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6 Reasons You Don't Need A QA Department

Overview:

One of the biggest challenges for growing software development teams is how to best use limited funding. While we all would like to hire the #1 engineer, purchase the fastest, largest servers on the market, and the biggest bandwidth connection to the Internet possible, there is always a budget impact, and a trade-off somewhere else.

This goes for all areas of software development, not just coders. Build engineers, performance engineers, and yes, even Software Test Engineers. Why not skip the QA Department completely, and use the budget for more developers, or support engineers, or even servers?

These are the most common reasons we have found with our clients and prospects:

1. Your developers fix most of the bugs before anyone notices them.

Studies have found that developers tend to create 150 - 200 defects for every 1000 lines of code that are written. Those same developers find 50% - 80% (80% if they're REALLY good, but the average is 50%) of the defects themselves. Just think, we estimate that 1% of all defects are critical. That ends up giving you one critical defect per 1000 lines of code that could be making into your customers hands.

Why not just skip it and let your customers report the 1 remaining critical defect and 20 remaining major defects per 1000 lines of code through support?

If your code base is small, that is actually a very good approach. Industry average is 30% of a developer's time is spent fixing defects, and 1 in 5 defects require an emergency fix. Okay, that's a reasonable expense...until you get to 10,000 function points. At that point the average team will deliver 4 times as many defects in a release. If that developer is spending 30% of his time fixing defects at 20 function points, he now needs to spend 120% of his time fixing defects. Which means you are never delivering new features to your customers.

-If your customers are finding major or critical defects, you need QA. Our On Demand Test Engineers can find the defects your developers miss, and eliminate the need for emergency patches.



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2. You can always have Marketing and Sales spend the week before a release testing the product.

This is a very common approach, especially among start-up companies. When development thinks the release is ready, everyone gets together for a "test fest" and splits testing the application across as many people in the company as possible.

Having sales and marketing test is a really good way to make sure your software is matching the requirements. Since most defects are in requirements definition (usually a third of the defects that make it to the field) and are often the most costly to fix, this type of testing has a good "bang for the buck".

The problem is that you already spent the time and effort designing and coding the functionality, and any defects of this type are extremely expensive to fix. Add to that the cost of having your revenue generation team off-line while they are testing, and this stops looking attractive very quickly.

-If it is more important to have Marketing and Sales finding new customers, you need QA. Our On Demand Test Engineers are experts at finding defects in all project deliverables, not just the code.

3. You only need to test at the end of the project.

For a new product, there is very little need for software QA testing up front. After all, there is no software until the developers have written code. Some level of requirements and design are needed before any coding has begun.

When we go back to the statistics, 55% of all defects in delivered products occurred in requirements and design. This is one reason why RAD and various agile development methodologies work: short iterations delivering code to the end-user or marketing group identify defects sooner than traditional development techniques. However, once the product becomes complex (around 5000 function points or 250,000 lines of code) RAD and agile development cannot keep up with the number of defects, and less than 25% of projects using these methodologies are successful at that point.

Of course, there are also applications that cannot afford to have critical or major defects in their deliveries/deployments. In that situation, passive QA cannot find defects before release (industry median is 53% of defects found if you wait until after coding), while QA throughout the project finds 99% of all defects in the median case and 99.99% at the highest level.



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-If you want to find the defects before your release date, you need QA. Our On Demand Test Engineers can help you find defects in requirements, design, code and documentation throughout the life cycle of your project.

4. Your customers love being the first to find a defect in your software.

They really do, that's why they rush to sign up as a beta tester. There are some people who can't wait to call up support with a juicy new defect that no one has ever discovered before. These people are your best customers.

If only all of your customers were as enthusiastic and happy when they ran into a bug. In our experience, approximately 5% of software users are in this category. The other 95% are broken down into the mopers, the screamers, and the annoyed masses.

Mopers are the customers who run into problems and just put up with them quietly until you deliver a new release, which fixes their bugs. Mopers will eventually just go away and you never know why.

