

THE PROBLEM

The client required that their E-biz portal, built on the latest web technologies be put through functional testing. Rigorous and thorough testing was to be performed within a short time frame in time for the website launch.

The QA team at Kualitatem was faced with the challenge of performing testing within a critical time frame and to maintain close collaboration with the client's development to ensure timely bug fixes.

THE APPROACH

Kualitatem team gathered business domain knowledge and product understanding while spending rigorous two weeks with the development and management team. The two week onsite and offsite effort included development of a communication framework for bug reporting, bug fixing and build-update. A web based open source tool was selected for bug reporting purposes. This was essential to seamlessly integrate QA model developed by Kualitatem with the client's development team to optimize both work and time.

Kualitatem QA team started off with the Functional testing while the development team got familiarized with the communication framework. In little iteration, the cycle (bug report, bug fix, and build update) was in flow and the testing paced up. Each day QA activity included verifying the fixed bugs, looking for ripples and then looking for new bugs. Test scenario development and test case development was also a part of the activity.

After eliminating the level 1 and level 2 bugs, the product was launched and the development team worked on adding more features. Regression testing and functional testing were carried out in parallel. As the product clientele grew Kualitatem also developed a plan for usability testing.

Structural testing was also being performed in order to ensure stability of the application as new modules are being added to it.

It is evident from figure 1 below, that as time has elapsed percentage increase in the bug count has improved consistently.

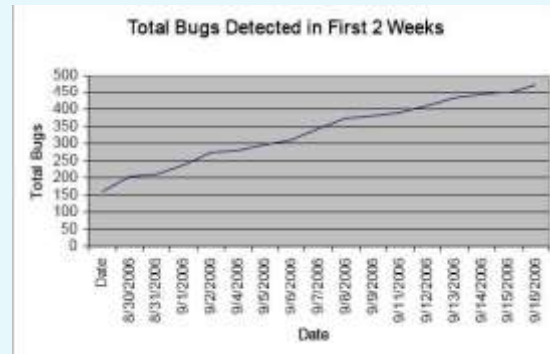


Figure 1

New bug count in figure 2, during the same period shows fluctuations. Primary reason is that testing was 'on-demand bases. This meant that functional testing was performed only when the new release was available to be tested.

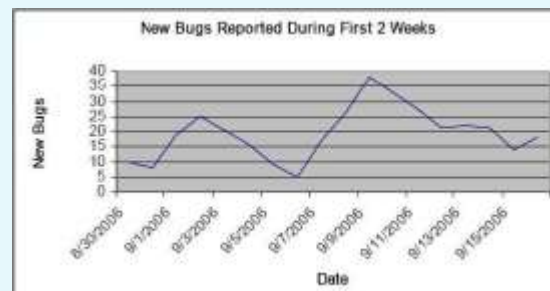


Figure 2

Time vs. Cost Analysis

The real strength of this model lies in its flexibility and seamless integration with the client activities and processes while working on QA tasks from a different location: This resulted in positive outcomes for the client such as:

- Eliminating the fixed costs of having a complete QA department
- Cost savings during the time when there is no testing activity as clients are charged for the amount of work done
- Variable cost savings in QA dept. when the Testing cycle is inactive.
- Increased profits through these cost savings

Resources vs. Cost Analysis

Kualitatem employs resources with multidimensional thinking and varied experiences. Our team is well trained in multiple domains within the Quality Assurance field. We encourage our resources to add onto their skills through learning latest tools and technologies and exploring new business domains. This culture of learning helps our team to remain up to date and hence they are able to add value to our clients businesses in the following ways:

- Reducing the cost of grooming and maintaining high end technical resources.
- Reducing the cost in searching and hiring such specialized resources.
- Reducing the cost of management involvement through substantial time savings.
- Reducing the cost of training resources with the emerging tools, technologies and strategies.
- Increased margins and increased budgets for QA and other constructive development.

SUMMARY

Kualitatem provided seamless and fully integrated software quality assurance services to the client using the latest tools and technologies. By combining the testing expertise of Kualitatem with the development expertise of client, various testing milestones were achieved in an efficient and timely manner.

Test engineers at Kualitatem added substantial value to the product by suggesting improvements in process flow, business flow and feature usability. Functional testing of the application proved that Kualitatem was successful in providing standardized, experienced and multidimensional technical support as an independent testing partner.