



Case Study: Dimension Data – GSOA Development

About the Company

Dimension Data (DD) is a global IT services and solution provider that helps customers plan, build and support their IT infrastructures. The company is listed on the London Stock Exchange [DDT LSE] and operates in 30 countries on five continents. DD applies its more than 23 years of experience in technology infrastructures, networking, security, operating environments, storage, and contact center technologies and its unique blend of skills in integration, consulting and managed services.

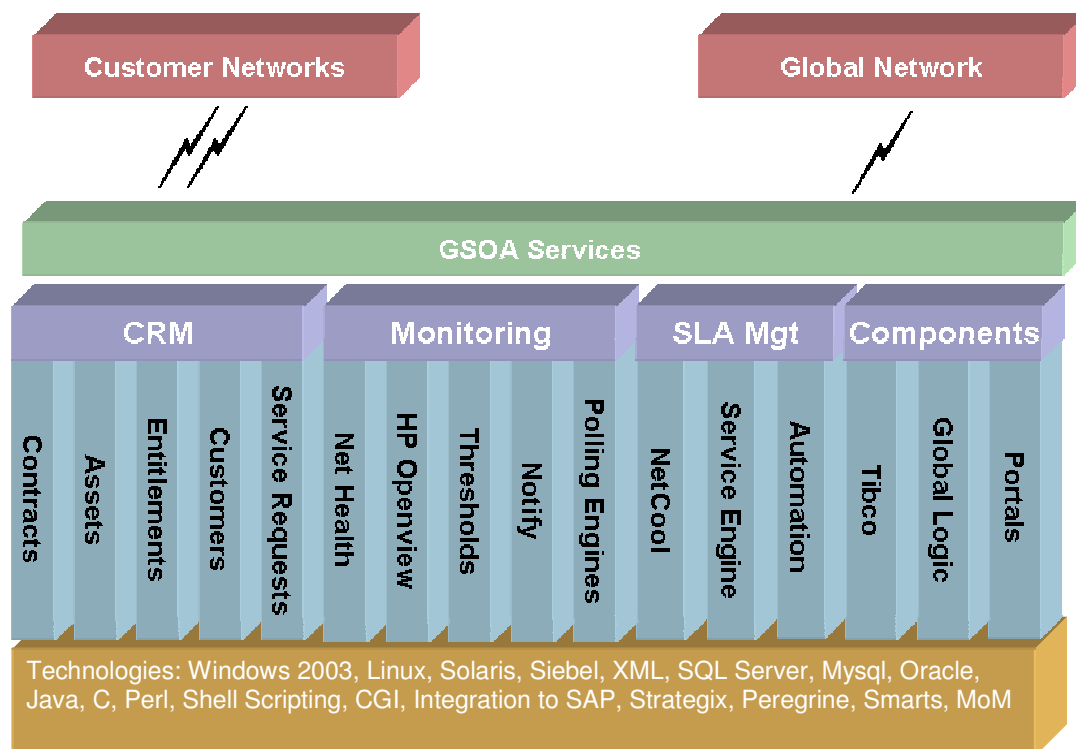
The aim is to create solutions that can help clients to realize a greater return on their IT investments. To achieve this, Dimension Data (DD) delivers solutions using its proprietary **Application Network** architectural framework.

Project Description

Global Services Operating Architecture (GSOA) is a Services Operating System Platform for all DD's Global Online Services initiatives. It is a complex eco-system consisting of commercial software tools, in-house software, and application-to-application integration modules that allow all of the various system components to interact as a single system.

The components of the Global Services Operating Architecture include:

- CRM component in Siebel Systems
- Global Logic Engine
- Set of correlation and event management tools from Micromuse/Netcool
- Performance management and reporting tools from Concord
- Active agents
- An advanced Poller mechanism
- Automated diagram generator
- Automated systems configuration module
- Advanced integration modules
- Customer services portal





Business Challenges

- The substantial growth of DD's customer base for IT Infrastructure support revealed many deficiencies, including a patchwork of technologies with no defined integration methodologies and built on a weak technical foundation. Due to this, the response to following business needs was being impacted:
 - o Pursue new business opportunities
 - o React to competitor actions
 - o Comply with changing regulations
- With aggressive near-term business initiatives, GSOA operations needed to be built upon strong development and deployment methodologies to ensure high system availability. DD further struggled to standardize GSOA architecture across different regional instances. Due to setups in 5 different locations, management was unable to consolidate organizational level statistics for improvement and strategizing.
- DD struggled to retain the varied skill sets required to maintain and enhance GSOA, due to the complex mix of technologies and lack of enterprise architecture.
- One of the key strategies to increase DD's revenue is providing ITIL compliant services, and Security standards and architecture best practices. Technology obsolescence of the existing solution, and heavy customization in commercial products like Siebel, meant a substantial effort and cost to upgrade components as per market needs.

Nihilent's Role

Nihilent has architectural ownership of GSOA, and is responsible to develop new functionalities by integrating newer solutions for DD to support around GSOA.

Nihilent was instrumental in migrating DD regional GSOA instances to a single centrally hosted global instance, with an aim to facilitate functional and operational standardization. Other key projects include development of ITIL compliant functionality on top of Siebel 7.8 (this included ITIL and design consulting to Siebel), Service-desk integration with Cisco, development of highly granular SLA Metrics functionality, design of business workflows and reports, integration of new technologies like MoM, Packeeter, Java-based customer portals, and Siebel upgrades and migrations.

Projects for Architectural improvement include deployment of a load-balanced architecture, improvement in performance, and system throughput, Security Assessments and Enterprise Integration layer re-architecture have been successfully managed. Nihilent has also introduced automated testing for GSOA, leading to significant reduction in the testing and release times.

Platform and Technologies

- Platforms: Microsoft, Linux, Sun Solaris
- Packaged Applications: Siebel, Micromuse Netcool, Concorde NetHealth, SAP
- Integration Applications: TIBCO, Siebel - SAP Integration, XML, Biztalk
- Programming Languages: Java, C, Perl, Shell scripting, CGI, PHP, dotNET
- Web Servers: Apache, Tomcat, IIS, Axis
- Databases: MS SQL Server, Oracle, Mysql
- Networking Protocols: TCP/IP, SNMP, ICMP, Telnet, SSH
- Automated Testing Tools: Mercury, Empirix



Business Benefits Delivered

Nihilent provides outsourcing services to DD leveraging the following key differentiators:

- Nihilent has a highly qualified and experienced team with a peak team size of 180 for this engagement. This helped DD to develop solutions at a rapid pace as required
- Nihilent has introduced development and testing process innovations to reduce the time to market of new solutions and releases. This includes test-driven development, a pre-UAT phase with business users testing applications as they get developed to ensure business alignment, and automated functional and security testing
- A phased approach has been adopted to standardize the current code base to deliver a Service Oriented Architecture. This alignment results in flexibility and reduction in the development effort and costs for new solutions
- By consolidating regional instances of the application into a single global instance, operational data across customers is now available, leading to improved data quality and better management reporting. DD can refine their strategies at a global level rather than per region
- Investments in architectural changes have resulted in reduced service delivery management effort, so that DD is able to focus on new solutions and functional enhancements, including ITIL implementation
- The ability to bring new services and solutions to the market quickly has led to an enhanced Service Portfolio, enabling DD to be aggressive in their strategies to pursue new opportunities and react to competitors