

CASE STUDY

ARCHITECTURE ASSESSMENT OF BANKING PORTAL

Client Background

Our client is a financial holding company that provides financing and leasing capital to customers in more than 30 industries. Additionally, the client operates a FDIC insured bank. The Fortune 1000 company is on the list of largest banks in the United States.

Business Challenge

The client requested a full architecture assessment of its inherited IT assets—a banking portal—following a merger with a national bank with 70 retail branches. The goal of the architecture assessment of the portal was to understand the state of the solution architecture and its implementation in order to identify gaps and propose recommendations to resolve issues. The assessment focused on the following:

- Application security—a high priority
- Architectural patterns and approaches
- Software structure and layers
- Data architecture and data isolation
- Best practices

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Project Description

The execution of the architecture assessment was based on the application of the architectural tradeoff analysis method (ATAM) and decision analysis method.

The assessment started with elicitation and prioritization of the business goals, constraints, functional requirements, and quality attributes—all essential to the architecture analysis. A series of workshops, interviews with bank staff, and documentation reviews were conducted to perform this step.

During the next step—architecture and code review—the qualitative tradeoff analysis and quantitative metrics analysis were applied to identify tradeoffs and risks associated with the bank portal. Design decisions affecting the significant architectural drivers—both functional and non-functional—were also analyzed. This was executed in workshops with the client's team as well as offsite.

Based on the analysis results and the SoftServe assessment team's vast technical expertise in technologies, reference architectures, patterns, and best practices specific recommendations were generated. These targeted assessment business goals, found issues, and risks.

Finally, the roadmap for improvement implementation was planned—and later presented to the business—based on the assessment findings and recommendations. The qualitative analysis was based on the Carnegie Mellon Software Engineering Institute (SEI) ATAM with SoftServe's adaptations to address process agility and the lack of technical documentation on the client side.

Value Delivered

SoftServe's assessment team evaluated the portal solution based on the objectives, communication with technical stakeholders—project manager, security officers and senior technicians, and supplied artifacts.

The team created the technical architecture for the solution to meet most of the business, functional, and nonfunctional drivers, goals, and constraints outlined in Phase 1 of the implementation.

It was critically important for the team to address identified issues and risks to prevent security threats, technical debt growth, and negative impact on the production deployment scalability, reliability, user experience, and performance.

As a result of the architecture assessment and the recommendations that addressed the discovered issues, the client decided to promote the evaluated platform to production for public use. Additionally, they used the platform as a solid foundation for future banking product development.

ABOUT US

SoftServe is a digital authority that advises and provides at the cutting-edge of technology. We reveal, transform, accelerate, and optimize the way enterprises and software companies do business. With expertise across healthcare, retail, media, financial services, software, and more, we implement end-to-end solutions to deliver the innovation, quality, and speed that our clients' users expect.

SoftServe delivers open innovation—from generating compelling new ideas, to developing and implementing transformational products and services.

Our work and client experience are built on a foundation of empathetic, human-focused design that ensures continuity from concept to release.

We empower enterprises and software companies to (re)identify differentiation, accelerate solution development, and vigorously compete in today's digital economy—No matter where you are in your journey.

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