



How Can We Help You?



[4 Steps to Better Quality Assurance]

Introduction

Your customers expect a solid product, no matter what your industry, which means your company better have a fundamentally sound quality assurance process in place to address failures as they arise throughout the development process and beyond. In the event you're planning to win a government contract, the US Chamber of Commerce contractually requires you have a written process in place. According to their website, these can range from a simple manual to a full-on quality assurance program that complies with a recognized commercial quality standard, a government standard, or the International Organization for Standardization (ISO) requirement for your industry. And while, depending on your customers, you may not need a system as contractually restrictive as the government requires, it definitely benefits you to create some kind of standardized system of checking your products. We've put together some tips to help point you in the right direction.

Consider Outsourcing

Before you spend too much time and money developing and implementing a system to control the quality of your products, consider the benefits of outsourcing this task all together. Many companies began outsourcing to save money, but quickly learned



that the strength of this strategy lies not necessarily in cost-savings, but in the exposure to poor opportunity costs. In other words, the goal is to spend more time doing what you do best, allowing those outside the firm to provide this service for you. This would be particularly helpful for those businesses without a current, reliable system in place. But the fringe benefits of working with an outside provider are significant.

According an article published by Forbes in 2013, "companies that outsource merely to shuffle off commodity work to save costs might be missing important opportunities to work with vendors and significantly improve the final product."

As with any outsourced service, be careful, take your time, and be sure to invest the requisite energy into building a solid partnership that will serve both parties.

According to Robert S. Huckman, Professor of Business Administration at the Harvard Business School, "...cultivating important person-to-person relationships with vendors of outsourced services can improve the efficiency and perhaps the quality of services delivered..."

At Smart.exe, we're committed to working with you as an outsourced QA provider, from high technology to web development. We have dependable processes already in place, with a proven track record of providing our customers with an end-product that's as true to specification and problem-free as possible.

Employ Scalable, Flexible QA Methodology

This may seem obvious, but developing a method that's as uniform as possible will help assure that you're creating the most problem-free product or service available. Keep in mind, though, that while it's a good idea to implement a



standard, overarching theme in your QA process, it's more important to tailor specific methodology to the process or product currently undergoing development. At a minimum, define your QA procedures and perform targeted risk assessment. Understand the budget for the project at hand, keeping in mind the potential cost of dealing with problems as they arise.

This will enable you to create and apply QA methods granular enough to reflect the level of risk associated with your project.

You'll also want to closely tie your QA process to the schedule associated with the new project. Be sure the two align, and that you're not crafting a process that will unduly drag out the development process longer than it needs to be.

Conversely, be sure you have enough time to adequately analyze results without being rushed to the point of generating a sloppy end product.

Finally, once you've developed a QA strategy you believe fits the development cycle nicely, submit it for review and revision; but remember, development cycles frequently run behind or ahead of schedule, and you're certain to encounter problems along the way. In this case, be sure to revise your processes as necessary.

Root Cause Review

In an ideal world, you'll move through the development of your product or service without encountering any catastrophic issues. Instead, they'll hopefully be manageable and easy to rectify. In either case, you'll have to identify the root cause, which is the source of chaos, the stepping stone to higher-level problems and symptoms that you must eliminate quickly, before its effects reach the customer. The root cause review is a particularly important QA best practice, as it provides you a systematic method to break down serious issues and modify development accordingly. By incorporating a thorough review, you ensure a controlled way to identify and rectify issues at the most basic level.



This is a difficult process to implement; plan accordingly, and be sure your employees are trained to take the necessary steps. In the book *Root Cause Analysis: the Core of Problem Solving and Corrective Action*, Duke Okes explains that the "...root cause analysis is a generic skill that can be applied to nearly any type of problem.

Some people learn it over time from repeated experiences solving problems, but this takes a lot of time and many mistakes are likely to be made along the way before one becomes highly proficient."

Process Reviews and Training

Regardless of your company's product, every business can benefit from a thorough review of its quality assurance processes. The key is to view your methodology through as objective a lens as possible, which will provide you an honest, data-driven course of action to revise your processes.

These reviews should measure and assess your QA methodology in a way that provides clear, tangible data for your team to interpret. While it's important to persistently incorporate your QA process as a whole into your development process, the frequency of its review will depend on the type and variety of your projects. Still, it will behoove you to implement this strategy as often and thoroughly as possible.

You'll find that the subject of quality assurance – no matter the product – will continue to benefit from newly generated methods and technology to help ease your processes along. Because of this, continuous training is paramount – so too is the need to train those employees outside of the QA cycle as much as possible.

Once you've finished development, continue to solicit feedback from your early adopters and customers. Just because your product or service has launched doesn't mean the QA process has ended (while hopefully complaints and recommendations will be limited).

Conclusion

In the event you've never developed a quality assurance process for your company, these tips should help you get started on the right path. Be sure to periodically revisit the procedures you implement, revising and adapting as necessary in order to maintain the most effective system possible. And if you find yourself with questions, give us a call – we're happy to help, or handle it all for you.

Smart.exe is an innovative software design, development, and testing enterprise established in 2004. We provide cost-effective offshore and outsourcing services to hi-tech companies working on cutting-edge technologies and products.

Our mission is to help you execute your ideas - smartly.

Our fields of expertise are diverse and include, among others, scalable Web technologies, mobile applications, and video-over-IP streaming. We offer services in the areas of product design, development, product management, project management, cloud technologies, and quality assurance and software testing.

Contact us to learn more about our services at : www.smartexe.com