



By Unni Lie, nResult  
Edited by Ed Carroll, ProDX

## QA Testing is an Important step

What company would consider releasing a product into the marketplace without extensive quality assurance testing? This becomes especially critical in the highly competitive field of computer software and hardware. Service and support calls and product returns could easily eat away all the profits of a new release. Besides, if someone has a negative experience with any of your products, there are usually plenty of competitive products they can turn to, and you may have lost them for good.

## “It works on my computer”

This, of course, is no news to a software developer. But sometimes, in the rush to catch the window of opportunity for a release, testing may be overlooked, or left to the programmers and the hardware available to them. "It works on my computer" can be dangerous last words.

## Internal Testing or Outsourcing?

But if you are a conscientious developer and know the importance of the test cycle, you still have a decision to make: Do you invest in the manpower and hardware purchases to set up an internal test facility, or do you outsource? And if you decide to outsource, do you outsource the whole testing process, or just a portion of it? You may need to go through the steps of competitive analysis, functional testing, code review, interoperability, performance, localization, usability, accessibility and hardware compatibility testing. That may require not just talent to run the tests and create the test plans, but a considerable outlay of funds for hardware, software and regular upgrades.

## Pros of Internal Testing

The positives of having your own internal test group is that they are right there and available for your developers and programmers to stop by and try something out at a minute's notice. They are your

employees, and you can schedule their work day any way you see fit. Some developers have a fear of exposing their products to the outside world before the product is launched, and by keeping all testing in-house, it may give your programmers and developers a special "fuzzy" feeling knowing that their product is kept completely in-house until the official unveiling. Some developers also have a fear of losing control of their product, and may not be open to suggestions or proposals from outsiders. Consider, though, that if you are utilizing your software developers for testing, the hourly cost of a programmer may make your testing budget unnecessarily high.

## Pros of Outsourcing Testing

On the other hand, once testing is done, you have to have some other projects to keep your testing group occupied. And when new systems, peripherals you support or new software versions are released, you have to make the capital investment to bring them in-house. If you have a particular rush to have projects tested and out the door, you may have to hire contractors and bring them up to speed. And if you don't hire extra testers, your in-house staff may be better utilized by concentrating on your core competencies and leaving the testing to an experienced independent lab.

## Independent Perspective

There is also the benefit of an independent perspective of your product. After months or years of development, your staff may have become so familiar with the product that they fail to find the flaws and problems a novice user may experience.

## About the Author

Born and raised in Norway, Unni Lie is one of the founders of nResult. nResult has been in the field of software and hardware QA testing since 1991, and has during these 13+ years tested more than 4,000 different applications. She can be reached at [unni@nresult.com](mailto:unni@nresult.com) or 503-257-8000, ext. 211. For more information on nResult, visit <http://www.nresult.com/>.

## About the Editor

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