



# Software Testing and QA

**Driving software quality and QA maturity in fast-paced development projects**

# Our Goal Is Your Digital Success

ScienceSoft is a provider of custom software development, testing and QA services with HQ in McKinney, TX

**36**

years in software  
development and testing

**750+**

employees  
**75+** testing specialists

**730+**

completed testing  
projects



# Our Mission

## Driving Project Success No Matter What

Achieving project goals in spite of time and budget constraints, as well as changing requirements, is ScienceSoft's top priority.

You set goals, we drive the project to fulfill them.

[See how we work →](#)



# Our Clients

**62%** of our revenue comes from 2+ year Clients

**Baxter**

MULTINATIONAL  
HEALTHCARE COMPANY

**RBC**  
RBC Royal Bank

THE LARGEST BANK IN  
CANADA

**Walmart**

LARGEST GLOBAL RETAILER

**IBM**

MULTINATIONAL  
TECHNOLOGY COMPANY

**PerkinElmer**

HEALTHCARE & LIFE SCIENCE  
INNOVATION PROVIDER

**Nestlé**

LARGEST GLOBAL FOOD  
COMPANY

**A1**

TELECOM PROVIDER  
OPERATING IN 8 COUNTRIES

**CHIRON**  
HEALTH

MODERN TELEMEDICINE  
COMPANY

**Eurasian Bank**

AWARD-WINNING  
UNIVERSAL BANK

**ebay**

MULTINATIONAL  
E-COMMERCE CORPORATION

**T-Mobile**

TELECOM PROVIDER WITH  
230M+ SUBSCRIBERS

**MDxHealth**

MOLECULAR DIAGNOSTICS  
COMPANY

**Viber**

INSTANT MESSAGING  
PROVIDER

**Leo Burnett**

ADVERTISING COMPANY

**NASA JPL**

LEADING AERONAUTICS &  
SPACE RESEARCH CENTER

# Industry Focus

Our QA teams are experienced in QA and managed testing services for a range of industries including:

Manufacturing



Insurance



Financial services



Marketing, Advertising



Oil & Gas



Healthcare



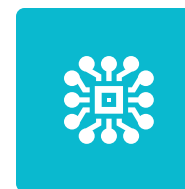
Professional services



Retail, Wholesale



Logistics



IT

# What We Offer



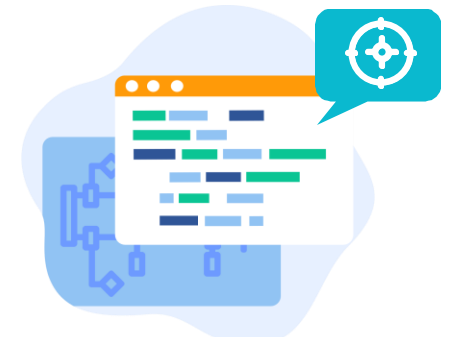
QA consulting  
services



Quality  
assessment  
services



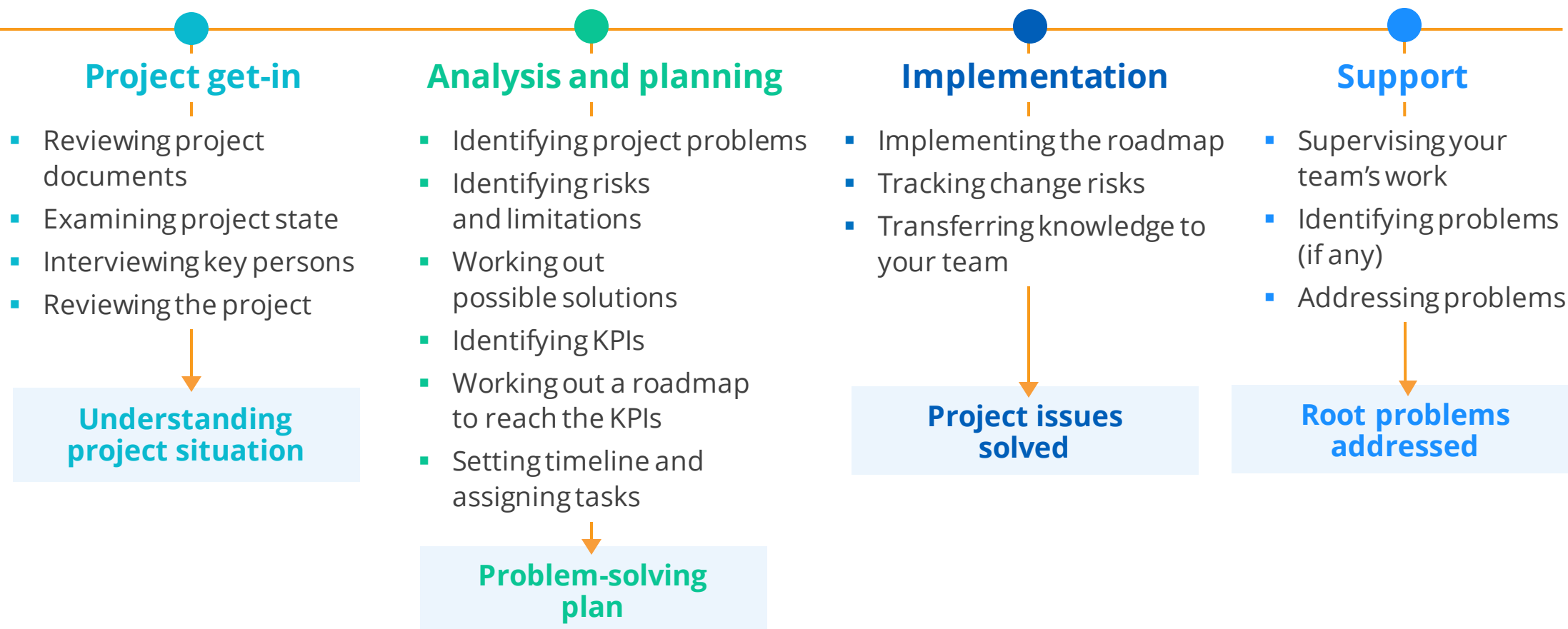
Managed testing  
services (full-cycle  
testing services)



