CASE STUDY

COST EFFICIENCY THROUGH BETTER WORKFLOWS FOR LEADING US EHR PROVIDER

Client Background

Our client is a leading U.S. company delivering electronic health record and practice management technology to healthcare providers.

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Business Challenge

As a part of security reorganization process, our client needed to reorganize their authentication and authorization workflow ensuring better and more costeffective control, support and maintenance. They chose SoftServe to develop a new security platform, as well as utilize our quality control experts to validate and verify that it conformed to the functional and performance requirements and our Client's business needs. Since manual testing was inapplicable due to the absence of a user interface, a set of automated test suites were created.

Project Description

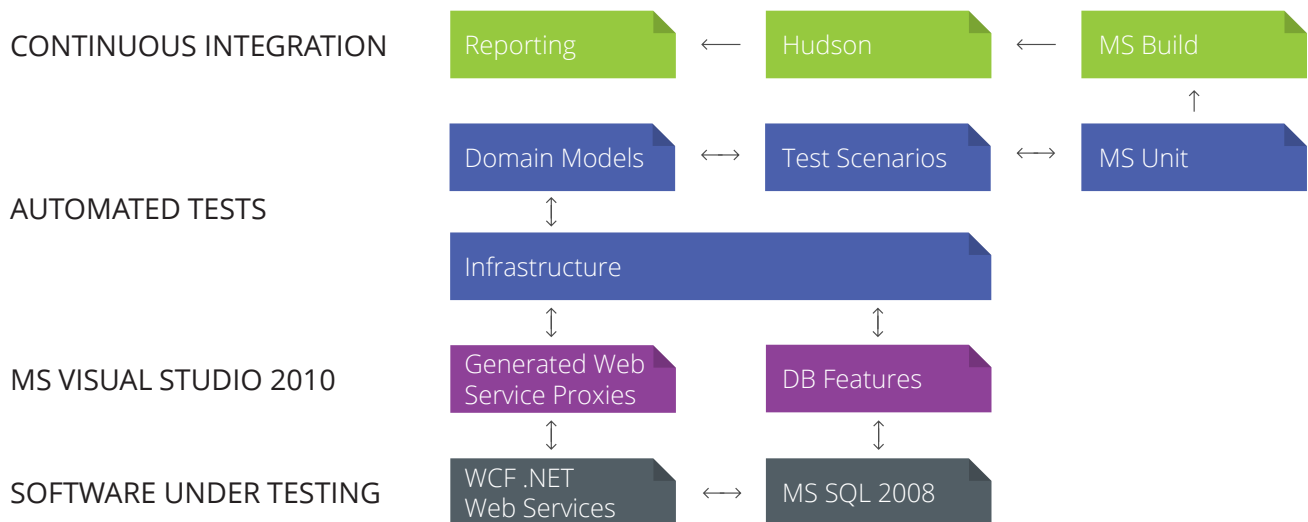SoftServe fully implemented the following four principles:

- Concurrent Testing – automated tests were developed concurrently with tested software;
- Continuous Integration – automated tests were included into continuous integration in order to provide feedback on the developers' actions;
- Collaborative Decision Making – test scenarios were simplified for nontechnical stakeholders for decision making purposes. Testers also used the same tools and programming languages as developers to eliminate miscommunication or lack of coordination.
- Continuous Improvement – test automation framework was developed and continuously improved in order to decrease the time and resources spent on test development and maintenance, as well as to improve human readability.

The combination of these best practices enabled SoftServe's quality control engineers to develop 3000 tests within 8 months, sufficiently covering all of the project stakeholder's acceptance criteria.

Value Delivered

- SoftServe's quality control experts met the client's expectation of thorough security platform testing and continuous optimization, delivering the following business values:
- High reliability of the developed platform that met all requirements
- Optimization of testing processes and improved test readability ensuring:
  - Continuous involvement of all project stakeholders in the process of decision making
  - Better communication between the teams
  - Commonly shared views on requirements
- All acceptance criteria were sufficiently covered by test suites ensuring quality and productivity
- Automated test suites were more transparent and usable as a base for Sprint Demos
- Decreased testing time and resources on test review, test support and maintenance ensured more time and resources for sufficient test coverage, requirements analysis, and ultimately faster time to market
- Decreased costs as a result of reducing defects as well as prompt response on every code commit.

Automated Functional Test Suites Architecture

CONTINUOUS INTEGRATION	Reporting	⟵	Hudson	⟵ MS Build
	Domain Models	⟷	Test Scenarios	⟷ MS Unit
AUTOMATED TESTS	Infrastructure			
MS VISUAL STUDIO 2010	Generated Web Service Proxies		DB Features	
SOFTWARE UNDER TESTING	WCF .NET Web Services	⟷	MS SQL 2008	

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ABOUT US

SoftServe is a global digital authority and consulting company, operating at the cutting edge of technology. We reveal, transform, accelerate, and optimise the way large 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 is built on a foundation of empathetic, human-focused experience design that ensures continuity from concept to release.

Ultimately, we empower businesses to re-identify their differentiation, accelerate market position, and vigorously compete in today's digital, global economy.

Visit our **website**, **blog**, **Facebook**, **Twitter**, and **LinkedIn** pages.

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