TURKEY SOFTWARE QUALITY

REPORT

2025-2026







Survey Questions

What are the 3 most important key benefits of AI in software testing?

What is your average percentage use of AI in your software testing activities at your company?

What are the 3 most important success factors for adopting an AI-First testing strategy?

What are the 3 most common mistakes organizations make when implementing AI-Assisted Testing?

Which software development methodologies benefit the most from Al-

Assisted Testing?

5



Survey Questions

6 What are the 3 biggest risks of adopting an AI-First testing approach? What is the current skill level of your test team in Al-Assisted Testing? 8 What are the 3 most important actions to accelerate AI-First adoption in your organization? 9 What are the 3 most common practical applications of AI in software testing? 10 What are the common misconceptions about AI-Assisted testing?



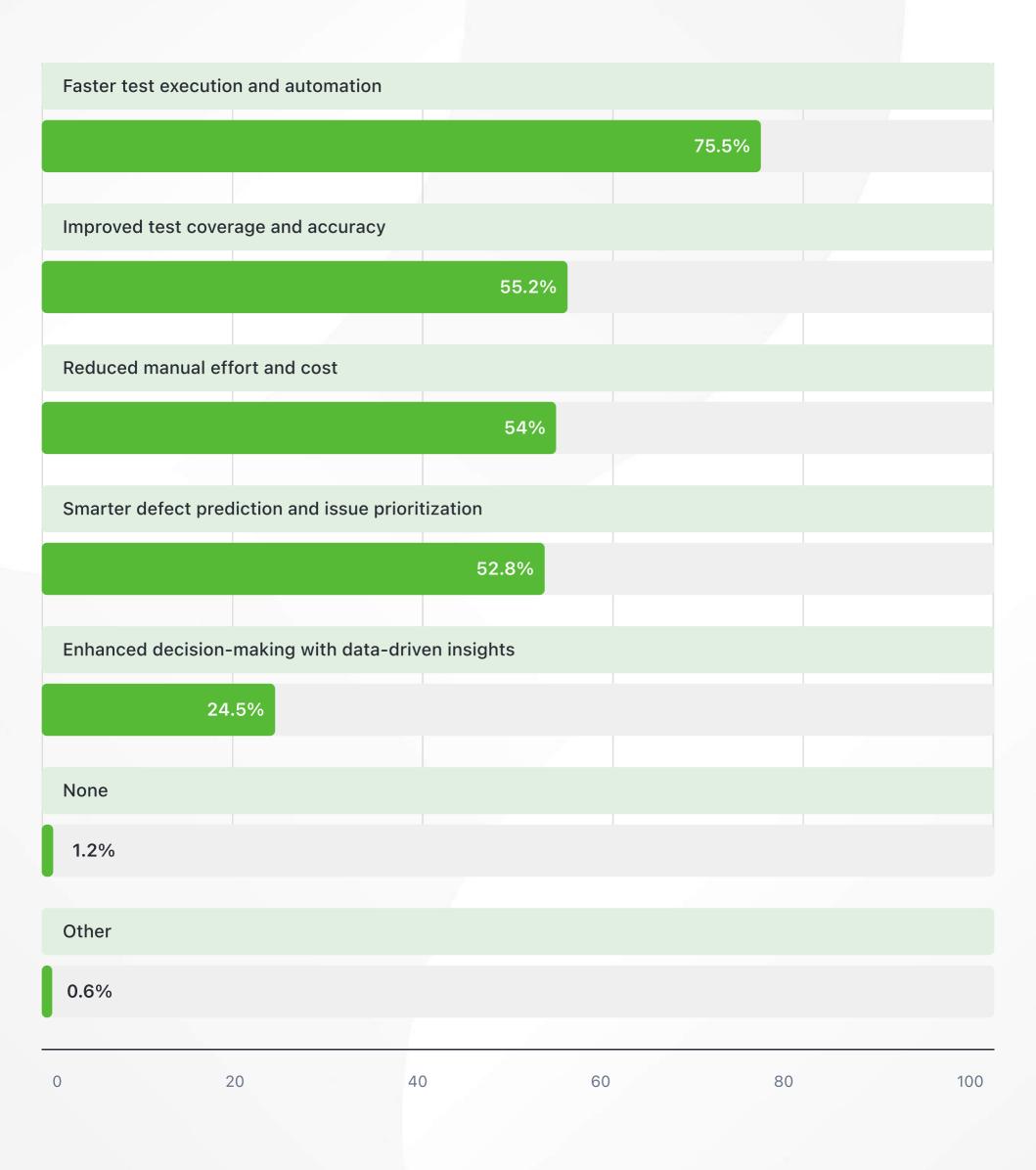
Foreword