Project-specific  
independent  
testing services

# QA Consulting Services

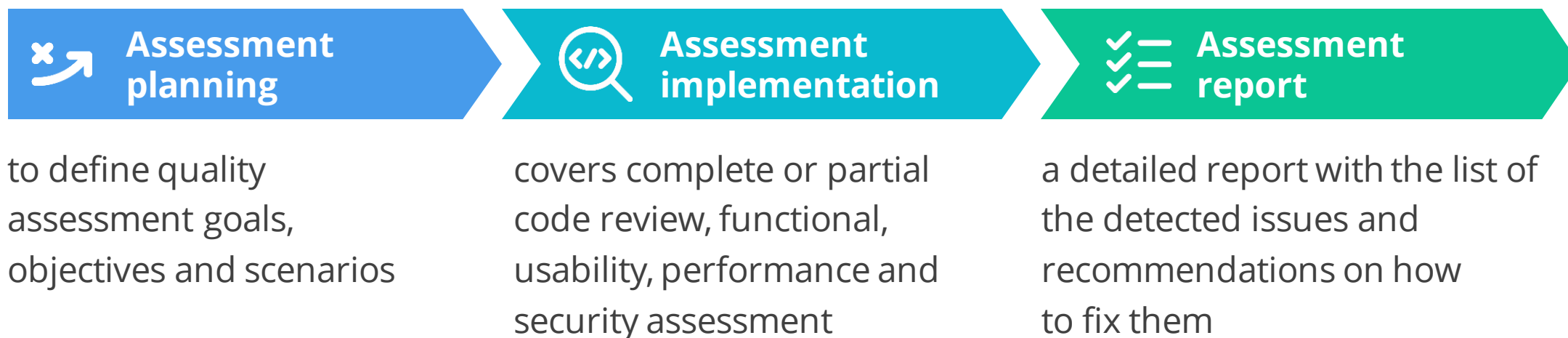
Our QA consultants help companies adapt to changes in quality management process with no damage to their products, projects and reputation





