

# Business Case



## Load Test of a Global e-Commerce Web Site



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### The client

- Global consumer goods
- New consumer web site
- World wide distribution
- Country specific customization
- High server load

### Success reasons

- Rapid deployment
- Low costs
- Use of cloud based test tool

The client wanted to release a new e-Commerce application destined for internet and mobile users. The launch would be accompanied by a marketing campaign so it was important that the site represent the public image of the brand and had excellent performance. The client asked Itecor to test their site to ensure it performed under load with acceptable response times from Web and mobile.

The client was a leading global consumer goods company headquartered in Switzerland. They were planning to launch a new e-commerce channel for marketing and distribution. Good performance and scalability was critical, as the client expected a rapidly growing market.

The application was hosted by a local market provider.

The load challenges were:

- ✓ Rapid test implementation
- ✓ Test with many users from different locations across the world
- ✓ Cost effectiveness

To address these demands the cloud based performance test tool NeoLoad<sup>®</sup> was selected. The simplicity of scripting with NeoLoad<sup>®</sup> reduced the test preparation time allowing the performance test team to concentrate on planning

and organizing the test.

It was important for the client to understand the response time for mobile users as the e-commerce site was being launched in a market where a high percentage of internet traffic was mobile. Using the Neotys Cloud solution, the test team was able to simulate mobile traffic from local market servers. Bandwidth limitations of mobile devices were also simulated using the load test tool. License and infrastructure costs were low, since they were billed on a pay-per-use basis.

Through iterative testing, the Itecor team diagnosed multiple performance issues which were able to be resolved before the successful market launch.

With the choice of the NEOLOAD<sup>®</sup> cloud based performance test tool, the test demands were met and the e-commerce application was able to go live. The solution was implemented on a very short time scale.

## Challenge and Risks

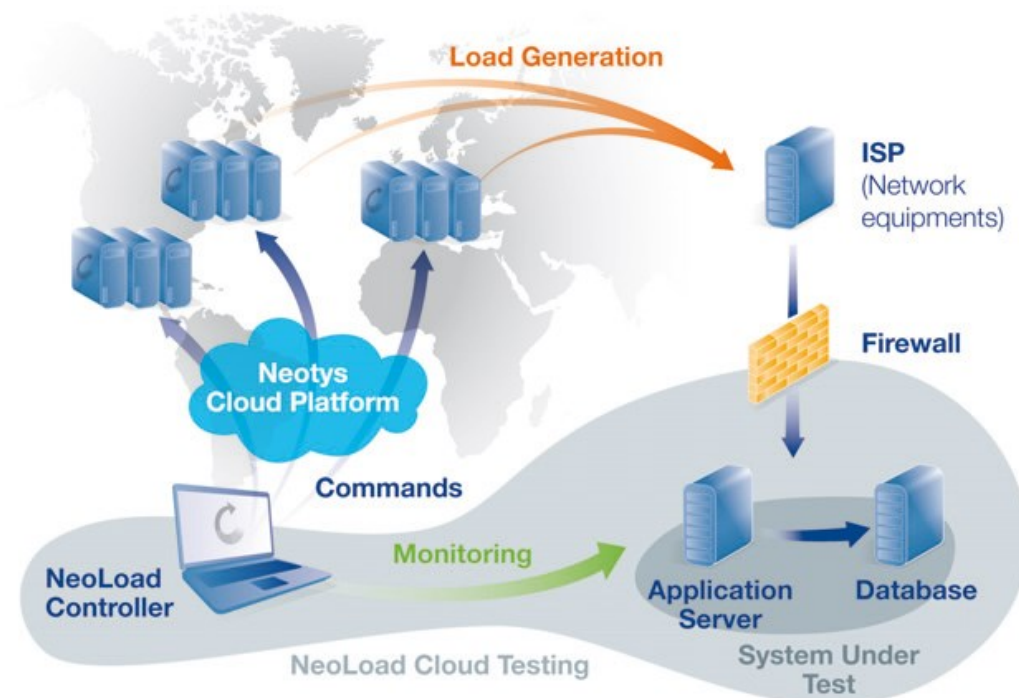
A innovative product line was launched using n e-commerce application for marketing and distribution . The challenge for load tests were:

- ❶ Ambitious project plan, short time for testing
- ❷ Geographical locations of application servers
- ❸ High number of concurrent users
- ❹ Bandwidth limitations

## Catalysts

The key catalysts that contributed to the success of the project:

- ❶ Experienced, NeoLoad-certified consultants
- ❷ Low expenses for tool licenses and test infrastructure through the use of cloud based test tools
- ❸ Rapidity of test and high quality of reporting



## Approach

The selection of the NeoLoad Cloud Testing solution and open source analysis tools, were essential for the success of the project:

- ❶ Short test preparation time due to easy test case recording and load scenario preparation.
- ❷ Low costs: The NeoLoad license is billed only for “test days”.
- ❸ Cloud load generators: The use of cloud injectors in Asia and Central Europe allowed a realistic simulation of latency and complied with legal access restrictions of the application.
- ❹ Open source tools Fiddler and Yslow were used to analyse the Client/Server traffic and to provide performance tuning recommendations to the project manager.

## Benefits

The load test showed severe performance limitations which started at less than half of the anticipated load. Bandwidth simulation of mobile networks revealed that the application was not suited for use with mobile devices. By monitoring the Client/Server communication the team was able to identify the bottlenecks causing poor performance

As result of the test, the application was optimized and the capacity of the application infrastructure was increased. After optimization, the application was re-tested and performed according to the Key Performance Indicators set by the customer.

The e-commerce application launched successfully without performance issues.



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