The world of software testing is evolving rapidly, and AI is no longer a futuristic concept — it's here, shaping how we work today. The 2025–2026 TSQR Survey gathered insights from IT professionals, shedding light on how organizations are adopting AI-assisted testing, where they see the biggest benefits, and the roadblocks that still stand in the way. What we found confirms what many of us already feel: AI is transforming testing into something faster, smarter, and more impactful.

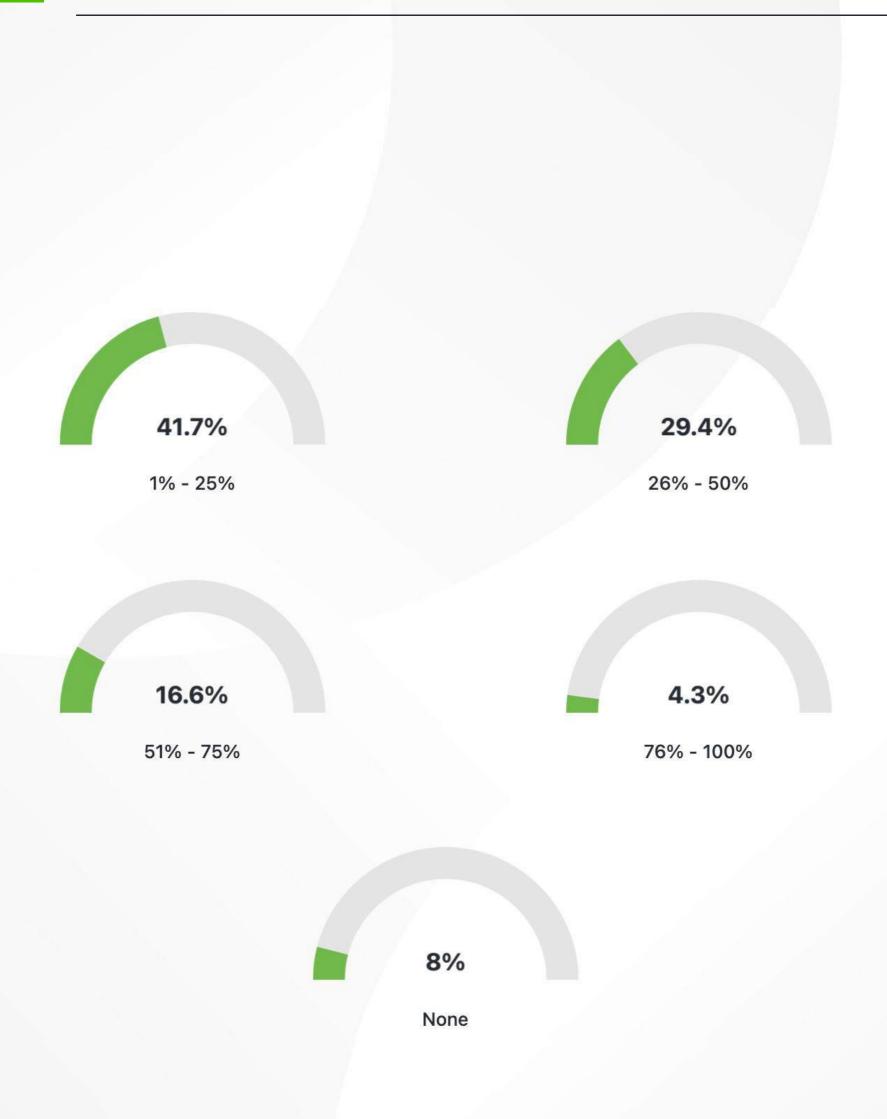
From faster test execution and smarter defect prediction to broader test coverage, respondents highlighted the very real advantages AI is bringing into their day-to-day work. At the same time, the survey didn't shy away from the challenges — skill gaps, data quality issues, over-reliance on AI without human oversight, and, of course, the ongoing concerns about security and compliance. These aren't just technical hurdles; they're reminders that successful adoption requires balance, strategy, and collaboration.

