Architecture Assessment of Learning Management System Software

Client Background
Our client is a public company providing legal, compliance and risk management professionals around the world with information services and solutions for managing risk, achieving compliance and driving business improvement.

Their customers include many of the world’s leading organizations across all major verticals, including financial services, aerospace and defense, manufacturing, life sciences, pharmaceutical industry, technology and transportation.

BUSINESS CHALLENGE
In order to reduce technical debt and grow their business, the client decided to develop a new high-performance enterprise Learning Management System (LMS) with two key objectives:

• Migrating approximately 5 million existing users including over 400 client accounts and three legacy learning management systems to the new solution
• Scaling up to 10 million users over the next 2-5 years.

One of the company’s acquired divisions suggested their own software be used as the foundation for the new system build. To evaluate the pros and cons of such a decision, the CIO requested an independent 3rd party architecture assessment. They partnered with SoftServe due to SoftServe’s strong experience in architecture practices.

SOLUTION
SoftServe’s architecture evaluation was conducted to discover key architecture decisions that posed risks for meeting system quality requirements and identifying decisions that may have been overlooked. The solution was also evaluated against:

• Functional requirements
• Non-technical requirements, including cost of the maintenance and ownership
• Client’s team expertise
• Development practices maturity
• Ability and experience to create systems with similar scale and complexity

The assessment was performed using an industry recognized ATAM technique with SoftServe’s proprietary practices by a
team of SEI Architecture Certified Professionals. SoftServe Architecture Group consists of 40 seasoned professionals, including 20 Solutions Architects certified by Carnegie-Mellon Software Engineering Institute (SEI) who help Global and SMB companies create solid architectures. The team conducted the evaluation within three weeks:

• The first week was dedicated to analyzing requirements and technical documentation as well as finalizing the agenda and scope with the main stakeholders.

• Weeks two and three included a series of onsite meetings, interviews and brainstorming with the company’s business and technical personnel.

The evaluation process was conducted in two directions:

• Top-down. The ATAM based architecture evaluation aimed to identify architectural decisions that pose potential risks for meeting system quality requirements (such as performance, scalability, reliability, etc.).

• Bottom-up. The analysis of product foundation features aimed to identify functional gaps.

BUSINESS VALUE

The benefits of evaluating the proposed solution prior to deploying included:

• Saved the company millions of dollars with direct investments, maintenance costs, and customer dissatisfaction if the proposed platform did not meet the requirements.

• Mitigated risks that were uncovered during the top-down architecture evaluation. The timely localization allowed the team to put the risks under the project governance control, which positively influenced the project success.

• Proved that the proposed platform was a good foundation for the required solution. The platform contained all the required modules and components to implement the majority of the necessary features as well as future features.
ABOUT SOFTSERVE INC.

SoftServe, Inc. is a leading global software application development and consulting company. We immerse ourselves in our client’s business and relentlessly focus on providing technology solutions that create tangible business value. Our robust competencies include business and technology consulting, software optimization, SaaS/Cloud, Mobile, UI/UX and BI/Analytics for vertical markets such as healthcare, retail and high tech.

SoftServe developed Abiliton, a set of adaptive best practices and processes for software development optimization comprised of people, processes and technology. Abiliton ensures predictable, repeatable results and faster time to market, positioning businesses for scalable growth.

With over 20 years of industry excellence, SoftServe delivers rich user experiences, intuitive products and solutions providing our clients with a strong competitive advantage. Our offices are located in North America, Europe and Russia.

For more information please visit www.softserveinc.com