# Quality Assessment Services

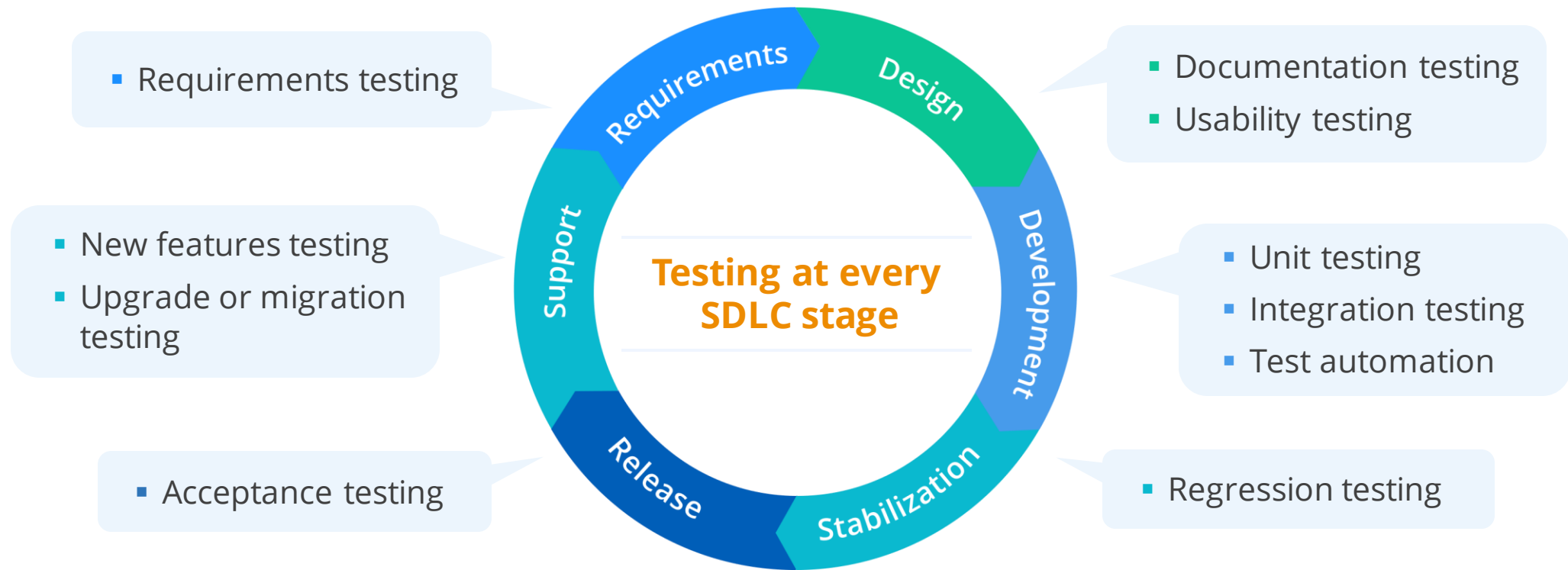
ScienceSoft offers comprehensive product audit from different angles, including code quality, solution functionality, usability, performance and security. Our quality assessment process consists of **3 steps**:





# Managed Testing Services

We provide **end-to-end** testing services to ensure all the pieces integrated into your solution are performing as designed from start to finish



# Project-specific Testing Services

## By aims & goals

- Functional testing
- Usability testing
- Security testing
- Compatibility testing
- Performance testing

## By automation level

- Manual testing
- Test automation

## Vulnerability management

- Regular security testing.
- Continuous security policy review.
- Implementation of the required remediation measures and code fixes.

## Compliance management

- Web application testing
- Mobile application testing
- Desktop application testing
- Data analytics, including big data testing

# Functional Testing

ScienceSoft performs functional testing to guarantee that your solution will work everywhere, every time and for everyone.

## We provide full-cycle functional testing services:



Functionality testing for compliance with the specification



System and integration testing



Localization testing



Functional test automation



Data migration testing

# Performance Testing

Our testing team reveals stress, load, scalability or reliability glitches and ensures reliable work of your product

## Testing types we perform:



Load testing



Volume testing



Stress testing



Stability testing



Scalability testing



Visual Studio



# Usability Testing

Scenarios

**Usability testing** helps to understand what issues and barriers can arise during the interaction with the product

## Usability Testing Report

A "Usability Testing Report" is the key document for any company that wants to gain a deeper understanding of their audience's needs and frustrations. Whether it's for a website, mobile app, physical product, or anything you can test in front of people, usability tests can help you discover product flaws as well as areas of confusion. This template guides you through the process of usability tests and helps you deliver your findings in a simple, easy-to-read document.

Month Day, Year

**Project Lead:** Ashley Solloway  
**UX Researcher:** Timothy Nichols  
**Research Analyst:** Mariah Coolridge  
**Testing Moderator:** Ellis Skillman

### Executive Summary

The length of your executive summary can vary, but it's important to give a concise overview to discuss the purpose of the study, how it took place and your key findings.

Start by briefly describing how you tested your product's usability.

- List the factors that you used to define usability here (e.g: appeal and clarity to a user).
- Factor 2.
- Factor 3.

Describe the age range and geographic breakdown of your test group. Briefly describe the type of test you conducted (online or in person) and the key findings you collected from your test.

72%

of participants were able to successfully complete all tasks.

28%

of participants were unable to complete all tasks.

54%

of participants enjoyed this specific experience.

33%

of participants complained about this specific experience.

