infopulse

tietoevry

QA Process Enhancement Helps Tietoevry Banking Optimize Costs & Accelerate Time-to-Market_

Industry: Banking & Finance   **Location: Nordics**   **Employees: 3,600+**

Client Background

Website:
https://www.tietoevry.com/en/banking/

Tietoevry Banking is a leading financial services software provider, helping banks, FinTech companies, and PSPs across 50+ countries leverage next-gen digital solutions to thrive in the dynamic industry. It offers a holistic portfolio of modular, cloud-native software-as-a-service (SaaS) solutions that cover all aspects of banking, including BaaS, Open Banking, payments, credit, insurance, fraud prevention, omnichannel banking, and more. Aiming to reinvent banking services for good, Tietoevry Banking develops software that empowers millions of people with fast, seamless, and secure digital banking.

Executive Summary

Goals

The client discovered a range of misalignments and gaps in its QA processes, which had to be fixed prior to launching a large-scale product modernization project.
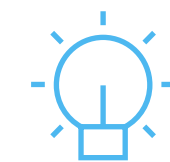
Solution

Infopulse created a tailored QA strategy, implemented various types of automated tests, and built a dedicated CI/CD pipeline to help the client strengthen its QA maturity and ensure the timely detection of software defects.

Benefits

The renewed QA practice and full-scale test automation helped the client enable continuous code testing, reach **96% test coverage,** and eliminate **98% of defects** before deployment.
This resulted in better product performance, faster time-to-market, and significantly optimized costs.
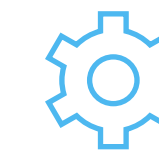
Services delivered

Software Quality Assurance, DevOps

Business Challenge_

The new platform architecture had to incorporate a broad spectrum of new REST and SOAP services, batch processing, and messaging queues (MQs), which had to be thoroughly tested before deployment. After re-examining its QA maturity, Tietoevry Banking discovered a substantial misalignment between the testing and development activities, as well as gaps in QA processes, which caused a range of pressing issues:

- System errors across multiple services and hampered integrations between the platform's components

- Delayed discovery of software defects due to time-consuming manual testing

- Lack of component versioning and change management processes

- Insufficient release management with minimal planning, which resulted in Big Bang releases

The combination of these issues translated into the late detection of software defects, which required approximately **6+ months to fix,** along with prolonged development of new features that typically took **3+ months** to complete. Therefore, the client decided to upgrade its QA practice and leverage automated testing to improve the software quality and prevent failures in advance, optimize the development time, and accelerate the product time-to-market.

Solution & Business Value_

Infopulse created a custom QA strategy for the client, optimized the company's entire Software Testing Lifecycle (STLC), and implemented various types of software tests that are fully automated, atomic, repeatable, and subdivided by levels.

As a result, the refined and mature QA practice has brought a myriad of valuable benefits for Tietoevry Banking:

○ Automated tests were integrated into the CI/CD pipeline, which ensured the **continuous testing of the code** during the development process

○ Standardized release management that enabled **fast, consistent, and error-free deployments**

○ **Better software and requirements quality** through well-defined standards

○ Overall test coverage increased from **80% to 96%**

○ **No major integration issues** were observed after the implementation of automated tests

○ After introducing **shift-left testing** the number of defects was **reduced from dozens to 1-5 a month**

○ **98% of software defects** are detected before the components are released

○ The average time to fix software defects was reduced from **6 months to just up to 4 days**

○ **Fully automated testing of code merges,** which previously had required **8-12 hours of manual testing** each day

○ Automated regression tests **spared 1,5 weeks per employee** for checking the functionality of new components

Ultimately, the client managed to improve the reliability and performance of its core banking platform, accelerate time-to-market, and optimize a significant amount of costs by detecting and fixing software defects prior to deployment.

Technical Details_

At the beginning of the project, Infopulse conducted an in-depth assessment of the client's QA approach, processes, and software testing tools. After gaining a clear picture of the client's STLC, our experts shaped a tailored QA strategy with an emphasis on test automation. Once the new strategy was confirmed with the client, Infopulse started implementing DevOps practices and built a dedicated CI/CD pipeline to apply automated tests for every created code merge. In addition, all of the new software requirements were analyzed for completeness, correctness, consistency, and testability.

Consequently, Infopulse experts implemented a range of purpose-built **automated tests** for Tietoevry Banking:

- **Unit tests** to test the error case scenarios in user stories

- **Component tests** to assess whether the component logic is implemented correctly

- **System tests** to ensure error-free integrations and E2E scenarios

- **GUI tests** to evaluate new features and visual elements

- **Regression tests** to check the entire functionality of all merged components