What excites us most is the forward-looking mindset of the community. Training, pilot projects, and investing in the right tools came through as the top actions needed to accelerate adoption. This isn't about replacing testers — it's about empowering teams with new capabilities and building confidence in the next generation of testing practices. With this report, we invite you to dive into the numbers, reflect on your own journey, and hopefully find both validation and inspiration as you shape your AI-first testing strategy.

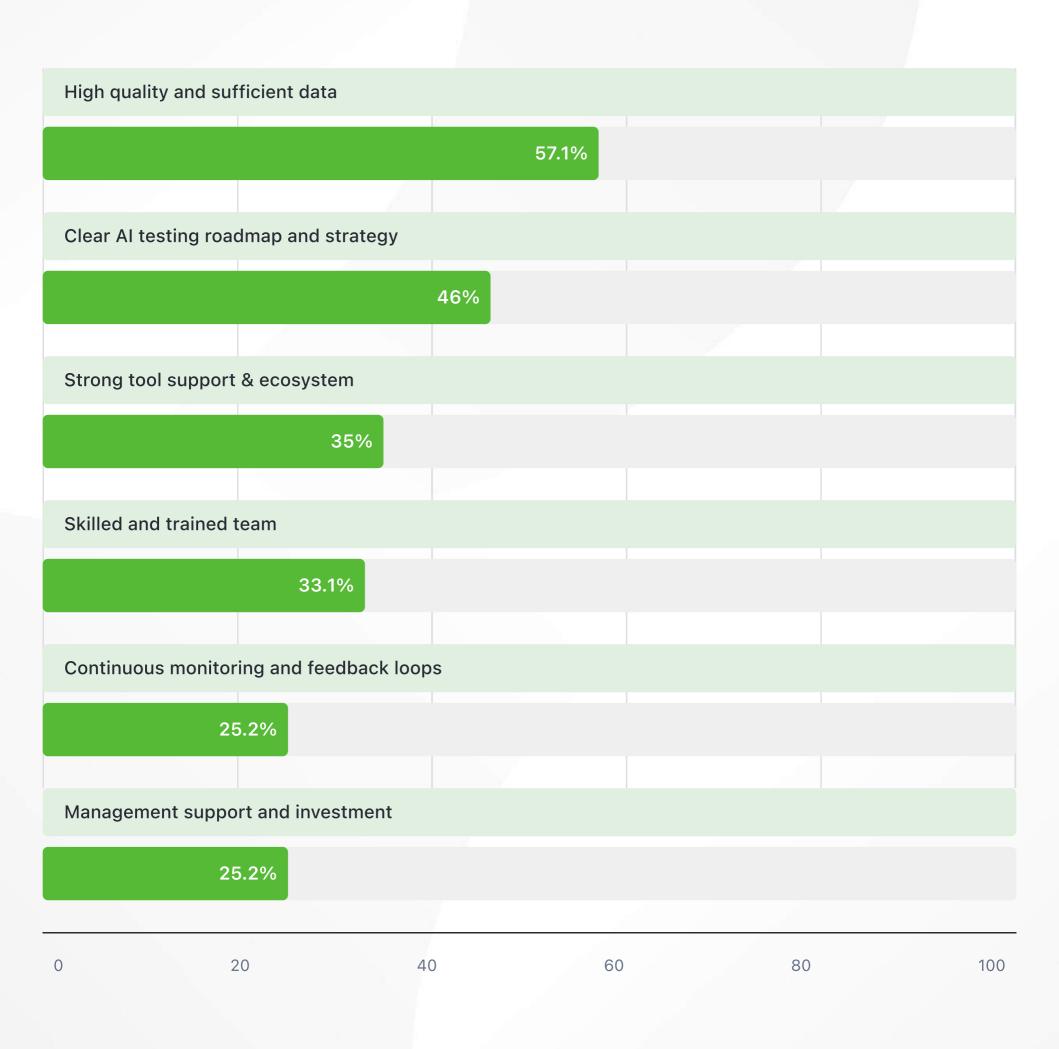