Corrected logic and work principles of the product

# Security Testing



- **Penetration testing**  
to check the protection of the entire IT infrastructure or applications by finding and exploiting security vulnerabilities
- **Vulnerability assessment**  
to detect and prioritize security weaknesses in the IT infrastructure and provide recommendations on their mitigation
- **Infrastructure security audit**  
to find vulnerabilities in security policies and procedures, security monitoring tools, physical access control, etc.
- **Compliance testing**  
to ensure the compliance with PCI DSS, HIPAA, and other regulatory standards
- **Security code review**  
to identify encryption, buffer overflow, XSS vulnerabilities, and other security weaknesses possibly overlooked in the development phase



# Test Automation

Whether it's web, mobile or desktop, we define and implement appropriate strategies and methodologies for test automation:

- ✓ Test automation feasibility study and ROI analysis
- ✓ Test automation framework design and implementation
- ✓ Test automation tool evaluation and selection
- ✓ Test automation scripting and execution





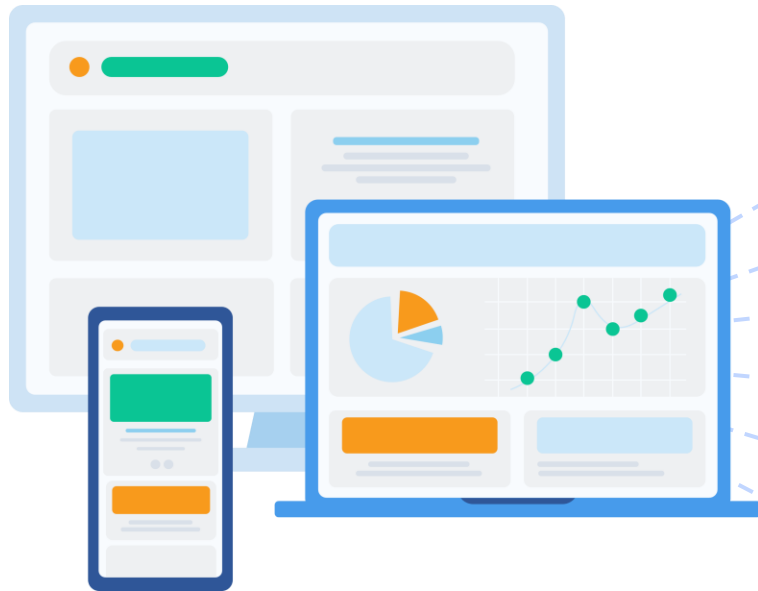
# Mobile Testing

We offer ample experience in testing iOS, Android and cross-platform mobile applications in various domains.

- ✓ UI testing
- ✓ UX testing
- ✓ Mobile backend performance testing
- ✓ Mobile functional (manual) testing
- ✓ Mobile test automation
- ✓ Test automation framework design and implementation



# Application Types We Test



Enterprise applications (ERP, CRM, SCM, BPM, billing systems, etc.)

BI and big data solutions

Portals

eCommerce solutions

Enterprise mobile applications

Customer mobile applications



For all applications, we assure secure authorization and protection of sensitive data

# Cooperation Models

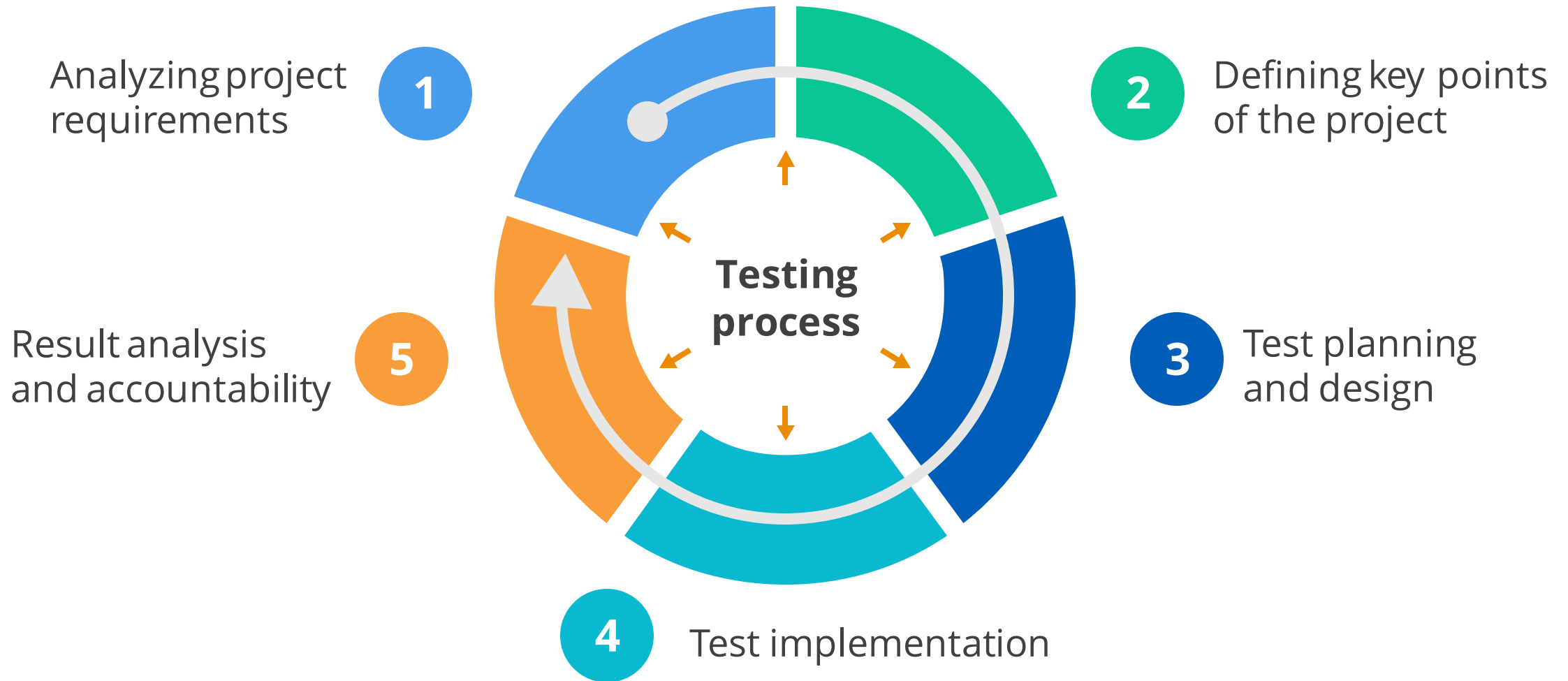
**Independent testing  
and QA services**



