project priorities.
- ▶▶ Point solutions were continuously built with no sunset strategies.
- ▶▶ A role that had visibility into all of the integration requirements of the enterprise was not part of the organizational structure.

Considering the above factors, Ultramatics undertook a top-down approach to increase the odds of success, and executed as follows:

- ▶▶ Carried out an internal marketing effort to promote concepts of consistent integration and the benefits thereof. Heavy emphasis was based on repeatability, reuse and operational efficiencies.
- ▶▶ Identified business and IT leaders who could provide the necessary change catalysts and provided them the necessary tools to convince their organizations as well as others, of the benefits of a consistent approach.
- ▶▶ Created a comprehensive vision for a Service-Oriented Architecture that provided a roadmap for solution architects.
- ▶▶ Campaigned major initiatives and identified common infrastructure services and components that could be shared between them. Convinced the sponsors to pool and fund the building of these common infrastructure services.
- ▶▶ Delivered functional infrastructure services through iterative methodologies without impacting application deadlines by taking a loosely coupled approach.

Key services included Enterprise level asynchronous auditing and logging framework, Enterprise level exception notification and management systems, common security services and configuration services. By re-factoring the HIPAA mandates within these common infrastructure services, alleviated the projects from focusing on this on an individual basis.

- ▶▶ Created several processes, tools and guidelines for solutions architects to consistently leverage the technology suite and create reusable application services. This resulted in major business solutions to leverage each other's interfaces much more effectively.
- ▶▶ Created message-driven integration patterns for integrating mainframe legacy applications running under CICS and IMS.
- ▶▶ The technology suite consisted of IBM MQSeries, WebSphere MQSeries Integrator (formerly MQSI), Candle eBP, Candle Omegamon XE, IBM WebSphere Application Server, JMS and HP OpenView.

Benefit Analysis

The benefits realized by this approach includes among other things:

- ▶▶ A very high Return-on-Investment due to the demonstrable reuse of services resulting from a consistent methodology.
- ▶▶ Extremely effective Total Cost of Ownership (TCO) due to the focus on streamlined operational aspects of the architecture.
- ▶▶ Proactive operational processes and monitoring could be created to notify business users of potential outages were possible. This resulted in increased customer satisfaction and loyalty to the IT organization.
- ▶▶ Common infrastructure services led to the ability to mine the data collected to perform trend analysis on application behavior. This resulted in the ability to identify poorly performing and architected applications.
- ▶▶ Troubleshooting and fault localization was made much easier resulting in a highly available infrastructure.
- ▶▶ A stage for an evolutionary platform has been created to enable the organization to provide quicker business solutions.