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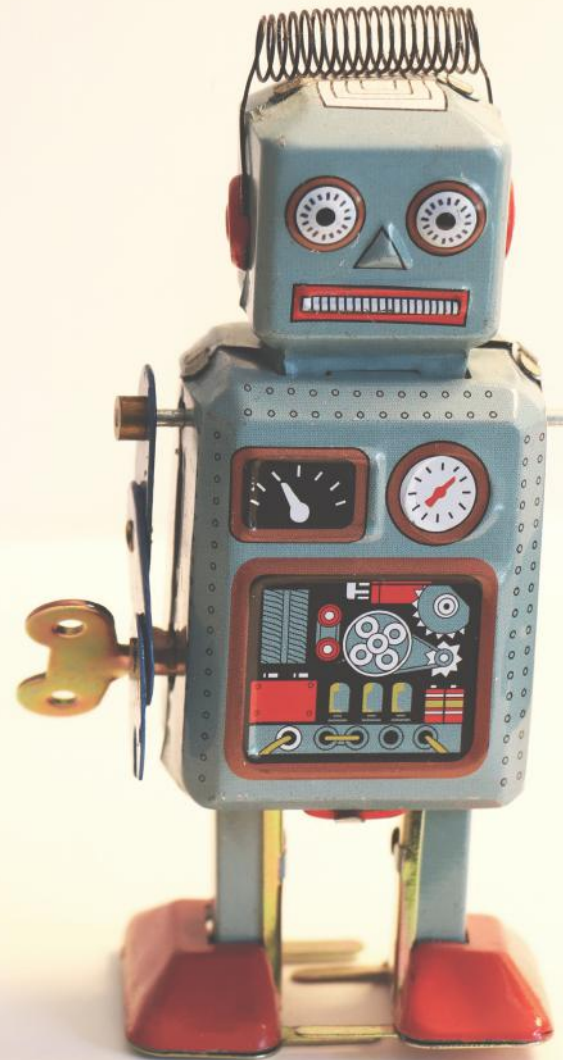
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Is test automation suitable for you right now?

**Test automation
evaluation guide**

Test automation?

Test automation is not suitable for all situations; it's not always cost efficient or even necessary. On the other hand, it can achieve significant cost savings. Check the questions in this guide and find out whether test automation would suit your situation!





Checklist



Does testing take more and more time?



Is the amount of testing increasing in the future?



Are the quality assurance costs increasing?



Can you invest or not?



Is something already automated?



Are your test cases easily repeatable?



Do you fully utilise the knowledge of your experts?



Are you starting a new development project?



Do you have challenges with test monitoring and/or measurability?



Is your development still rather small-scale?



Does testing take more and more time?

Manual testing is time consuming. Especially, if the systems under test are large. When the amount of test cases increase, the workload increases. And at the same time you should meet with unchanged deadlines.

Sometimes test results also determine how the development of a software continues. This Unfortunately often leads in a situation, where there's pressure to execute the tests in a shorter time period than planned.

Test automation eases the pressure from manual testing. However, it's important to note that it doesn't eliminate the need for explorative testing performed by humans!

Automation is the backbone of testing. It is a predictable, easily repeatable and dependable work horse, which releases time from manual testing to more complex cases. The increased speed of running tests also helps with keeping up with the deadlines.





Is the amount of testing increasing?

Continuous regression testing is often thought as a backbone of testing. A backbone that takes care that new implemented features, bug fixes or updates don't break the previously working software.

Manual regression testing takes more and more time and resources, when test cases increase over time. Test automation can reduce the run time of regression cycles from weeks to days or from days to hours.