**Test team  
augmentation**



# Software Testing Process



# What We Do for Each Project Stage



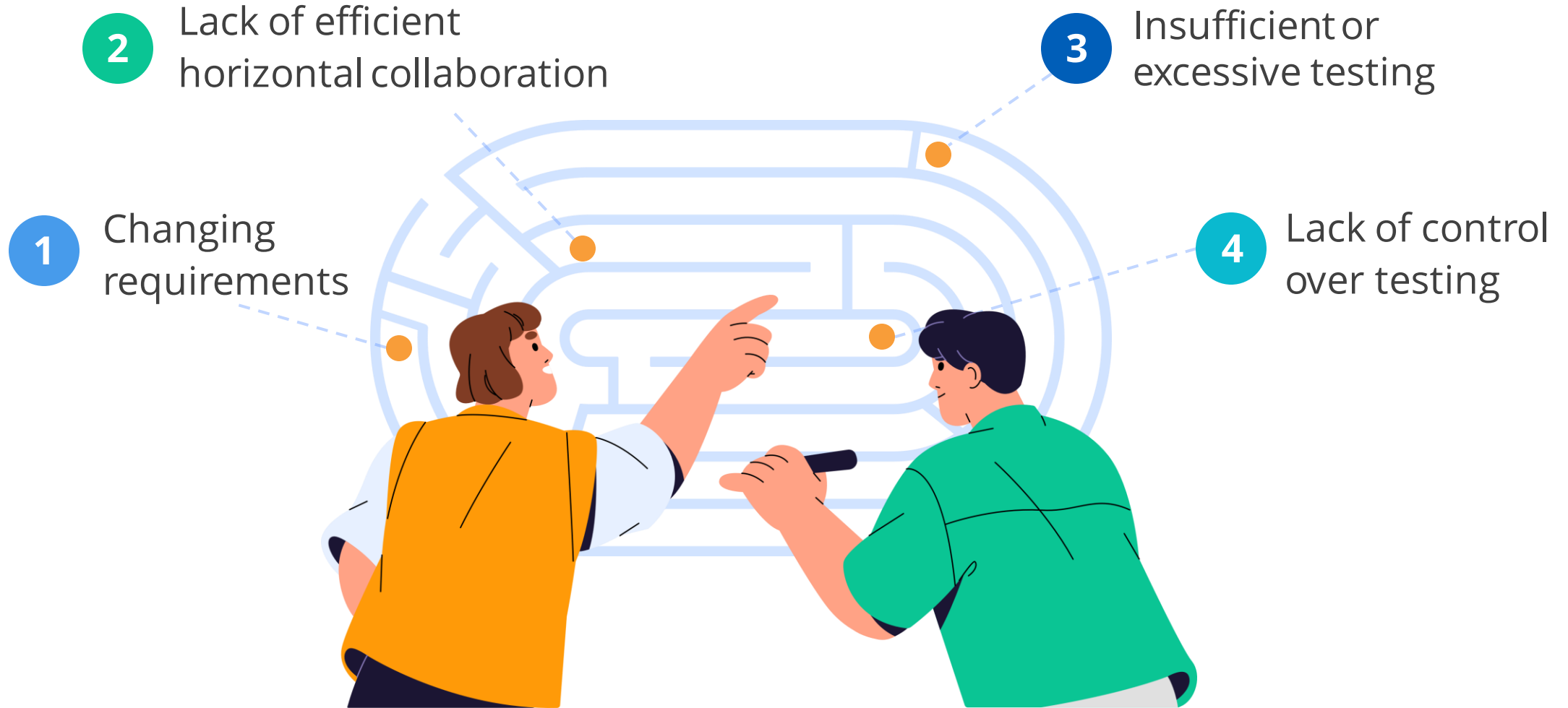
## 1. Create test documentation required by ISO/IEC/IEEE 29119-3:2013

to ensure systematic and complete test coverage and ensure full visibility of the project's activities

## 2. Apply proven testing techniques, tools and methodologies

to perform different types of testing and surpass your quality expectations

# Project Challenges We Meet



# Project Challenges We Solve



**Testing process slows down** due to the need to adapt to ever-changing situation

**Solution:** Domain experience + Risk-based approach



As an experienced testing vendor, we single out test cases for application areas, which are affected by new features, and rank them according to the priority.