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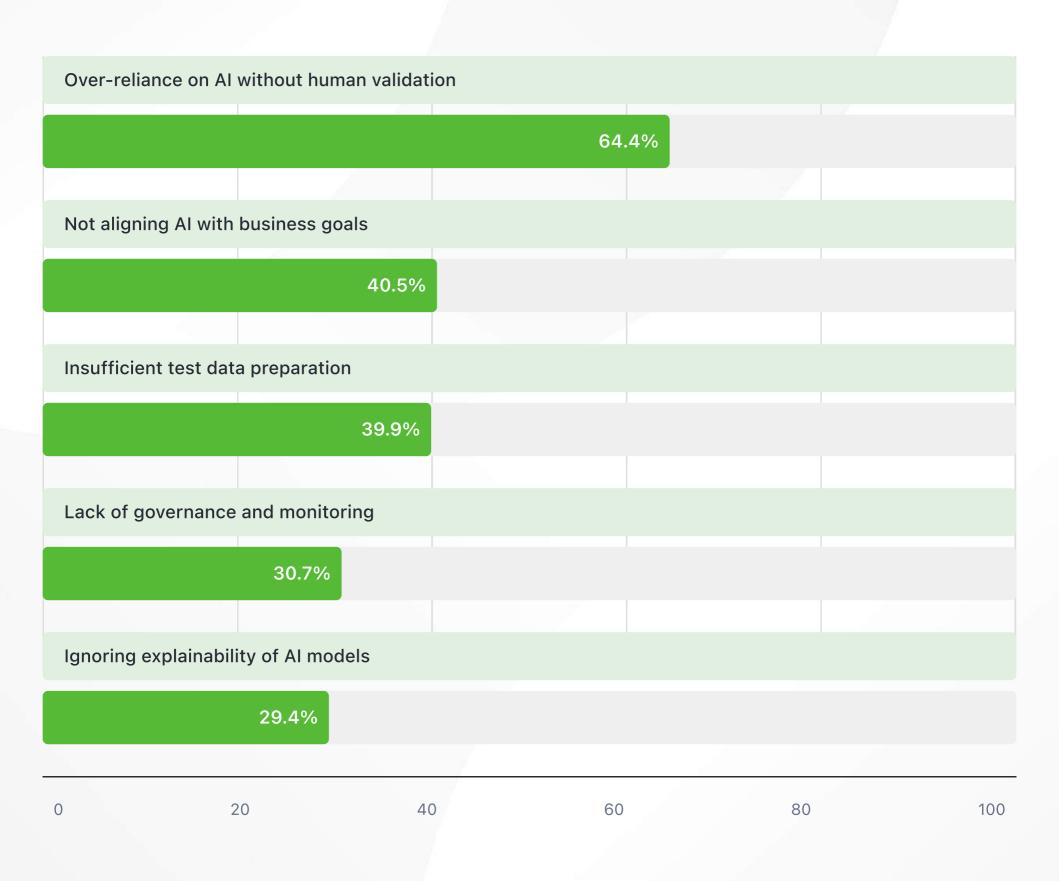
What are the 3 most important success factors for adopting an Al-First testing strategy?



What are the 3 most important success factors for adopting an Al-First testing strategy?

Regular training/upskilling for test teams				
17.2%				
Alignment with business priorities				
16%				
Performance benchmarking and measurement	ent			
11.7%				
Cross-team collaboration				
3.7%				
None				
1.2%				
Other				
0.6%				
0 20 40	60	80) 10	00

