

FORRESTER®

# Modernize Testing To Accelerate Your Digital Business

Get started →

FORRESTER OPPORTUNITY SNAPSHOT: A CUSTOM STUDY COMMISSIONED BY TRICENTIS | AUGUST 2021



## Continuous Testing Pays Off At The Business Level

While all application development and delivery teams prioritize speed, quality often gets left behind. Traditional testing models are slow, and as such, modern testing models and technologies have made inroads in the market, supporting trends like continuous delivery. The adoption of continuous testing allows the business, testers, and developers to contribute to building in quality from the start. With this approach, many companies achieve their desired goal: to deliver faster and with quality.<sup>1</sup>

Tricentis commissioned Forrester Consulting to explore the priorities of companies that have already made great strides along their testing transformation journeys. To do this, we surveyed 186 application development and delivery leaders at companies doing continuous testing. We found that leaders realize tangible business benefits when they follow best practices like automation and shift left testing.

### Key Findings



Leaders whose organizations perform continuous testing are making great strides in automating testing and moving to federated centers of excellence (COEs).



Even with the benefits of continuous testing, leaders still struggle to keep pace with evolving customer needs.



Leaders turn to third-party service providers and broad testing platforms to support their testing transformation efforts.

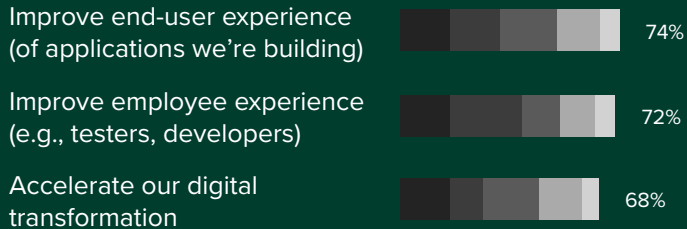
## Improving Speed With Quality Is Key To Delivering Better Experiences And Business Agility

The top business priorities for modern organizations include improving end-user and employee experience (EX) and accelerating digital transformation efforts. By focusing on improving delivery speed with quality, continuous testing leaders are helping their organizations achieve these goals sooner.

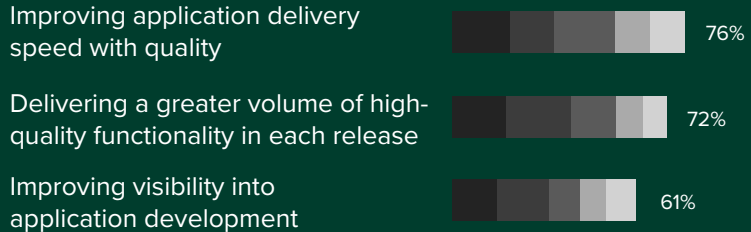
**Seventy-six percent of leaders believe improving speed with quality is key to achieving top business goals.**



### “What are your company’s top business priorities in the next 12 months?”



### “What of the following application development and delivery–related actions are most important to achieving your company’s top business priorities?”



## Continuous Testing Leaders Are Heavier Adopters Of Best Practices

Automating testing for rapid and reliable feedback is crucial to delivering great software fast. And while leaders excel at test automation, 40% of testing is still performed manually — i.e., there is room for improvement. Interestingly, automation is most prevalent in security, load and performance, and end-to-end business testing.

Leaders have also adopted federated testing COEs, which Forrester deems a best practice. A federated COE is a small, centralized group of highly skilled automation and performance engineers and test data management experts who harvest best practices, design patterns, and tools to share with teams. Their goal is to make testing software easier. The testing itself is handled by testers working alongside developers in integrated product teams.<sup>2</sup>

