QUALIZEAL

How to Effectively Leverage

Test Automation to Achieve Digital Transformation.

Preface.

Digital Transformation,
The Most Sought-After Requirement
of the Post-Pandemic World

The last two years have seen a paradigm shift in the way organizations conducted their business. Employees went home as the pandemic closed offices and new challenges emerged. Digital transformation has led the way for companies to not only operate but also generate revenues at a greater pace than ever.

Digital technologies add value to every industry sector and its operations. But the major roadblock is that most companies aren't sure which digital technologies to focus on or implement first. But there are solutions available.

A major factor accelerating digital transformation is the data generated by a system or device in operation. This data reflects how the system performs in the real-world scenarios it was designed for. In this whitepaper, we will leave how companies can effectively leverage test automation to make the best out of digital transformation journey.

Chapters.

Introduction

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We believe that digital should be seen less as a thing and more a way of doing things

Karel Dörner and David Edelman, McKinsey & Company

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Many industry experts would say that test automation is only a component of a sound digital strategy, but there are multiple case studies that prove that it is a critical component for achieving the same. Testing or quality assurance not only verifies the integrity and usability of the products you release but also correlates with the speed and accuracy of your digital program. Test automation has a multitude of benefits and many organizations around the world have already leveraged it to improve their transition into a digitized business process.

Test automation is needed for multiple reasons, these numbers speak for themselves.

3%

About 3% of Aerospace and Defence companies consider their digital transformation initiatives successful.

$1.8T

In 2022, spending on digital transformation (DX) is projected to reach 1.8 trillion U.S. dollars. By 2025, global digital transformation spending is forecast to reach 2.8 trillion U.S. dollars. (Statista)
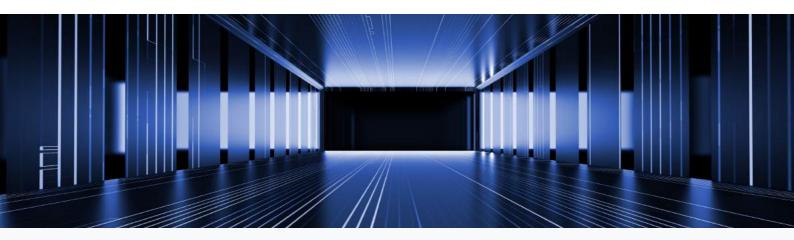
82%

82% of companies use exploratory testing as a software testing methodology, while 61% use conventional script-based inspection. (PractiTest)

Importance of Test Automation in Accelerating Digitization Journey

Digitized business practices depends on frequent updates and release of the applications that facilitate the process. Many companies follow this practice on a weekly basis. This process often halts operations and affect customer satisfaction. This is why there is a need to deliver efficient, fit-for-purpose solutions with greater speed and agility. During development cycles, many software tests are repeated to accelerate this process.

Test automation ensures shorter delivery cycles.

Once deployed, automated tests can be repeated at without incurring any additional expenses. This creates a speedier solution deployment and cost savings without compromising customer experience.

Business Case for Test Automation

Digital test automation programs find success from three important criteria:

- Empowered decision-makers
- Focus on user stories instead of traditional processes
- Testing tools that help testing teams reduce their time and manpower

When you are planning to build a business case for test automation, you should look into the following factors

Regression Testing Costs

Regression testing costs give you an idea on the cost of manual regression test of the most expensive features and the cost of setting up automated testing the said features.

Software Development Costs

Organizations should always quantify the number of points that their project teams are supposed to deliver upon every modification. These unplanned interruptions should always be taken into account while quantifying the costs as they are undelivered feature points.

Business Losses Due to Lack of Speed

This starts happening when a software becomes more complex and hence gets harder to change. Companies lose the agility that they intended it to have when it was created. While building a business case, you must assign a business value to software flexibility, in terms of business lost due to delayed time in launch or modifications.

Agile and DevOps

Agile and DevOps have become popular factors affecting the life of software development lifecycle. Test automation leverage the advantage of these factors and helps teams identify and resolve issues early during the software development phase. It enables enterprises to add quality to their product and innovate at a much faster pace.

Some of the advantages of deploying a smarter test automation are:

Improved efficiency and time savings

Early identification of defects

Faster responsiveness to changing business demands

Improved accuracy in identifying defects

Quicker time to market

Superior customer experience

Without a well-defined digital quality assurance strategy coupled with test automation can be a barrier to digital transformation success.

Benefits of Test Automation During and After Covid-19

Business are still constrained by issues of time, location, and regular shutdowns even though the number of covid cases have come down. In times like these, test automation can really benefit the digitization journey and even save the companies from the pain of reopening their offices, and go completely remote.

Test automation saves time and expenses on software/application development process

It allows additional room for innovation by reducing the development timelines

It improves tester motivation and effectiveness

Enterprises leverage test automation to make the testing process extremely efficient

The Way-Forward.

Businesses globally have suffered in the aftermath of COVID-19 pandemic and have failed to achieve many of their targets as they originally intended to. This is the best time to implement test automation and enjoy the benefits, for you and your workforce.

Test automation is not an option anymore, it is the part of how organizations function and develop their products or services. Enterprises interesting in finding a solution for increasing test volumes will find it beneficial for their digital transformation journey with a plethora of advantages in their favour.