Screamers...well, I think you know who these people are. If you don't, stop by your support team's office and ask them. I'm sure they have a list of names. Screamers will call up support and give them an earful for every little bug they can find. If you fix the important ones they call about, they will probably stick around to scream about something else at a later date. Screamers are helpful, because they will tell you when you have one button out of alignment by 2 pixels, or when the color style doesn't match their wallpaper. Okay, that last item is an exaggeration, but you get the point: screamers will allow no defect, no matter how small, to slide.

The annoyed masses are just plain annoyed by defects. They call support if the defect is important enough, but usually they are just annoyed and will tell you so if you ask. When a competitor comes along with a decent product, they will switch. These are usually the majority of your customers, and are where your sales team spends most of their time. The fewer defects the annoyed masses see, the longer they stay as customers.

-If your customers don't like to find defects, you need QA. QA processes combined with On Demand Test Engineers can find 99% of the defects in your software.

5. Your support team always makes your customers happy.



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You should thank your customer support team. They don't hear often enough how important they are to the company. Defects are part of software development, and they can turn a screamer into a puppy dog. They are the reason you have repeat customers.

The problem is your customers don't want to call them in the first place. Every time a customer calls support he is one step closer to being an ex-customer. How much business would your company be doing if every customer you ever had were still a customer today?

-If your customers prefer to not call support, you need QA. Some customers buy software because they plan on calling support and like the support offerings that come with the product, our On Demand Test Engineers make sure the other customers don't have to call support.

6. All software QA testing engineers ever do is give you bad news anyway.

Really. That's their job, isn't it? The best thing you can hear from a test engineer is that he doesn't have anything to say. If your lead test engineer schedules a two-hour meeting with you, you know what's coming.

Which is better: having an On Demand Test Engineer tell you about a really heinous defect before you release, or having a really big customer tell you about it after they have deployed to 5000 employees? If you know about it before release you'll have options; if your customer finds out after the release, you may not have any options.

-If you, 'd rather get bad news sooner than later, you need QA. Our On Demand Test Engineers love to find defects.

What Do I Do Next?

I hope you've found this report valuable.

If you need help today, then by all means, please call my cell phone at 512-970-7283. If I don't answer, please leave a voicemail letting me know that you need help urgently. I'll call you back within 1 business day. You should also send an email to jeff@testco.com so I'll have 2 opportunities to see that I need to get in touch with you quickly.

If you don't need help today but think you might need help in the near future, please send an email to jeff@testco.com and we'll arrange a time to talk on the phone and answer any questions you have.



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Here's what one of our On-Demand Software Testing clients said recently –

“TESTCo was crucial to meeting our testing goals and deadlines. Even though I was too busy to provide proper direction to the testing team, they were able to get started on their own, create test plans based on what I wanted and deliver results from day one. As the testing needs of the project grew, TESTCo was easily able to grow with us. They continued to build requirements themselves and they were able to manage the testing process in a way that worked for us, not against us. Bringing in TESTCo is a huge win for any software engineering project.” - Apar

You may find that you like the idea of automated web site and web application testing but are still uncertain as to how to proceed. That's not unexpected. Unfortunately, I can't give every detail of every step in the process – it's just too much information. If you find that you're still a bit uncertain, please feel free to contact me at via our website at www.testco.com. We can schedule a quick meeting to answer your questions and discuss the process in more detail.

I wish you the best of luck and success with your next project.

A handwritten signature in black ink, appearing to read 'Jeff Hotz', written in a cursive style.

Jeff Hotz, President/Founder, TESTCo

About TESTCo

TESTCo delivers On-Demand Software Testing to carefully selected customers around the world. The Austin, Texas-based company's customers eliminate software testing problems, slash support costs by up to 50% and achieve their release date commitments...all without the hassle of hunting down the best outsourced vendor, the pain and frustration of learning how to properly manage them and the unpredictable results so common with most outsourced vendors.