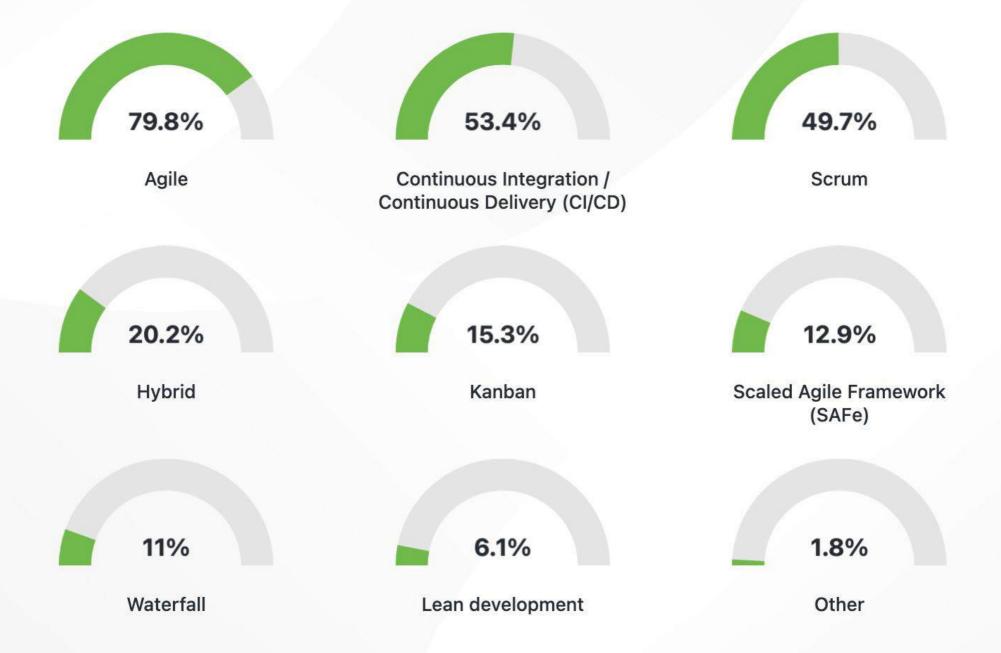
What are the 3 most common mistakes organizations make when implementing Al-Assisted Testing?



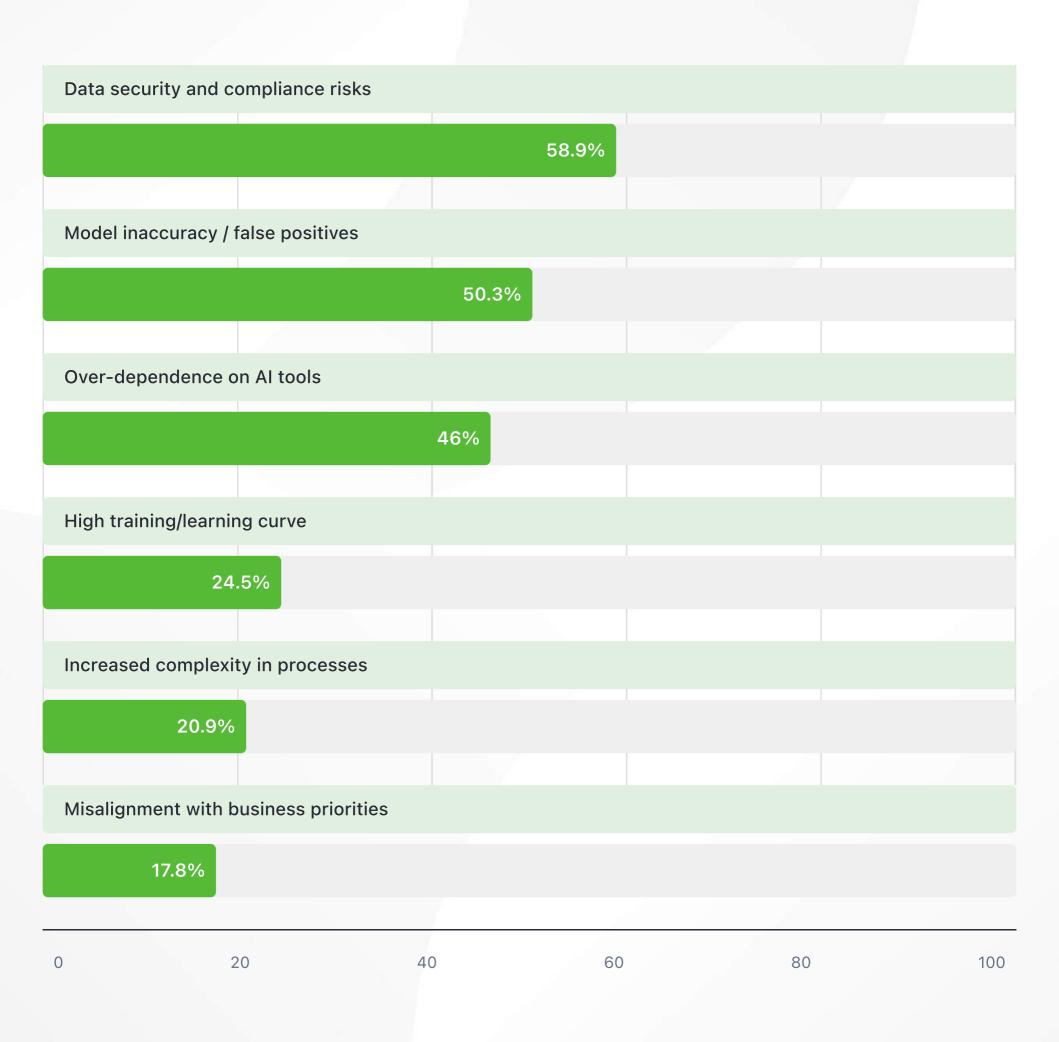
What are the 3 most common mistakes organizations make when implementing AI-Assisted Testing?

