

Future of Testing

Gofore studied the current attitudes, practices, and views regarding the future of testing and quality assurance of software and system development. The key challenge is a needed shift in mindset. Testing should not be seen as a cost, but as an investment bringing business benefits like reliability, risk management, boost to the competitive edge, and resulting as seamless operations and increased customer satisfaction.

Top performing organisations measure the business benefits of testing

This sets them apart from others. According to this study public organisations are doing better than private ones and seem to have a higher level of maturity in comprehending the business potential of testing and quality assurance.

Pioneers

- Interested in new technologies and utilising them effectively
- Testing is seen as an investment
- Business benefits are measured systematically
- Supplement in-house expertise with strategic partnerships

Traditionalists

- Testing is invested in although cost-effectiveness is important
- Business benefits are not measured
- Mindset of doing most testing operations in-house
- Testing is not part of organisational culture

Late adopters

- Testing is seen as an expense and a hindrance
- Business benefits are not measured
- Testing is done in-house and mostly manually
- Struggle in prioritising testing

What hinders the full utilisation of testing in an organisation



Desire to do testing in-house but having difficulties in recruiting experts to do it.



Testing is not embedded to the organisational culture.



Testing is seen as a run-through expense, not an investment with expected business results.

KEY ELEMENT FOR FINDING TESTING MOTIVATION?

Management's understanding of business benefits of testing plays a significant role in whether organisations find the motivation to invest in testing and quality assurance.

The overall benefits of testing are generally understood on an operational level. However, without measuring the business impact, it is hard to convey its value to upper management. Without a clear business case, it is often difficult to secure sufficient budgeting for developing testing operations to meet future needs.

A fast and reliable test automation is the necessity of tomorrow, not the luxury of today. As systems get more complex and development cycles shorten, the demand for fast and reliable testing grows.



Why should every organisation invest in testing

End-user satisfaction and delivered value

"Testing plays a significant role; the better we do it, the more **value we deliver** to the customer. This is the **bedrock for any strong brand.**"

Cost savings

"I would say that with this change in our **operating model [from manual testing to test automation]**, we are aiming for **savings of about 30-50%.**"

Smooth launches

"When the team says, 'We're ready to release!', it means that **testing has been thorough**, everyone has done their part, and **major incidents are rare.**"

Risk management

"The cost of a planned outage is around €1000 per minute for the Finnish society. An unplanned outage is **significantly more expensive**, with reputational damage and a complete halt in operations."

1000€/min

Estimated cost of a **planned** outage.

Employee satisfaction

"It's **frustrating to do unnecessary work** and find problems too late; it affects **people's work motivation, job satisfaction, retention**, and ultimately the company's success and individual happiness."

600%

An interviewee's estimate of the work hours saved by utilising AI based on a test case.

AI expected to revolutionise testing efficiency - while creating a testing paradox

The development of AI solutions is believed to bring revolutionary efficiency to support test automation. However, AI generates even more code that must be tested, thus creating a testing paradox. The more we average AI, the more we need high-quality testing.

The key challenge to tackle is a needed shift in mindset. Testing should not be seen as a cost, but as an investment that brings business benefits. These benefits include system reliability, risk management, and seamless operations.

What steps are you taking to get ready to meet the future demands of testing and quality assurance?



Learn more about Gofore's IntelliTestAI concept to revolutionise your testing and quality assurance practices.

[Link to website](#)