From Software Testing to Software Quality





01

Changing the Landscape of Software Development 02

Testing is just testing

03

A Holistic Approach to Quality

04

The Importance of a Quality Culture

05

VALA Quality Model 06

Conclusion

07

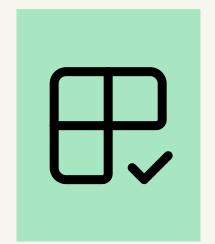
Let's talk!

www.valagroup.com



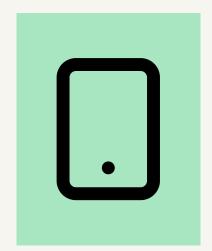
Software is everywhere and

www.valagroup.com



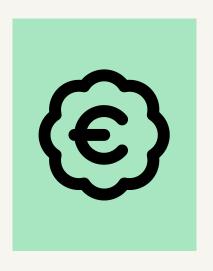
We rely on software in every industry these days

From healthcare to finance to manufacturing, software is essential in all industries. Moving forward, it will become a core function for most companies.



Users' expectations have risen

A buggy app or a slow website is simply unacceptable nowadays. Whereas in the past a great user experience created a competitive edge, now it is a requirement.



Software failures are getting more and more expensive

While the number of software applications, and users, increases, the price of failures increase. Downtime, data breaches, and negative publicity cost even more tha before.

TESTING IS JUST TESTING

Why Testing Alone Is Not Enough?



Finds bugs, doesn't prevent them.

Testing alone doesn't guarantee highquality software. Testing identifies defects, but it doesn't actually fix them. To truly ensure quality, a more holistic approach is needed, one that integrates quality practices throughout the entire development lifecycle and involves all stakeholders, not just testers.



Testing is One Part of Quality

While testing is an essential part of ensuring software quality, it's not the only one. Other crucial aspects include usability, performance, security, and maintainability. A holistic view of software quality considers all these factors.



Testing is Reactive, Quality is Proactive

Software testing often focuses on identifying defects after they have occurred. A quality-oriented approach aims to prevent defects from happening in the first place by integrating quality practices throughout the entire software development lifecycle (SDLC).

4

Quality is Everyone's Responsibility

In a quality-oriented culture, everyone involved in software development is responsible for quality, not just the testing team. This shared responsibility helps build a quality product from the ground up.

A HOLISTIC APPROACH TO QUALITY

Building Quality In, Not Just Testing It Out

Shift Left Approach



Proactive **Prevention**



Integrate quality practices early in the software development lifecycle, not just at the end. This means involving testers and quality advocates from the design phase onwards to prevent defects, not just find them later. By shifting left, you can identify and address potential quality issues before they become big problems.

Focus on building quality into the software from the beginning, rather than just testing it. This involves techniques like code reviews and risk assessments to identify and mitigate potential quality risks early on. So instead of finding bugs or issues earlier, try to proactively prevent them in the first place.

Collaborative **Process**



Continuous Improvement



Quality is everyone's responsibility, not just the testing team's. Create a culture of open communication and collaboration between developers, testers, and business stakeholders to make sure everyone is aligned with your quality goals. Only a truly collaborative approach can drive your organization towards proper quality culture.

Regularly assess and improve your quality practices to stay on top of the changing environment. This could involve adopting new testing techniques, implementing better quality metrics, or refining your development processes. Continuous improvement ensures that your quality practices remain effective and relevant in the evolving software world.

THE IMPORTANCE OF QUALITY CULTURE

Quality is Everyone's Responsibility







- Everyone needs to understand the quality goals.
- Empower teams to take charge of quality.
- Encourage continuous learning and improvement.
- Celebrate quality achievements.

04

VALA QUALITY MODEL

How we approach building quality

Strategic or Organization level

From reactive Quality Assurance to proactive Quality Building Ultimately creating Quality Culture where everyone participates.

Business and Project management and level

Understanding business needs and taking them into Quality Goals Ensuring that all end user groups needs and intended use are met.

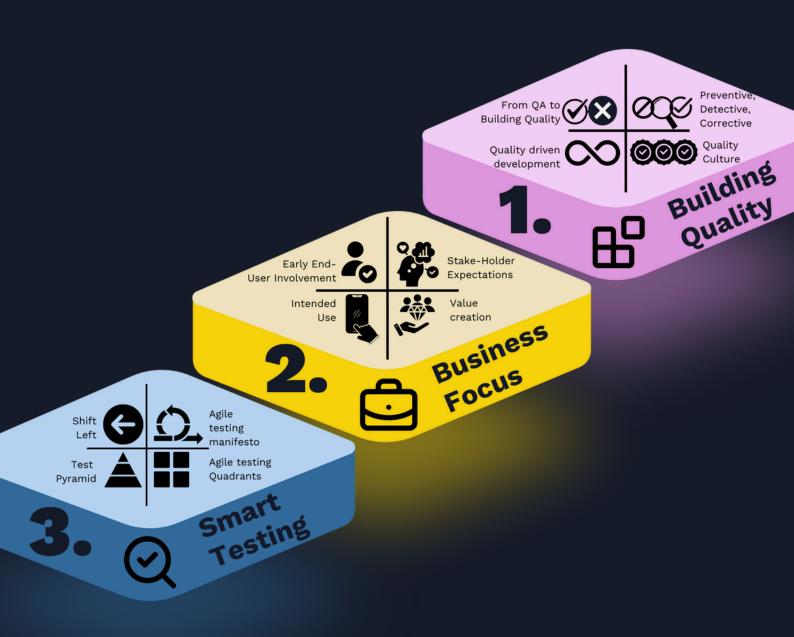
Operational or Project level

Utilizing the current Quality Trends in software quality and testing Enabling Smart and active testing.



VALA QUALITY MODEL

One shouldn't list a tech/method stack but instead know what works in certain situations. Here are some of our favourite methods at the moment.



www.valagroup.com 05

CONCLUSION

Quality is Everyone's Responsibility



IT'S ALL ABOUT CULTURE

Building quality is better than assessing it. To build quality instead of assessing it, you need quality focused culture. Culture always wins strategy. When you have quality culture you have a chance of bringing all stakeholders in to the process of building quality.



HOLISTIC APPROACH

Quality doesn't happen in the end. It doesn't happen by testing either. It happens by injecting quality mindset to all parts of development, starting from the very beginning. Actually, you shouldn't shift left per se because you still need to test in the end. But in general, yes you need to move towards left and start building quality instead of assessing it.



LET'S TALK

Contact us if you'd like to build your quality with us!



JUHA POMPPUQA Services &
Solutions Lead

+358 40 350 9995 juha.pomppu@valagroup.com



MARCUS MATTILA
CEO

+358 40 064 5949 marcus.mattila@valagroup.com



JANNE JUOPPERIFull Stack QA

+358 40 519 3254 janne.juopperi@valagroup.com

www.valagroup.com 07