

One of the most important steps that organizations often take during their digital transformation journey is selecting the best test automation tool to meet their goals. Yet, selecting the best automation tool can be riddled with challenges. Failing to select a tool that meets all the criteria of your industry needs, your individual organizational needs, and of your short and long-term goals can lead to overspending along with resource and time constraints. Selecting the wrong tool can also lead to little or no return on investment, and sluggish progress on your initial digital transformation objectives. It is important to note that dismal results can also come from inadequately implementing the tool, as well from improper training, lack of change management or understanding regarding the nuances and capabilities of the tool itself.

Selecting the Right Testing Tool

At the beginning of digital transformation projects, organizations commonly increase their automation testing capabilities to improve operations for what is often a mix of legacy, proprietary and off-the-shelf applications. Often, we see our clients utilize a mix of web interfaces, multi-cloud environments, and server-based applications -- at various stages of maturity -- running on Linux and Microsoft Windows variants, and perhaps even outdated yet critical mainframes systems.

At the heart of their digital transformation journey is commonly the goal to rationalize the testing tool landscape with scriptless test automation — usually as part of a larger push to increase the automation environment — as companies progress to a future state that is more fully Agile. Yet embarking on this journey, particularly when selecting an automation tool, require a solid understanding of some important best practices when entering the testing phase.

And navigating these and other challenges requires partnering with a leader in global software assurance space that understands the needs of your organization, your industry, and can pair that understanding with subject matter expertise behind a wide range of tools.

Tool Selection Mistakes to Avoid

From the assessment process, to moving into a pilot, organizations can benefit from avoiding these common mistakes when selecting the right automation tool.

Simply Relying on a Large Consulting Company: Although firms like Forrester, IDC, and Gartner offer a wealth of information regarding automation tools, their recommendations are typically very general and not tailored to the specificities of an individual organization. According to Nate Custer, Senior Manager at TTC,

"Large firms often look for the best solutions across a number different industries, and we find that each of our clients have unique requirements which calls for a tailored approach."

Skipping the Pilot:

Another common pitfall when selecting an automation tool is failing to run a pilot. "Analysis is an important step in the process," says Custer, "If a tool doesn't have a way of addressing specific needs that you and your organization have, that changes the whole process."

A pilot process is helpful in terms of proving the technology to the specific needs of the organization. It is one thing to have a great demo, but a pilot can extend that demo to the systems and software your organization uses, whether the solutions your organizations uses are off-the-shelf or proprietary.

The Inclination to Pilot Every Tool:

Another major challenge that often occurs is over-piloting by looking at all possible candidates. Falling into this pitfall can be time consuming and needlessly overextend resources that may be critical to your organization. According to Custer, "Good pilots require close feedback and observation from your SMEs and Quality Assurance teams...piloting every tool can possibly end up wasting a lot of time and resources." Whenever possible, shortlisting down to one or two tools before launching into a pilot is a much more effective practice.

Performing a Pilot with Inexperienced Users:
Often companies choose to conduct a pilot internally, and this leads to issues that stem from users attempting to test drive a tool without having sufficient experience in the tool to properly understand the tools limits within the organization.

"Partnering with an organization that knows the industry, understands your organization and are experts in the tools you are interested in, is like hiring a professional race car driver to test drive a sports car versus letting one of your employees do it,"

Additionally, we recommend that your testing team have the following three important skills:

- 1. Technical Skills
- 2. Proficiency in Applications Being Tested
- 3. A Testing Methodology

Having testers who know the application landscape well, test well, and are trained in automation can make a large impact to the quality of a pilot.



But Wait, There's More

In the case of large companies, some additional considerations were added when selecting the best path for testing automaton tools. For example, when selecting the right tool for a diverse organization, make sure the tool will fit your target processes. Companies should also understand that any testing tool will give a boost to the testing operation and will greatly influence established procedures.

Other important tool selection criteria include looking for a solution that provides the ability to test APIs. Test data management is also important for large enterprises. This includes testing how data feeds in and out of the tool, as well as the opportunity to investigate data integrity testing for data warehouse applications. Most organizations have a combination of off-the-shelf and custom applications. Therefore, these differences should be considered when selecting a tool along with the need to conduct reporting in the target mode, which is often part of a larger journey to migrate to a target state such as, Agile Service Virtualization.

Establishing a Pilot

Our first step is to initially spend time at your site, so we can fully understand the application under test, establish critical relationships, and build trust with your team. TTC then works with you on a communication plan, including remote access protocol, to undertake the technical evaluation. Our in-house experts remotely access your test environment to set-up and execute tests while the management and monitoring of these tests are done remotely which often times removes the need for a team to be deployed to your site, eliminating physical workspace challenges.

TTC leverages an outcome-based delivery model, which means we provide remotely managed, 24/7 automated testing with instant deployment, and we centralize the progress reporting to your own internal SharePoint site, where you can access reports at any time -- providing the flexibility for you to monitor and audit our progress, independently. Our approach begins with determining scope, which includes five key areas:

- 1. Meaningful and Concise Test Cases
- 2. Test Cases with Variation in Technology, Applications, and Steps

- 3. Test Cases with Impact, This Includes Tests
 That:
 - · Are Very Time Consuming
 - · Are Challenging to Automate Reliably
 - · Have High-Business Criticality
- 4. Test Cases with Prepared Data
- 5. Examples of "Data Driven" Test Cases

This preliminary analysis also includes identifying out of scope items such as building-up large sets of test cases, replacing formal tool training, establishing a full-scale test automation infrastructure, and replacing a methodological consultancy.

Looking for the best automation tool on your digital transformation journey can lead to several challenges. Organizations are often met with unique circumstances on how to best approach every stage of these efforts. But navigating the pitfalls, and partnering with a leader in global software assurance space that understands the needs of your organization, your industry, and can pair that understanding with unprecedented knowledge behind every possible tool, can make all the difference in augment and bolster your automation tool landscape.

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- Nate Custer, Sr. Manager at TTC

About TTC

TTC is the leading global software assurance provider focused on helping organizations transform the way they deliver technology. Our unique capabilities across a wide range of delivery areas enable our clients to increase the speed and quality of technology development while reducing risk and cost. TTC was founded in 2004 to be a testing partner that could take global learnings and best practices and deliver them in a locally appropriate way. Fast forward fifteen years with offices in New Zealand, Australia, Asia, the Americas and Europe and strong partnerships with some of the world's largest organizations, this is still TTC's purpose today. To learn more, visit us at: https://www.ttcglobal.com/

Let's talk

If you're ready to decrease test execution time and the cost of testing while increasing risk coverage and speed to market, speak to a member of the TTC team today.