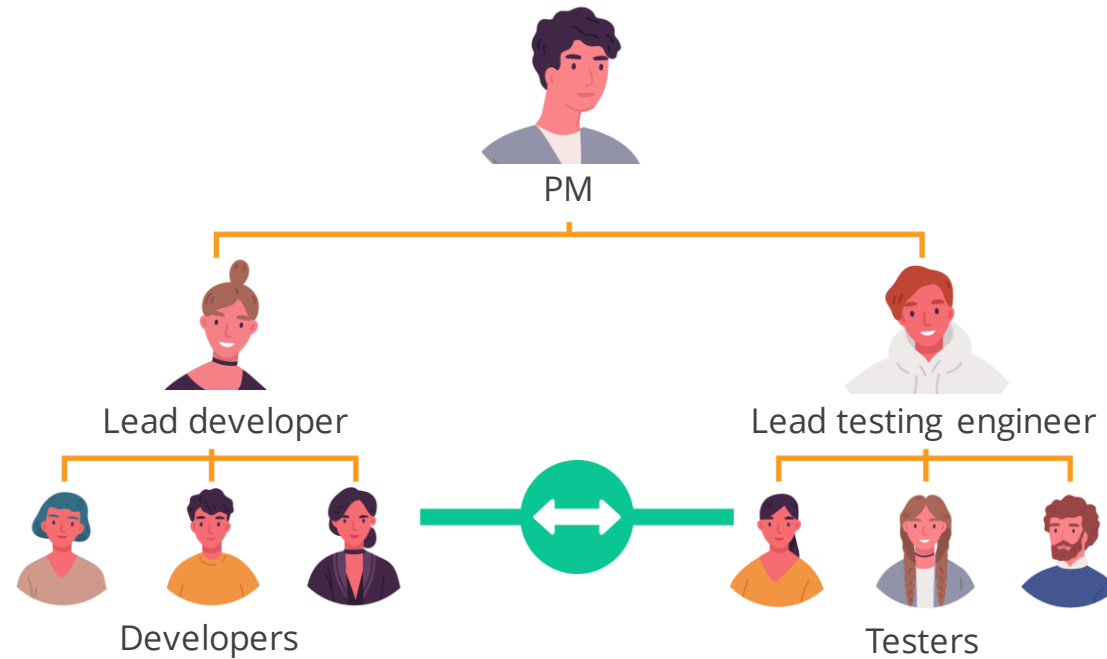


# Project Challenges We Solve



Lack of integration between testers and developers may **hamper testing efficiency** and **increase testing time**