Poor integration with CI/C	CD pipelines						
27.6	%						
Ignoring edge cases							
17.8%							
Outdated or obsolete Al r	Outdated or obsolete AI models						
14.1%							
Neglecting performance testing							
5.5%							
None							
1.2%							
0 20	40	60	80 100				

Which software development methodologies benefit the most from AI-Assisted Testing?



What are the 3 biggest risks of adopting an AI-First testing approach?



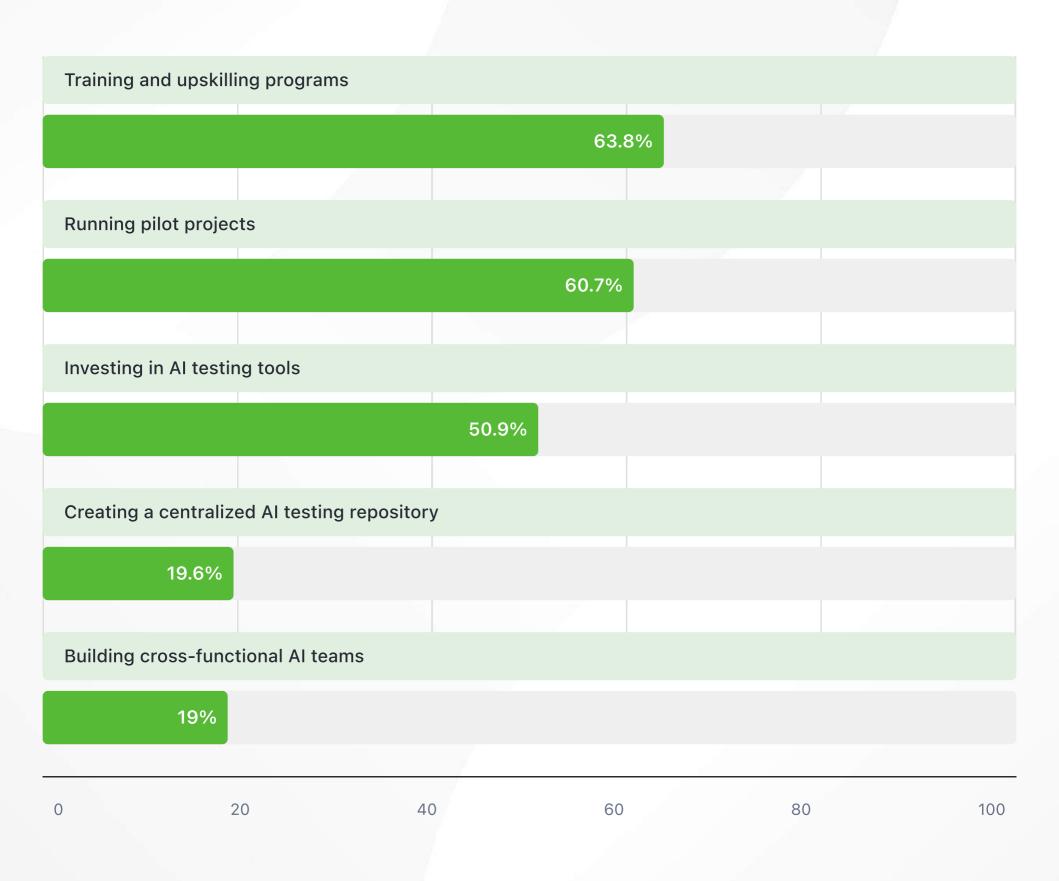
What are the 3 biggest risks of adopting an AI-First testing approach?

