



Software Test Automation Case Study

ING Bank

ING Group was created in **1991**

Head Office in **Amsterdam**

52,000 employees worldwide

33m customers across **40 countries**

450 employees in IT field in Turkey

Objectives

**Fully Automated
DevOps Cycle**

Challenges

- ✓ Extensive number of applications, platforms and technologies: Xnet, Smarti ING Mobile, MIM, Paramara,
- ✓ Lack of human resources for the test automation,
- ✓ Tight schedule,
- ✓ Long test cycle and deployment time,
- ✓ 12 separated teams to be aligned.

Approach

Since there is **insufficient human resource** for the test automation in order to achieve fully automated DevOps cycle, we decided to use **Behaviour Drive Development (BDD)** methodology to involve non-technic employees in STLC, partnered with Testinium.

Testinium

Testinium was established in **2014, Istanbul.**

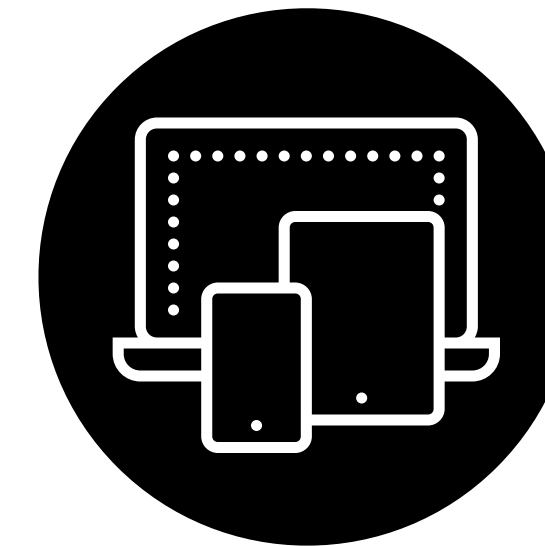
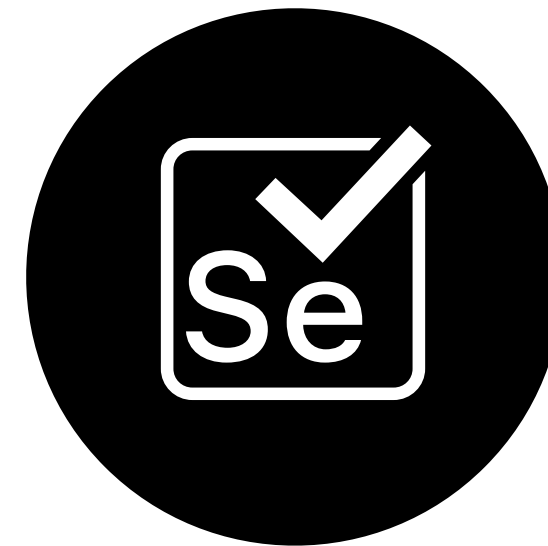
Specialized in **software test automation** solutions for mobile, web and desktop applications.

Additionally, provides a wide range of services including **software lifecycle consulting, test outsourcing** and **training.**

Why Testinium?

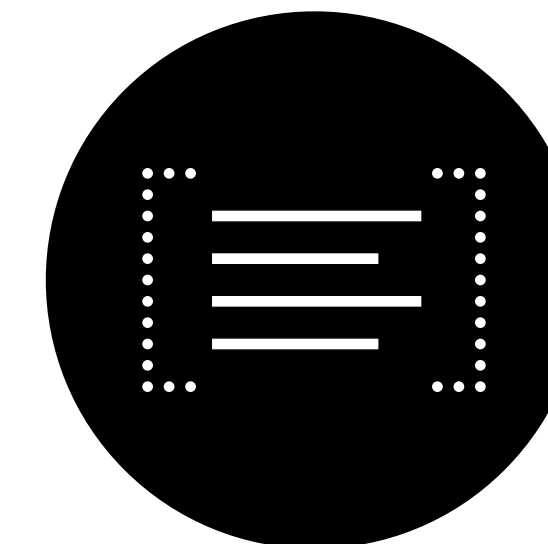
Centralized Test Automation Management

Custom Selenium grid implementation that supports video recording, command logging, self-healing



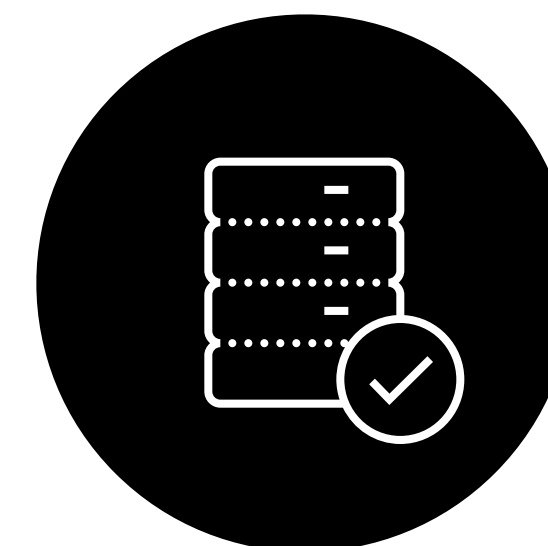
Can manage more than 100 mobile devices and web nodes (Appium and Selenium)

Supports on-premise and cloud infrastructure



REST based micro-service architecture

Setting up different types of roles is possible by defining specific permissions for members of a software team with Enterprise Role Management



Detailed reporting and TFS with Git support

How?

