



Financial Systems Enterprise Level IT Modernization

End Client

A multi-billion Financial Services provider in Pre-Paid and Payment Solutions

The Challenge

Our client had numerous financial transaction processing applications based on unsupported versions of application server software that was several major versions behind the currently supported software. As a company that requires PCI compliance to remain in business, this was a major risk that needed to be addressed quickly and systematically. The systems in scope process transactions of \$50 billion/year with peak transaction loads of over 2000 transactions per second during the Christmas holiday period. With limited internal resources and time, the client engaged us to analyze the magnitude and scope of the problem and recommend a way forward with the ultimate outcome of migrating to the latest supported version of the application server.

Our Services

- ✓ Strategy and IT Enablement → IT Program and Project Management
- ✓ IT Advisory Services → IT Risk Assessment
- ✓ IT Advisory Services → IT Modernization Strategy, Planning, and Support
- ✓ Solution Architecture → Application Architecture & Development

Our Approach and the Results Achieved

We worked with the client to divide the project into three phases based on our **ValueTek[™]** framework to reduce risk and minimize the chance of rework or false starts. Phase 0 involved a comprehensive four week assessment of the entire application landscape consisting of over 130 applications to identify the applications that were impacted by the use of the unsupported application server. We produced a roadmap detailing the activities of the subsequent two phases: Phase 1 (Proof-of-concepts) and Phase 2 (Migration). We identified over 70 impacted [financial and non-financial] systems with millions of lines of code. Phase 1 carried out two proof-of-concepts that investigated and ported each of the "problem" technologies used by the applications to the latest application server version. These proof-of-concepts were selected to ensure that the riskiest and most significant aspects of the applications would port over to the new application server. In addition to usable code, this phase yielded valuable metrics and estimating benchmarks that were used to scope out the "true" level of effort required to migrate all of the impacted applications to the latest supported application server. Phase 2 focused on migrating each of the impacted applications over to the latest supported version of the application. The Phase 2 project team consisted of ten members of which one was an offshore developer. Leveraging our NirvanaOpsTM framework, we worked closely with the development managers, architects, developers, and other subject matter experts to ensure that the migration had minimal impact on the codebase/functionality and to plan out QA and production rollouts. Phase 3 focused on setting up an end-to-end Integration test environment and supporting QA, Load Testing, and Production Rollout for all the migrated applications. The TekNirvana led project team completed its tasks on schedule and on budget and has received numerous accolades from the client and prime vendor.