Low user adoption 15.3% Cost of Al tools 14.1% Maintenance overhead for Al models 12.9% Unclear ROI measurement 8% None 1.2%								
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None 1.2%	12.9%			'				
None 1.2%								
None 1.2%	Unclear ROI measurement							
1.2%	8%							
1.2%								
	None							
	1.2%							
0 20 40 60 80 100	0	20	40	60	80 100			

What is the current skill level of your test team in AI-Assisted Testing?



What are the 3 most important actions to accelerate AI-First adoption in your organization?





What are the 3 most important actions to accelerate AI-First adoption in your organization?



What are the 3 most common practical applications of AI in software testing?



41.7%

Test data generation and management

31.3%

Visual testing and UI validations

52.8%

Smart test maintenance and script healing

31.3%

Predictive analysis for defect management

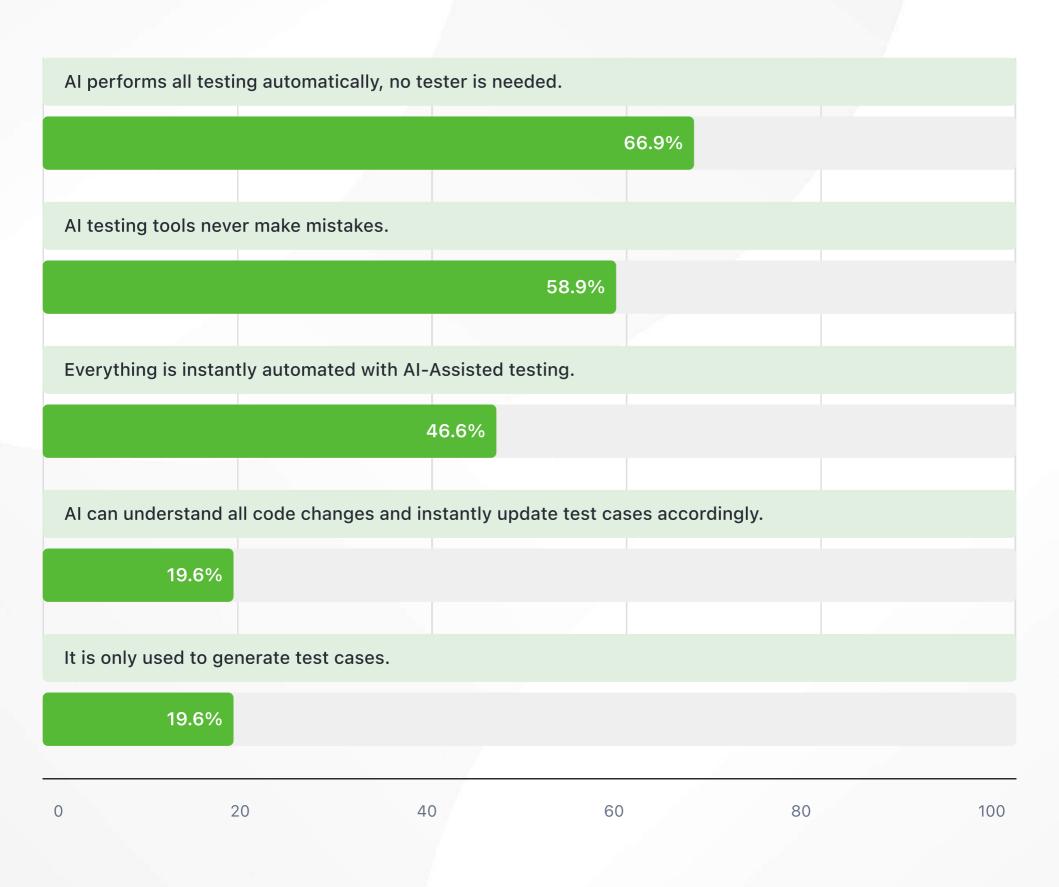
2/%

Continuous testing in CI/CD pipelines

1.2%

None

What are the common misconceptions about AI-Assisted testing?



What are the common misconceptions about AI-Assisted testing?





About



ISTQB® is a global, non-profit organization responsible for enabling test professionals, through globally accepted software testing certification standards to support their career development. As of May 2025, ISTQB® has administered 1.4 million exams and issued more than 1 Million certifications in over 130 countries. The scheme relies on a Body of Knowledge (Syllabus and Glossary) and exam rules that are applied consistently all over the world, with exams and supporting material being available in many languages.

www.istqb.org



About



Turkish Testing Board has been carrying out the following activities to increase software testing awareness in the information technology sector since 2006. International Certification Turkish Testing Board conducts international ISTQB® certification exams and gives internationally accredited certificates to participants who are successful in the exam. More than 7,000 tester candidates have applied to the board and entered the certification exams since 2006.

Certification Exams

- ISTQB® Foundation Level Certified Tester (CTFL)
- ISTQB® Specialist -Performance Testing (CT-PT)
- ISTQB® Specialist Al Testing (CT-Al)