Infrastructure & Training and Scripting

- ✔ Established test automation infrastructure that requires zero coding for analysts.
- ✔ Twenty three analysts worked on four different domains at ING bank and were trained about testing, BDD approach and Testinium usage.
- ✔ Cooperated with the analyst team to develop automation scenarios using the BDD approach.
- ✔ Developed more than 700 automation scripts using web based BDD editor.
- ✔ In this way lack of enough resource and tight schedule were handled effectively.

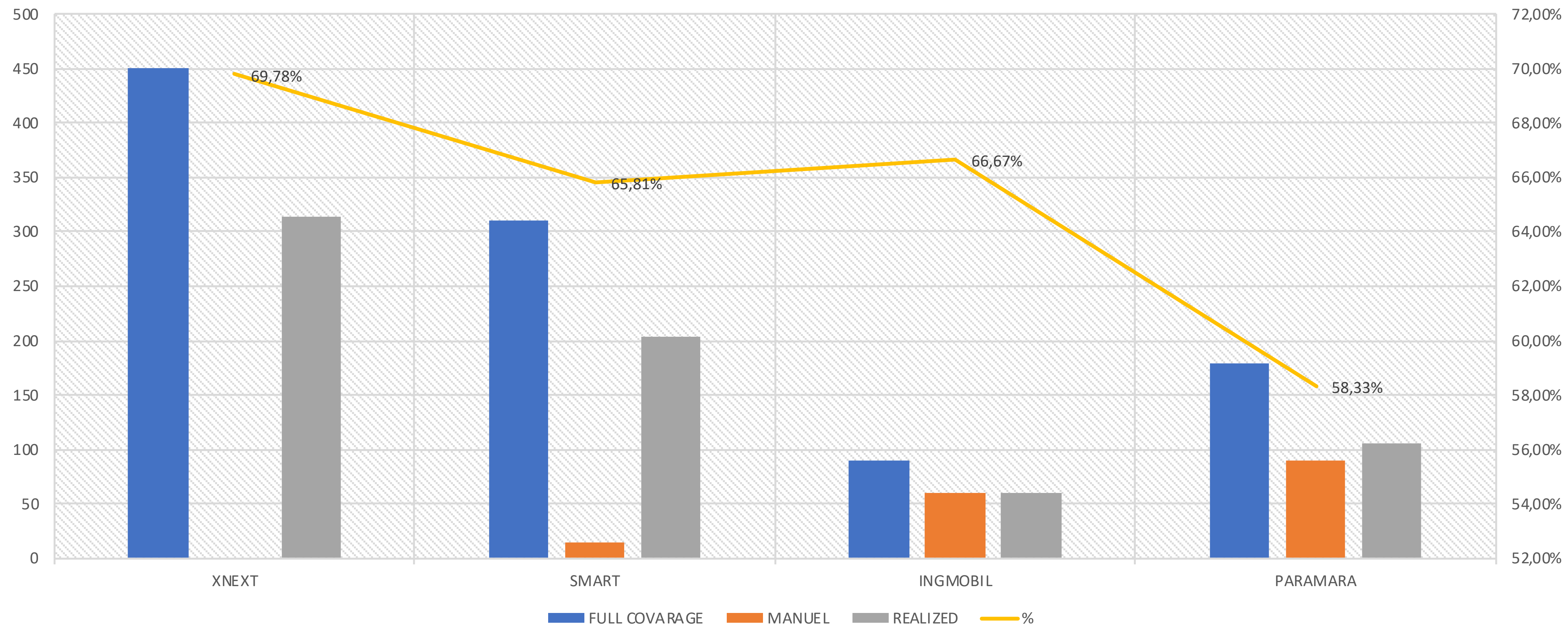
Results

**Better
App Quality**

**Reduced
re-open
cases**

Regression Tests

Higher Coverage.



Before

After

XNEXT

No regression

3 hours

SMART

2 man/day

4 hours

MOBILE

3 man/day

4 hours



TESTINIUM

Scalable, Simplified and Effective **TEST AUTOMATION** Solutions

By signing up for a free account on Testinium, you can instantly run your script on hundreds of different browsers on real mobile devices, review reports and use your time more efficiently.

It's time to BDD.

Enjoy Testing!