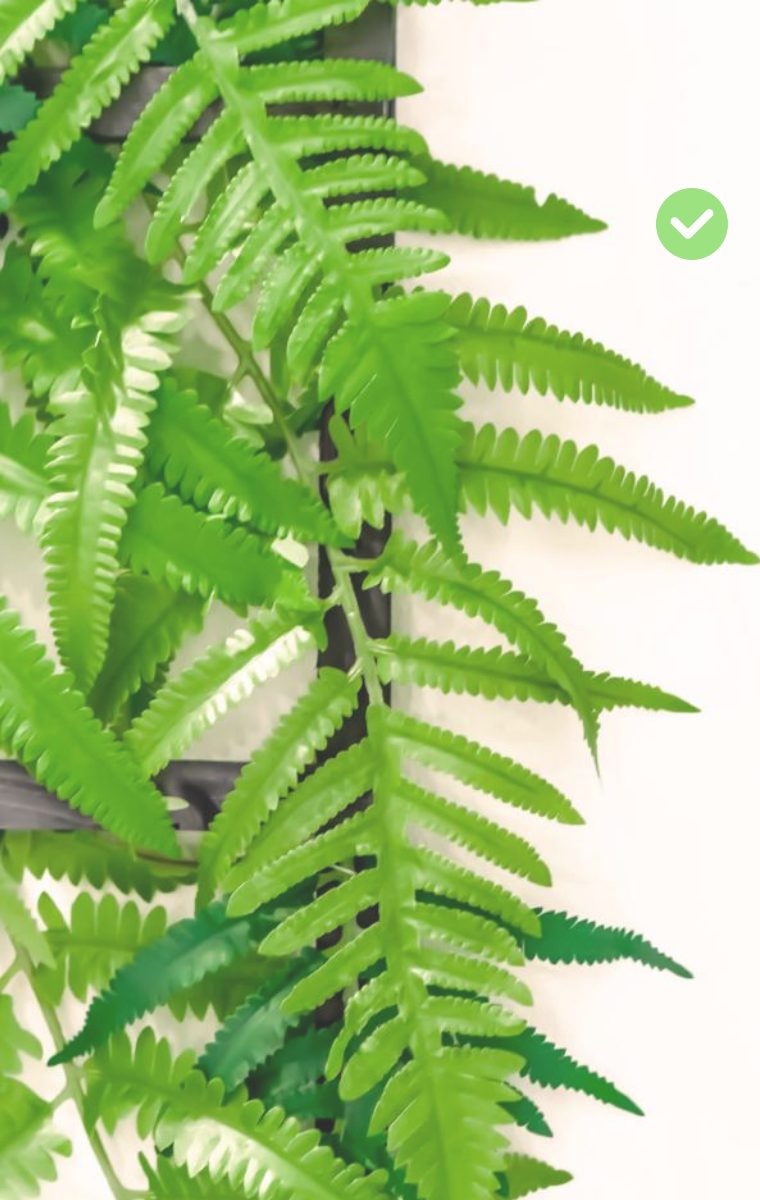
Are the quality assurance costs increasing?

While testing increases, more resources are needed and thus the costs increase too.

Test automation doesn't follow working hours, it can run without added costs during the night or even for multiple days. This reduces the time required for testing and releases resources for something else.

Automation doesn't eliminate the need for manual testing. Instead, it enables allocating the resources at hand more effectively.





Can you invest or not?

Implementing test automation is always an investment. The initial costs can appear larger than the possible benefits – the tool itself can cost, the implementation takes time and the users of the tool might need training. Also, automating existing test cases or planning them from the beginning, takes time.

On the flip side of the coin is the time saved in the future. The more there is to test and the more frequent or comprehensive the testing is, the more automation saves time compared to manual testing. Saved time can mean saved money or more time to do other things.

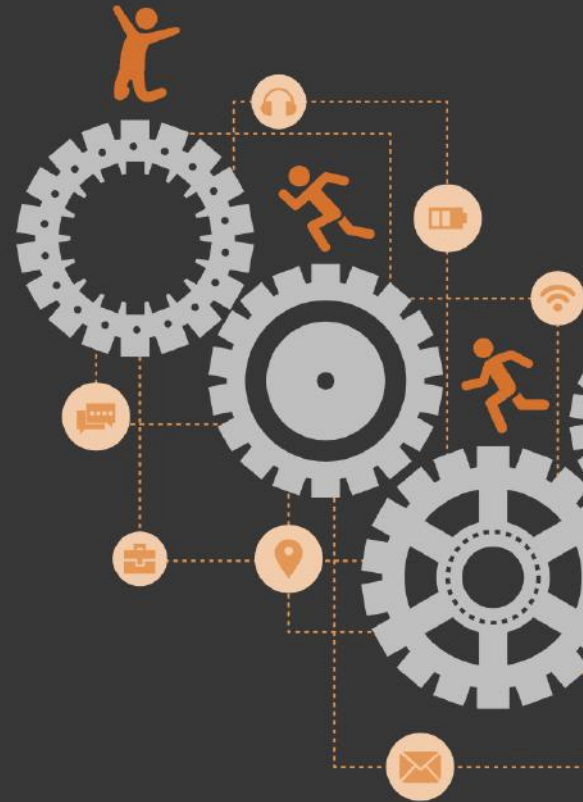
Testing itself never produces profits. Its gains are measured in the quality and reliability of the software. Bugs are always easier and cheaper to fix the sooner they are found.