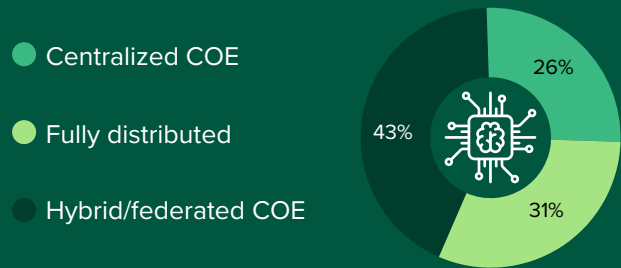


**Sixty percent of leaders' test cases are currently automated.**

### “Which types of tests are your organization currently (fully or partially) automating?”

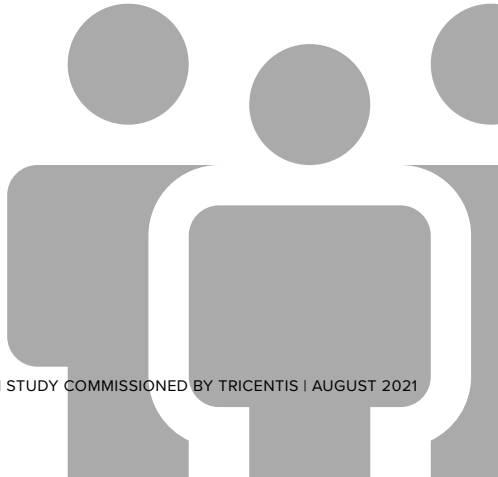


### “Which of the following best describes your testing organization?”

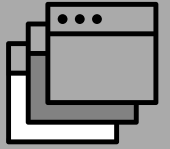


## Fixating Only On Speed Can Negatively Impact The Customer Experience

Even continuous-testing leaders prioritize speed over quality (56%) as they race to keep pace with customer demands (54%). Ironically enough, sacrificing quality for speed to keep pace can ultimately introduce blind spots that lead to poor customer experiences. In fact, 49% of leaders believe their companies have lost revenue due to poor digital customer experience (CX).

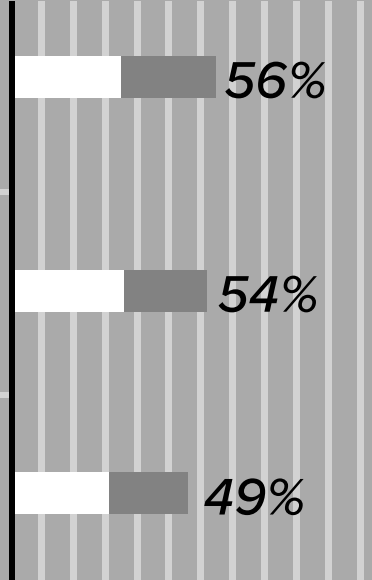


“Please rate your level of agreement with the following statements.”



○ Agree   ● Strongly agree

Quality sometimes suffers (e.g., poor user experience, services break) as we prioritize fast development and delivery



We struggle to keep up with ever-changing customer demands

Our company has lost revenue due to poor digital CX (including quality)

## Tooling That Does Not Support All Testing Use Cases Is A Top Challenge

When asked about top challenges, continuous testing leaders reported how insufficient technology prevents them from optimizing their testing transformation practices. Specifically, they note being limited by tooling that fails to support all types of applications (37%) and all types of testing personas (37%) like developer testers, technical testers, and business testers.



### “Which of the following, if any, are preventing your organization from optimizing its testing practice?”

(Showing top responses)

Current tooling fails to support all our application components (e.g., cloud-native, packaged apps, mainframes, etc.)

37%

Current tooling fails to support all our needs for business, technical, and developer testing personas

37%

Testing is not considered a first-class citizen in our software development lifecycle

31%

Lack of skills (e.g., automation engineers, test-driven development/behavioral-driven development, agile testing, etc.)

30%

Employee resistance to changing the status quo

28%

Modernization of testing is not part of the modernization of our delivery program

26%

Lack of tools to automate and manage testing at scale

25%

Lack of strategy/guidance on reaching our ideal testing state

24%

## Testing Transformation Delivers Improved Productivity, Agility, And Experiences

Despite challenges and limitations, continuous testing leaders have already seen business value from their testing transformation efforts. In addition to improved productivity (50%), leaders have experienced increased business agility (49%), improved EX (47%), and improved end user (i.e., customer) experience (43%).

While some application development and delivery organizations are comfortable focusing solely on improved efficiency and productivity, leading teams understand that improved EX drives improved CX), which Forrester’s research has proven translates directly to improved financial results.<sup>3</sup>

## Benefits Companies Have Already Realized From Transforming Testing



## How Can Other Companies Follow In These Leaders' Footsteps?

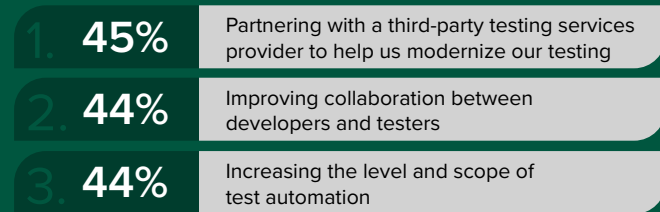
From a process and people perspective, leaders prioritize partnering with a third-party testing services provider to help modernize testing (45%); they also focus on improving collaboration between testers and developers (44%). From a technology perspective, leaders prioritize tooling that provides broad, integrated capabilities: embracing multiple testing approaches, integrating with existing processes, enabling both business and technical testing users, and supporting end-to-end process automation.

