

— Success story

**BBVA Reduces
Response Times
by 80% Before
System Go-live**

—
BBVA

BBVA



Performance Testing before go-live / BBVA Case Study

Banco Bilbao Vizcaya Argentaria (BBVA) is one of the world's largest banking and financial services groups. Founded in 1857, it has a presence in over 30 countries with over 100,000 employees, 50 million customers, 7,000 branches and 21,000 ATMs.



30 countries



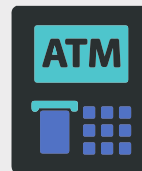
+100,000 employees



50 million
customers



7,000 Branches



20,000 ATMs





The Problem

BBVA was restructuring its Internet Banking system, BBVANet, and needed confirmation that its system would be able to absorb peak traffic loads.

Abstracta ran performance tests over Web and Mobile corporate systems using real data to enable BBVA to make key design and architecture decisions and to minimize risks before going live.



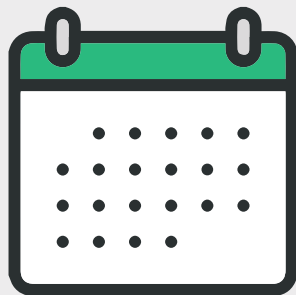


Our Solution

BBVA decided to hire Abstracta (over its existing Fortune 500 service providers) as they needed experts in performance analysis who could perform a quick system diagnosis. Within two months, Abstracta had completed all our performance tests, suggested improvements and implemented a monitoring platform.

02
MONTHS

To complete all the performance tests, suggest improvements and implement a monitoring platform



The restructuring of BBVAnet faced many inherent risks due to the deployment and architectural characteristics of the internet banking system. Abstracta executed performance tests that could be run multiple times and provided indicators of how the system responded to a large number of concurrent users.

This testing was essential in order to reduce the risk of downtime or failures in the production systems. The system was developed mainly in C# on the .Net platform with certain aspects also created in Java and AS400 CL. The main tools used in the project were OpenSTA, Iseries Navigator, Windows Performance Monitor, Apache Log Viewer and SQLServer Tuning Advisor.

Firstly, we validated the architecture and general infrastructure to detect severe performance problems.

We then provided objective data to analyze different implementation options.

Finally, we recommended changes to the system architecture. We used OpenSTA for test automation and NMON for monitoring the server's resources and database using statistics native logs.

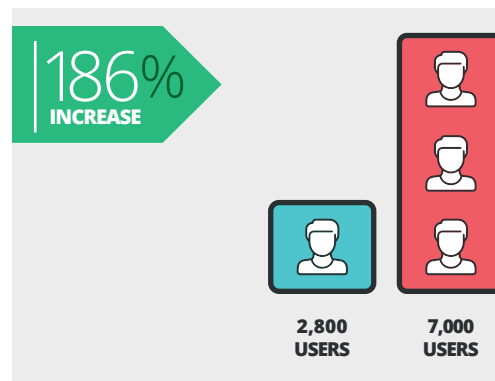


A+ Results

Originally, the system had been able to handle a total of 2,800 virtual users without suffering degradation under concurrence.

In preparation for the 2013 release, Abstracta successfully ramped up to 7,000 virtual users an hour (a 186% increase) during the load simulation testing without the need for any additional hardware.

This amount was in line with the total number of users expected during peak hours over the following 3 years. These system optimizations led to millions of dollars of savings in hardware costs.



In addition, our recommended system adjustments enabled us to reduce the maximum response time in one of the most critical test scenarios by 80%.

Finally, we provided training to key staff in the bank for the detection, analysis and correction of performance incidents.

As a result of these successes, we continue to do excellent work for the BBVA Group in Latin America.



Looking to improve the performance and quality of your systems?

Contact us today

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