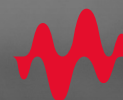


5 pitfalls of test automation.

With actionable tips on how to avoid them.

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**The test automation
market is expected
to reach nearly
\$110 billion by 2025.”**

Test automation: why you need it.

How often does your organization release new software?

Companies like Amazon release approximately every 15 seconds. This may be unattainable—and even unnecessary—for most organizations. However, it's safe to say that in virtually every sector, companies are under pressure to release faster. What once may have occurred semi-annually or quarterly is now expected to happen weekly or daily (or, in the case of digital native organizations like Amazon, even by the minute). It's simply impossible to release at this pace without automating the testing environment.

Enter intelligent test automation, which enables companies to:

- Accelerate testing
- Increase test coverage
- Keep pace with agile and DevOps
- Positively impact the bottom line

So, tech leaders just need to select a test automation provider and be on their way? Unfortunately, it's not quite that simple.

Read on for common test automation pitfalls and what you must do to avoid them.

**5 test
automation
mistakes.**

1.

Not treating it like a strategic initiative.

This one might seem obvious, but you'd be surprised by how many companies expect test automation to just magically happen.

Approaching test automation as a strategic project ensures that:

- A Project Charter or Statement of Work is created and, as such
- The goals, scope and roles/responsibilities are clearly defined
- Priorities and dependencies are set to identify the most important tests to automate
- Cost, time and quality expectations are met

Or, to put it another way, failing to run test automation like a project curtails your success before you've even left the gate.

2.

The wrong test execution infrastructure or test environment.

Another pitfall to avoid is not setting up a proper test execution infrastructure or test environment. The right setup is crucial, as you need complete certainty that the application or system under test behaves the same way in the test environment as it does when live. Take the time to:

- Create test data and insert it into the test bed
- Setup the database
- Configure the environment
- Configure the network

Also make sure that you've documented all of your actions so that the environment can be replicated and also used to inform the set-up of different test environments. Unreliable infrastructure and/or environments account for a huge number of test failures and lead to resource burn. Suffice it to say, this will do little to advance test automation!

3.

Creating big test frameworks.

Big is not always better, particularly when it comes to creating test frameworks. It's a common mistake to think, "Let's create numerous foundations for testing and then we'll be able to execute hundreds of tests efficiently!" To put it bluntly, I've never seen this work. Instead, consider the following best practice for creating test frameworks:

- Write one test and get it working
- Write ten more
- Refactor those tests to pull out common elements and create reusable modules
- Repeat

Simple, right? Because test automation offers so many benefits companies are understandably eager to get started. But be careful not to let this eagerness translate into too much, too soon. Start small, get it right, build from there.

4.

Inadequate reporting.

Don't let bad data take your test automation investment off course.

It's incredibly easy to look at a bad test report, get the wrong idea, and then go down rabbit holes for hours chasing non-existent issues. In order to quickly understand test failures and clearly communicate the issues to the development team, the right reporting is critical. The nature of what this data should be will vary by organization, but there are some common considerations for any good test reporting system:

Readability: Your teams need the ability to quickly surmise critical data points such as test coverage, the pass percentage, and the overall health of the technology under test. Readability will become even more critical as the citizen developer movement accelerates.



Accessibility: An accurate report is no good if it's only accessible to the individual or team responsible for the test. Not only does this prevent others in the organization from analyzing the results, it also makes it difficult to analyze testing data at a macro level and spot trends that could enhance test effectiveness.

Interoperability: Interoperability is critical for any solution in the digital age. From a test automation perspective, ensuring that any external program can access report data is key to aligning testing with business priorities.

Alerts and notifications: An accurate daily status report is imperative but, should something unexpected arise, you need to know about it when it happens. That's why integrated alert mechanisms are a vital component of any test reporting system.

5.

Forgetting about your users.

How many times have you heard about the importance of the digital customer experience?

Everyone knows it's critical, with nearly 50% of companies in a recent PwC survey pointing to it as the prime driver for embarking on digital transformation [1]. Yet, more often than not, this focus on the user experience is not reflected in testing strategy. Most test teams base their testing decisions largely on what is easy to test. From there, the next consideration is commonly risk. But what about what matters to users? If a part of the application is technically risky, but of little importance to users, and the other part is half-risky but critical to users, you should focus on the latter.

This means that test automation must move beyond confirming that an application meets technical requirements to instead ensuring that it delivers better user experiences and business outcomes. Advances in AI and ML enable companies to adopt this customercentric approach to testing.

Benefits include:

Image-based testing: Image-based testing views the screen in the same way it appears to the customer. By creating synthetic users for each customer persona, companies can better understand how the digital experience differs across key demographics. This allows them to optimize technology factors to improve these experiences and, in so doing, positively affect business outcomes.

Predict the impact of new releases: Testing from the users' perspective also enables companies to predict the impact of a new release before it goes live, and time the release to maximize its likelihood of success.

Continuous monitoring. By continuously monitoring digital performance companies have a real-time view of what their users are experiencing—and an action plan for addressing any areas for improvement.

A company can claim to prioritize the digital experience, but this is largely lip-service if testing continues to be a compliance function. Avoid this critical mistake by making what matters most to your users a central component of your test automation strategy.

Laying the framework for successful test automation.

The test automation market is expected to reach nearly \$110 billion by 2025 [2]. Maybe your organization has already invested heavily in the technology. Maybe you're just beginning your automation journey. Or, most likely, perhaps your company falls somewhere in the middle.

Regardless of your level of test automation maturity, it's critical to be mindful of the pitfalls outlined above. This is a sentiment echoed by Forrester's Craig Le Clair in a recent blog post on 2021 predictions [3]. As he puts it, "...the pandemic accelerated investments in various forms of business process and IT automation. This has pressured enterprises to rapidly patch in automations. Not surprisingly, failures will occur... in 2021, up to 30% of organizations will ramp up their focus on quality by better planning and testing their automation before deploying it in production or exposing it to employees."

Make sure your company is a member of this strategic community by deploying an intelligent, comprehensive test automation strategy that ensures automation is done right. With such a framework you can:

- **Develop better digital products**
- **Release them to the market faster**
- **Achieve better business outcomes in the form of agility, speed and reliability**

The right solution provider is critical to achieving your test automation goals.

Find out more about Eggplant and how partnering with us can drive better outcomes for your business.

Buyers guide:

Evaluating test automation solutions.

This guide comes loaded with key considerations, common pitfalls to avoid and practical questions every business should ask when choosing a test automation solution.

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