- ISTQB® Specialist
 - Mobile Application Testing (CT-MAT)
- ISTQB® Advanced Level Test Analyst (CTAL-TA)
- ISTQB® Foundation Level Agile Tester (CTFL-AT)

- JSTQB® Specialist Test Automation Engineering (CT-TAE)
- » ISTQB® Specialist
 - Automotive Software Tester (CT-AuT)
- ISTQB® Advanced Level
 - Test Management (CTAL-TM)
- » ISTQB® Advanced Level
 - Technical Test Analyst (CTAL-TTA)
- ISTQB® Certified Tester Game Testing (CT-GaMe)

Translation Projects

The translation group within the board works on the translation of ISTQB® documents and exams in order to bring international software testing terminology to Türkiye. Documents translated so far are as follows:

ISTQB® Certified Tester Foundation

- Level Syllabus 2011
- » ISTQB® Software Testing Glossary
- TMMi® in the Agile World (Çevik Bir Dünyada TMMi)
- ISTQB® Certified Tester Foundation Level Syllabus v4.0 (2024)
- ISTQB® Certified Tester Foundation Level Syllabus 2018
- ISTQB® Certified Tester Advanced Level - Test Analyst 2012
- Dragons Out A Dragon Lesson of Software Testing (Bir Eiderhadan Yazılım Test Dersi)

- ISTQB® Certified Tester Foundation Level (CTFL) v4.0 Sample Exam
- ISTQB® Certified Tester Foundation Level (CTFL) v4.0 Sample Exam B
- ISTQB® Certified Tester Mobile Application Testing Syllabus 2019
- » ISTQB® Certified Tester AI Testing Syllabus 2021
- ISTQB® Certified Tester Automotive Software Tester Syllabus 2018
- TMMi® General Brochure
- TMMi® Lightning Scan Tool
- TMMi® Career Path Brochure

www.turkishtestingboard.org



About



Turkish Testing Board has been organizing International TestIstanbul Conferences since 2010. In the last fifteen conferences, more than 80 keynotes and more than 6,700 participants from 25 countries were hosted. Turkish Testing Board is a non-profit organization, the profit of TestIstanbul Conferences is donated to scholarships. As of October 2024, the total number of scholarship students has exceeded 100.

The board organizes sector or topic-based panels for the development of the software testing industry. More than 1,300 professionals have attended the events. The panels and events held so far are TestRemote, TestFinance, TestInsurance, TestAnkara, TestIzmir, TestGames, TestFinTech, TestDefence.

www.testistanbul.org