Is something already automated?

If your development environment already includes partly automated solutions like CI or CD, agile methodologies or DevOps, then test automation should be on the menu too. Existing automation solutions are easily expendable to match current quality assurance needs.

For example, automated release system needs automated integration tests beside it so that the developers can get immediate feedback. Also, existing unit tests should be assembled into the automation package and run with every new release.





Are your test cases easily repeatable?



Test automation is worth considering if manual test cases are easily repeatable and same things are done a lot and frequently. All "mechanic" manual work only takes time off from doing something smarter.

If the existing test cases are well documented, the transition to automated cases is usually rather easy. On the other hand, if test cases are described only in very high level and cases rely on tester's on domain knowledge, it might require some test case documentation work in order to have them ready for automation. In this case, coincidence plays a too big role when too much trust is put on testers working in an exact similar fashion and thinking about the outcome from a similar perspective.



Do you fully utilize the knowledge of your experts?

It's possible to find the required knowledge from your own experts, to the implementation and maintenance of a test automation solution. Even though you initially feel that you don't have the experts, ask around and do your research. For example, you might well have developers who would like to do something different for a change.

Moreover, there are some tools that don't require extensive training and can be used without programming skills. These are so-called keyword environments and the learning curve for these is not too steep.



Are you starting a new development project?

A first thought might be that automation would slow down a beginning project. However, you definitely should at least consider implementing it right from the beginning. When time passes, you will feel good about the decision as more and more time is saved and developers and testers feel better about their work.

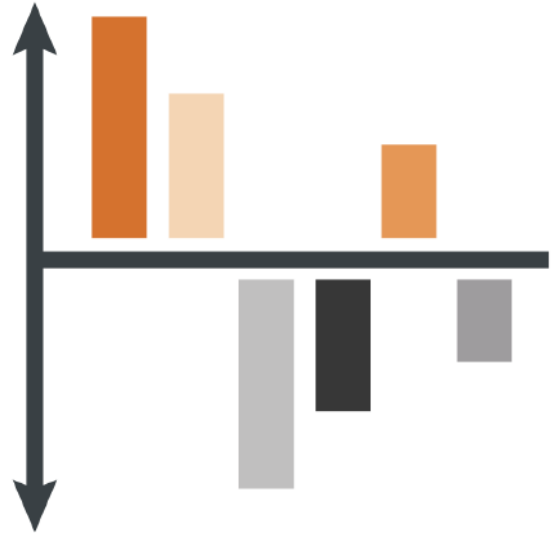
It's not impossible to implement automation later on but it requires careful planning and commitment to change from all team members. You should also keep your expectations at reasonable levels since only after some test cycles can you witness improved efficiency.



Do you have challenges with test monitoring and/or measurability?

One of the strong points of test automation is the enhanced predictability. You will know precisely when testing will be ready. This eases the reporting practices with the customer and enables better timing of the work of different development teams.

Continuous regression testing provides a clear image of the current situation, and a vision of where the development is heading. This enables faster reacting when errors appear. At the same time, measuring test coverage becomes more visible and possible needs to change testing focus can be detected earlier.





Is your development still rather small-scale?

If your development is rather small scale, or your development environment is highly dynamic, might not be needed. Or at least it won't be needed in large scale.

However, changing and dynamic environment too is based on a plan. And it too can have potential spots for automation, just not in all phases. In addition, in the case of a small-scale project, test automation can be used in automating few really important test cases that are the backbone of the application.



Thank you!

Contact us if you want
to hear more.

www.valagroup.com



Teemu Pesonen, Business Director:
Quality & Automation



+358 400 513 514



teemu.pesonen@valagroup.com

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