

Background

One problem with which a client approached Kualitatem was to perform QA activities on one of their products. The product was a web based e-biz portal built on latest web technologies. Primary objective was to perform rigorous testing to make it ready for launch within a scheduled timeline.

Challenge

- Client wanted a cost effective and experienced input to boost their QA work while meeting aggressive timelines.
- Kualitatem team had to get domain understanding and product knowledge in the absence of any documentation.
- Establish a robust and efficient framework to communicate with the development team as the task was time critical.

Solution

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 a communication framework development 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 work and time both.

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 a development team kept on adding more features. A Regression testing plan was set alongside the functional testing. As the product marketing and clientele started growing, Kualitatem team started in parallel the Usability testing.

With this model working successfully, White box testing is the step ahead. Test scripts are being written in one of the free-ware automation testing tools to ensure the reliability across the application as new modules are being added to it.



Analysis

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

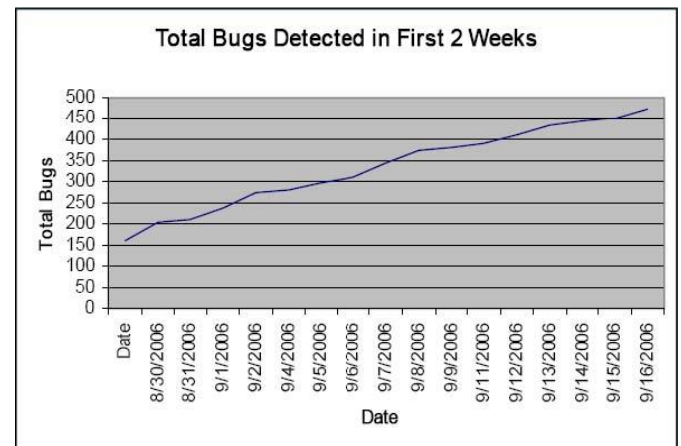


Exhibit 1

New bug count in exhibit 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.

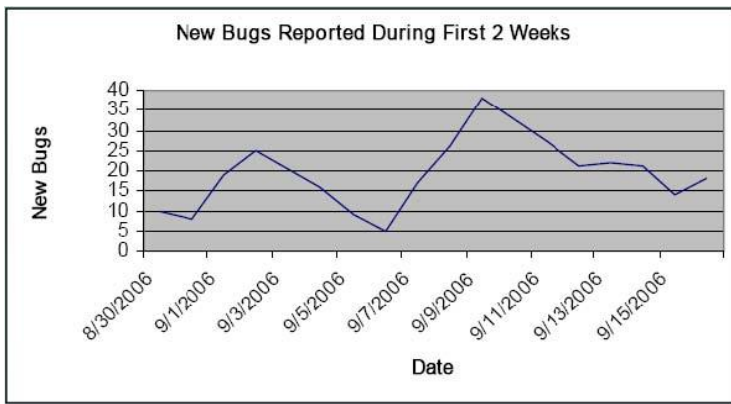


Exhibit 2

Time vs. Cost Analysis

Real strength in the model lies in its flexibility and seamless integration with the client activities and processes while completing the QA tasks and responsibilities remotely. This resulted in:

- 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 are experienced, trained, and best suitable in software testing lifecycle. Kualitatem emphasize on constant training and grooming of their team from the viewpoint of clients business domains, emerging technologies, tools and strategies. This culture facilitates them to remain updated through constant research and efficiently keeping in perspective the core objective i.e. client satisfaction. This specialized QA platform with latest updates and experienced resources adds value like:

- 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.

Conclusion

Kualitatem provided seamlessly integrated software quality assurance services using innovative framework and latest standards. By combining the testing expertise of Kualitatem with the development expertise of client, various testing milestones were achieved effectively and on-time confidence.

Test engineers at Kualitatem added substantial value to the product by suggesting improvements in process flow, business flow and feature usability. Several bugs were located that were not a part of test plans and test scenarios. Identifying these ripple effects clearly indicates the benefit of experience, skill, multidimensional thinking and independent verification and validation.

Working with Kualitatem resulted in Client avoiding cost overrun with an unmatched satisfaction level regarding both product quality and services.