- **Smoke tests** during daily CI/CD runs to detect major software flaws before deployment
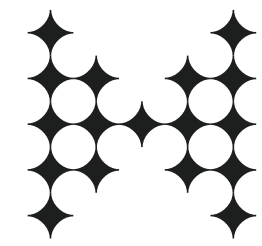
Furthermore, our team established mandatory versioning and change management for all software components, implemented static documentation testing for the created use cases and user stories, and enabled backward compatibility for the platform's services and APIs.
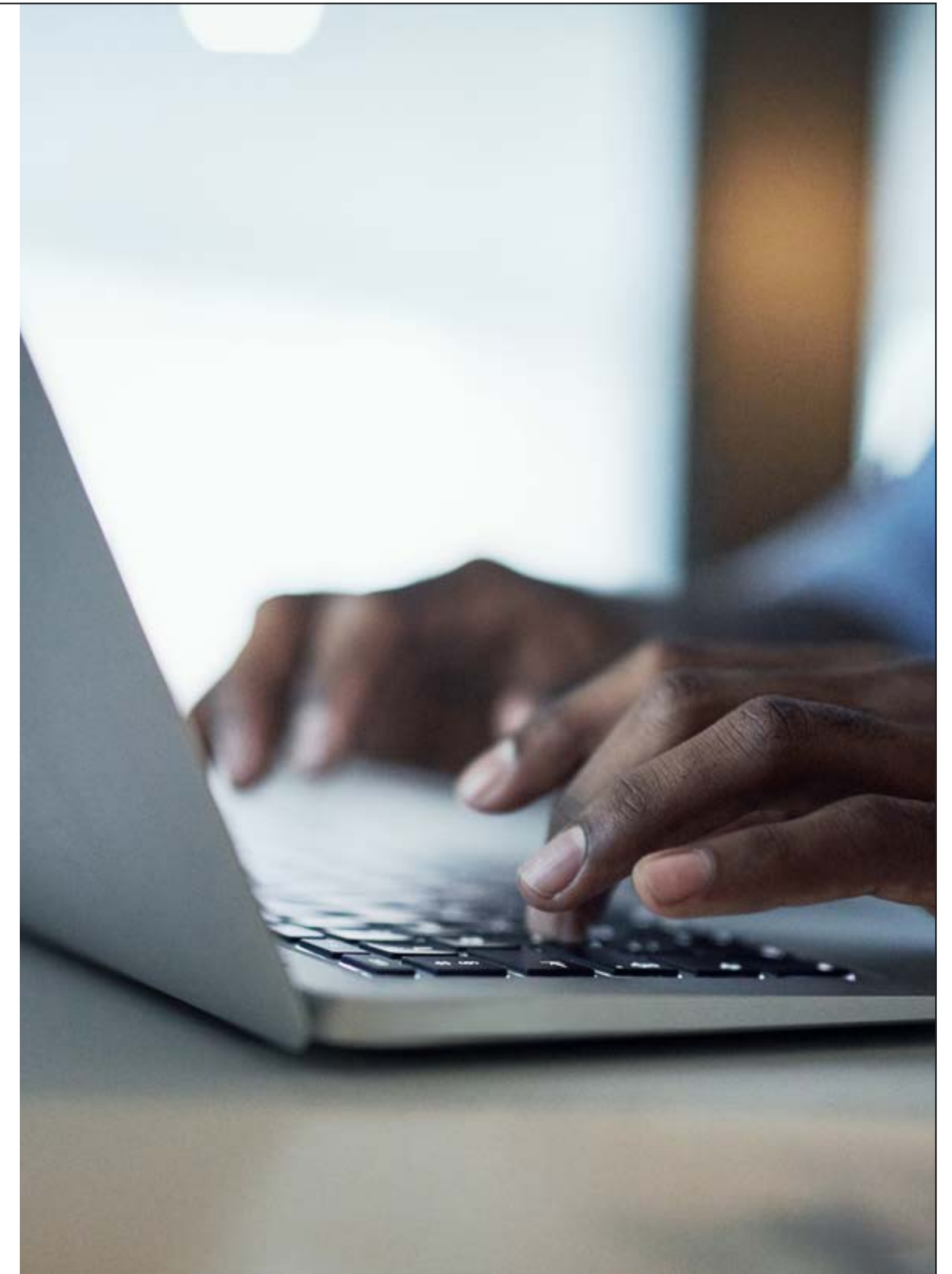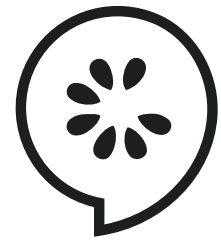
Technologies & Tools_

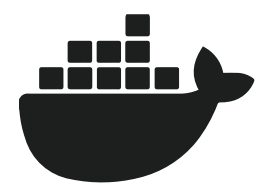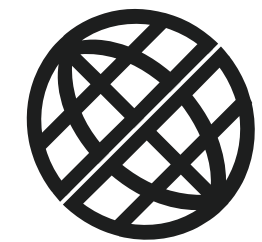|	Java		Hazelcast		JDBC		JavaScript
	Cucumber		Junit		TestNG		
	Docker		RestAssured		Maven		

About Infopulse

Infopulse's dedicated QA competence center offers the widest range of application testing and software quality assurance services, as well as QA consulting, strategy development, and process improvement. Our QA teams combine robust technical competence with in-depth business domain knowledge, and profound experience in cutting-edge testing technologies and frameworks to help our clients ensure the utmost quality of their software products.

We also provide a holistic portfolio of DevOps services, including consulting, CI/CD, container orchestration, release management, and DevSecOps to help our clients accelerate development, optimize costs, and prevent software failures.

Infopulse is trusted by many established brands, such as Allianz Bank, BICS, Bosch, Credit Agricole, Delta Wilmar, ING Bank, Microsoft, Metinvest, Offshore Norge, OLX, OTP Bank, Santander, SAP, UKRSIBBANK BNP Paribas Group, Vodafone, Zeppelin, and others.

For more information, please visit **www.infopulse.com**

Contact us

PL   +48 (221) 032-442

DE   +49 (69) 505-060-4719

US   +1 (888) 339-75-56

UA   +38 (044) 585-25-00

BG   +359 (876) 92-30-90

BR   +55 (21) 99298-3389

info@infopulse.com

infopulse