



How Many Test Cases Do You Need?

The question is: How many test cases should you have? The hindsight answer always seems like, “One more.” People say learn by burn is the most effective approach. This learning curve can be a fast but very expensive way to learn, not only for your company but maybe for your career. Everyone has been part of a technology or process change that was not tested fully. This may have led to downtime, loss of productivity and frustration. I have seen a few people be let go because of the lack of testing before implementing a change. I want to give you the tools to help you succeed.

What can be done to test every scenario? Well, the complete answer you are looking for is not here in this article, but hopefully this will get your mind thinking on how to go about accomplishing this vast task. It’s funny; people will complain loudly when things do not go well, but praise for a smooth implementation is not the norm. Knowing you did a job so well no one notices is the true reward.

Truth be told, it is nearly impossible to test for every scenario, especially when you are new. A lot of time, testing thoroughness comes down to time and money; both are indeed large factors but not the most influential. The most influential part of any change is planning and knowing your limitations.

Real Life Application

For example, with a new system integration, the same scenario can be carried over to other system or process changes. With this new system integration project, you are going from a working application that is becoming a legacy product to the latest and greatest product on the marketplace. You have created a detailed Statement of Work (SOW) correctly... or have you? Most people do not create a full SOW. They just say that they will have one percent of the time for testing — for a 100-hour projected project, you are only testing one hour. This may be good amount of time, or this may not be a significant amount of time whatsoever. It all depends on your testing methodology, also referred to as your testing process.

How Do You Determine Test Cases?

Coming up with test cases can be difficult and time-consuming, but doing it thoroughly the first time can make this a true asset for all future processes in your company. Remember to add all the ones you know and leave room for ones you do not know yet because this will be a truly living document.

A strong testing methodology has four main components: detailed written process, test scenarios, automation and analysis.

In the ideal world, you would like to have five groups working in conjunction on every project: the project sponsor, the project manager, the implementer/developer, the quality assurance team and the user signoff committee.

In today’s workplace, a lot of these jobs overlap, and testing can really suffer as a result of this. To make sure testing does not get overlooked, you need a detailed testing process that anyone can follow step by step to ensure that no major test cases are missed.

Now that you have thousands of test scenarios, how do you efficiently run these scenarios? The key is to automate wherever possible. There are many industry specific programs out there to utilize. You can also build one in-house. Most can be written in a fourth-generation development tool of choice and tied into your test database.

The key to knowing if you have a good testing tool is that it lets you analyze the data quickly and thoroughly. Without automation, huge test plans can take weeks or even months to run. Given a small scope, this is not practical for small, six-months and under projects. For example, one that I recently developed runs 7,000 scenarios in 10 minutes and takes five minutes to analyze the data. Fifteen minutes of time well-spent, I think!

Remember, a superior system is one that the users perceive as excellent and the backend also produces excellent consistent results. One without the other is only half-done project implementation. ■

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