90%

of respondents agree/strongly agree that investing in testing transformation is critical to enabling continuous delivery.

## “Which of the following has your company prioritized in its testing transformation efforts?”

(Showing top responses)



## “Which of the following technology requirements are most important to enabling continuous testing at your organization?”

○ Rank 1 ○ Rank 2 ○ Rank 3 ○ Rank 4 ○ Rank 5

Ability to handle both functional and nonfunctional requirements in testing 58%

Ability to embed test automation into our existing tools and processes 55%

Ability to automate testing for business and technical users 55%



## Conclusion

Companies that make testing a first-class citizen see improvements in business agility, as well as in EX and CX. To follow in their footsteps, others can:

- **Restructure their testing organizations.** No single role can achieve continuous testing alone. Business and technical testers need to work closely together, and in some cases do so with specialized external-testing services partners.
- **Adopt modern testing practices.** Applications have become distributed, become more complex, and run over heterogeneous platforms and technologies. New testing practices (e.g., shift left testing) are required to adapt quickly to changing business requirements.
- **Modernize technology.** Achieving high automation and quality requires a platform approach that leverages AI for precision and accuracy, efficient UI testing in concert with API testing, and integrated test data and load performance testing.

### Project Director:

Mandy Polacek,  
Market Impact Consultant

### Contributing Research:

Forrester's Application Development &  
Delivery research group



## Methodology

This Opportunity Snapshot was commissioned by Tricentis. To create this profile, Forrester Consulting conducted an online survey of 186 application development and delivery leaders at companies already doing continuous testing. The custom survey began and was completed in June 2021.

### ENDNOTES

<sup>1</sup> Source: "Master The SDLC For Modern Application Delivery," Forrester Research, January 26, 2021.

<sup>2</sup> Source: "The 12 Must-Dos For Achieving Continuous Software Testing," Forrester Research, August 14, 2019.

<sup>3</sup> Source: "Improving CX Through Business Discipline Drives Growth," Forrester Research, January 24, 2021.

### ABOUT FORRESTER CONSULTING

Forrester Consulting provides independent and objective research-based consulting to help leaders succeed in their organizations. Ranging in scope from a short strategy session to custom projects, Forrester's Consulting services connect you directly with research analysts who apply expert insight to your specific business challenges. For more information, visit [forrester.com/consulting](https://forrester.com/consulting).

© Forrester Research, Inc. All rights reserved. Unauthorized reproduction is strictly prohibited. Information is based on best available resources. Opinions reflect judgment at the time and are subject to change. Forrester®, Technographics®, Forrester Wave, RoleView, TechRadar, and Total Economic Impact are trademarks of Forrester Research, Inc. All other trademarks are the property of their respective companies. For additional information, go to [forrester.com](https://forrester.com). [E-51451]

## Demographics

COUNTRY	
United States	54%
United Kingdom	29%
Switzerland	8%
Germany	5%
Austria	4%

INDUSTRY	
Banking and financial services	23%
Insurance	15%
Healthcare	12%
Technology and/or technology services	10%
Travel and hospitality	9%

ANNUAL REVENUE	
>\$5B	15%
\$1B to \$5B	33%
\$500M to \$999M	27%
\$400M to \$499M	25%

CONTINUOUS TESTING IMPLEMENTATION	
Implemented across some business units/teams	53%
Implemented across the entire organization	47%

An overhead view of a person with short, curly hair, wearing a light-colored sweater, sitting at a wooden desk. They are typing on a silver laptop. To the left of the laptop is a spiral-bound notebook with a blue pen resting on it. Further left is a black tablet. To the right of the laptop is a clear glass. The person is sitting on a chair with a black and white checkered pattern. The entire scene is dimly lit, with a dark teal overlay.

FORRESTER®

FORRESTER OPPORTUNITY SNAPSHOT: A CUSTOM STUDY COMMISSIONED BY TRICENTIS | AUGUST 2021