SOFTHOUSE

Continuous Delivery improved the quality

This major telecom company operates in an extremely competitive market with very strict demands that the latest features be ready on time. The forced pace of the work is a severe test of our working methods.

Challenge

1

The telecom company's client had drawn up an aggressive timetable with short delivery times.

• All new features had to be ready for the Christmas season and were to be tested as soon as they were completed.

• 80 % of all problems found were to be rectified and delivered within 24 hours.

Tough baseline
At the start of the project delivery times were very long: in the best case it took two weeks from the time the code was ready for it to be integrated. The quality assurance process was very complex, with integration and testing in several stages. Despite this, there were serious quality problems in the code, in the test cases and in the test environment. Internally, the staff felt that the code they were developing was of low quality and that more testing time was needed before delivery.

Solution

2

Analysis showed that the integration process meant that the code supplied by the developers was being tested against code in the product that was more than two weeks old. The long lead time for integration was a key reason for the quality problems, and it also slowed down the overall development rate.

• A simpler process of integration was introduced. It took a maximum of half a day and contained just one step.

• An automatic test service was provided to all developers for the code that was to be delivered.

• The test environment and test cases were quality assured by allowing them to undergo a large number of iterations.

• Any regression errors that emerged were given a higher priority than everything else.

• Visualisation and monitoring of status and quality were carried out every day.

Results

3

Within two weeks we had managed to integrate the latest from all the developers into the product. Delivery times had also been reduced from two weeks to one day and the quality quickly improved. Every day we could follow the development of the quality of the product where problems could now be tackled quickly. The outcome of error corrections were visible the day after they were completed, which meant that we could immediately tackle the next problem.

The developers quickly learned to appreciate frequent deliveries because they felt helped by the automatic test service. Moreover, the most up-to-date code from all the other developers was included in the product all the time. The response time from the development department was now extremely short, which led to two benefits: the customer's needs could be met more effectively and internal quality assurance was improved.