**Solution:** Efficient horizontal collaboration

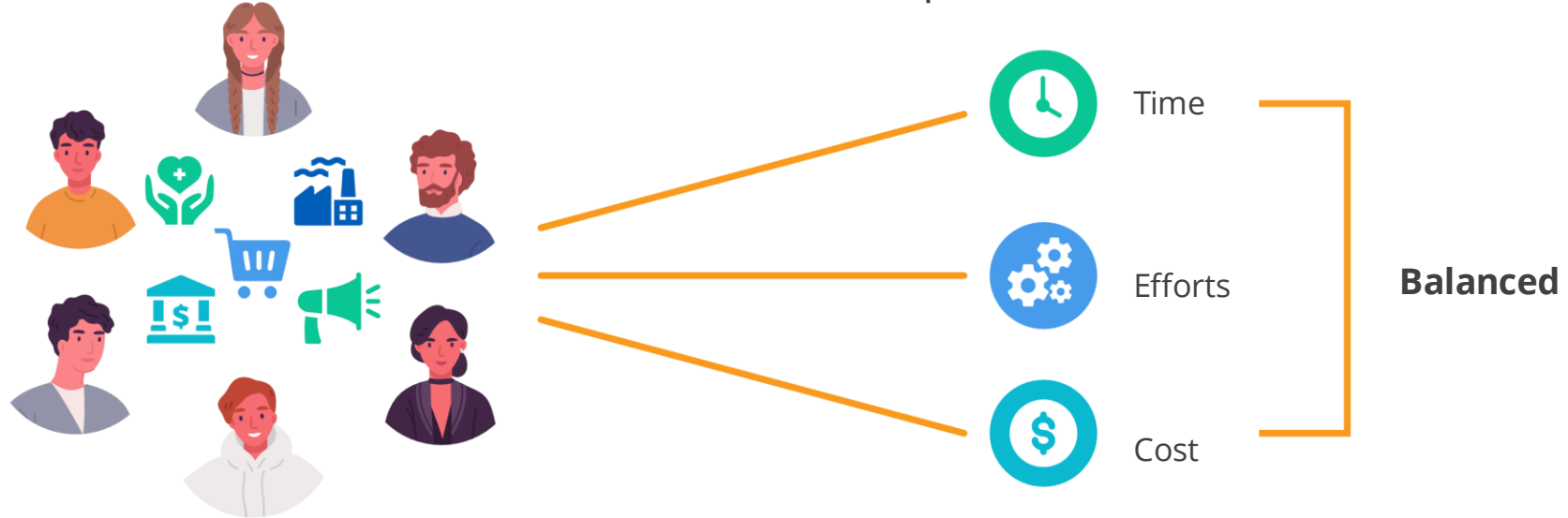


# Project Challenges We Solve



**Insufficient or excessive testing** are equally harmful. They result in **increased testing time, efforts and cost**

**Solution:** Domain experience



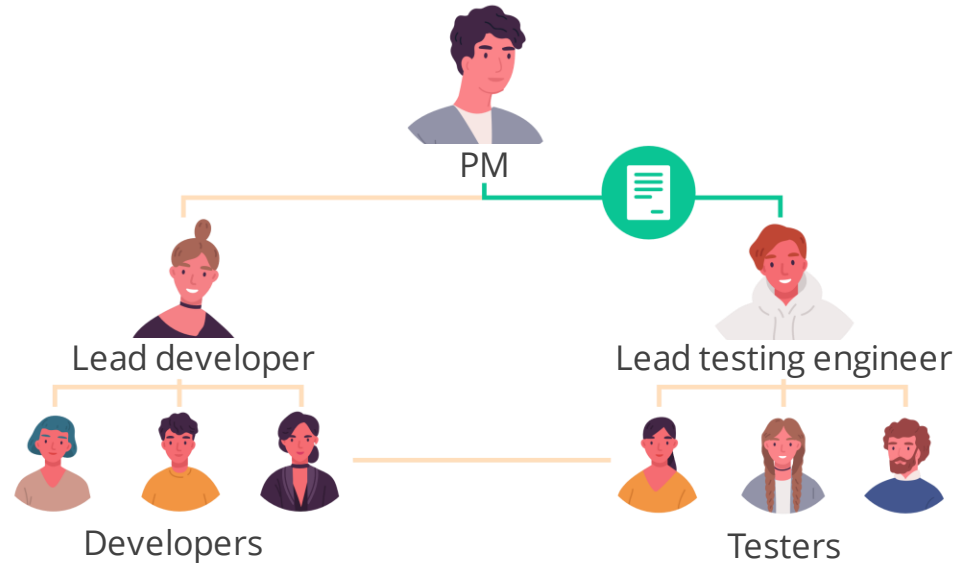
Thanks to extensive domain expertise, our specialists successfully balance testing efforts featuring expected system functionality and vulnerable points

# Project Challenges We Solve



Insufficient control over testing may lead to **the lack of project transparency**

**Solution:** Create test documentation and reports



We provide all documents, reports and ad hoc information about project quality so that you stay in control of the testing process

# Success Stories

See how we drive frequent releases of high-quality software through mature QA processes aligned with development.



# Web App Testing for Mobile Nursing Service Providers

## Customer

A European company developing software for healthcare, life sciences, pharmaceuticals and related industries.

## Solution

ScienceSoft's testing specialists performed functional and regression testing of the web application for mobile nursing service providers. The application has been functioning stably for 5+ years.

## Tools & Technologies

TFS (Test manager), MS SQL Server.

[Project details →](#)



# Testing of a Web and a Mobile Application for a Care Management Solutions Provider

## Customer

A US provider of HIE solutions for providers (hospitals, pharmacies, assisted living and home care systems) and patients.

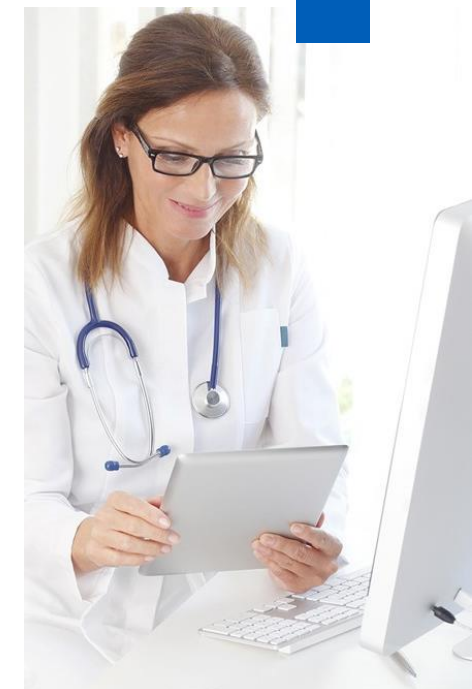
## Solution

We performed functional (700+ checklists), integration, and regression testing for multi-module web and mobile HIE apps. New app builds were released every 2 to 4 weeks with zero critical defects.

## Tools & Technologies

Postman, Atlassian Jira, Confluence.

[Project details →](#)



# End-to-End Testing for a Mobile Banking App Rated 4.8 on Google Play

## Customer

A commercial bank with \$1.9B in assets and 80 service centers aimed at supporting small and medium businesses.

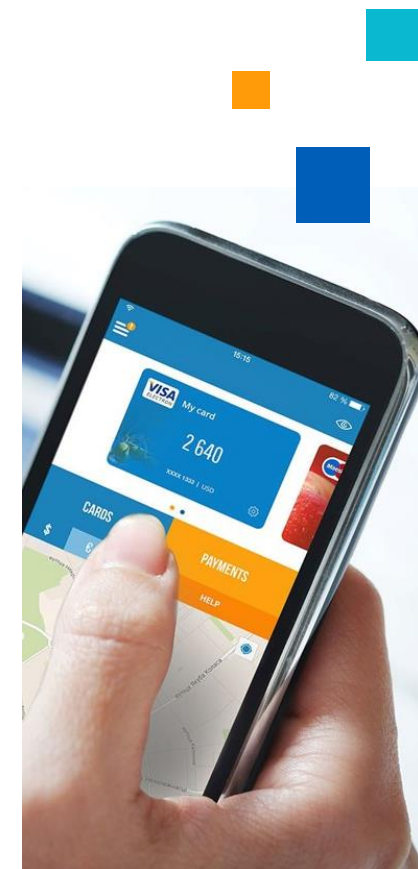
## Solution

ScienceSoft's team performed end-to-end testing of an award-winning mobile banking app with a complex functionality, on 20+ most popular devices, including wearables.

## Tools & Technologies

Atlassian JIRA, UiAutomator.

[Project details →](#)





# Automated Testing for Insurance Estimation Software of a Worldwide Insurance Company

## Customer

A global provider of casualty and accident insurance solutions and other insurance-related services.

## Solution

Our test automation team handled the QA for microservices-based insurance software, introducing continuous integration (CI) and continuous testing and applying pairwise design to test against large datasets.

## Tools & Technologies

Protractor, TypeScript, JavaScript.

[Project details →](#)



# Full-Cycle Testing of a Web Application for Car Insurance Claim Estimation

## Customer

A US software development company that provides digital document solutions to insurance companies working in the automotive industry.

## Solution

ScienceSoft performed exploratory, functional, UI, integration, cross-browser, cross-platform, localization, and regression testing for three role-based insurance web apps and a mobile web app.

## Tools & Technologies

Atlassian Jira, Confluence, Microsoft SQL Server Management Studio.

[Project details →](#)



# Testing and Support of BI-Integrated ERP for a Multi-Industry Corporation

## Customer

A multi-industry corporation with a nationwide retail and wholesale chain, including gas stations, gardening centers, and roadside cafes.

## Solution

Full-scale testing and technical support of a multi-faceted ERP integrated with a BI module. As the application was constantly updated, regression testing was performed each time a new feature was implemented.

## Tools & Technologies

.NET, Atlassian JIRA, VMWare Workstation, Microsoft SQL 2008R2, Microsoft Analysis Service, Magento.

[Project details →](#)



# Testing of a Video Streaming Application for an International TV Everywhere Service Provider

## Customer

A European TV Everywhere provider powering major network carriers, broadcasters and content owners.

## Solution

Functional, exploratory, usability and regression testing of each customized version of the B2B hybrid application on 15+ devices, such as TVs, smartphones, tablets, desktop computers and laptops.

## Tools & Technologies

Atlassian JIRA, Confluence, Google Drive.

[Project details →](#)



# Penetration Testing for Reconice to Improve ePHI Security

## Customer



Reconice, the leader of the medical speech recognition software systems in Italy.

## Tools & Technologies

Nessus, OWASP Zed Attack Proxy (ZAP), SSLScan, Metasploit, Burp Suite, Nmap, dirb, Dbeaver.

## Solution

ScienceSoft's cybersecurity experts verified the client's IT infrastructure against vulnerabilities and conducted black box pentesting of their solution used at 500+ healthcare organizations.

[Project details →](#)



# Let's Make Your Project a Success!

