

# Why are IT leaders unable to automate their app testing processes?



Automated testing has many benefits, from supporting continuous development processes to expanding testing capacities and improving product quality - among others.

Although keen to optimize development processes, in reality, IT leaders are faced with many challenges when it comes to overhauling their existing (mostly manual) workflows.

Pulse surveyed 100 IT leaders to understand their current app deployment practices and the hurdles that they are faced with while trying to pursue testing automation and DevOps processes.

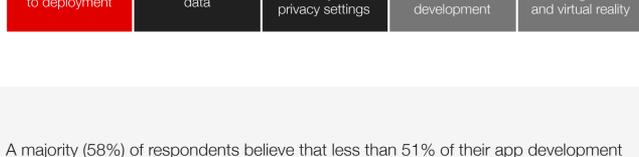
Data collected from June 21 - August 7, 2021

Respondents: 100 IT leaders

## Workflow automation and faster app deployment are top of the 2021 to-do list

The top priority for 43% of the IT leaders surveyed is speeding up their app deployments this year, and this is the top ranked development priority for 2021 overall.

Rank your top 5 app development priorities for 2021 from top to bottom.



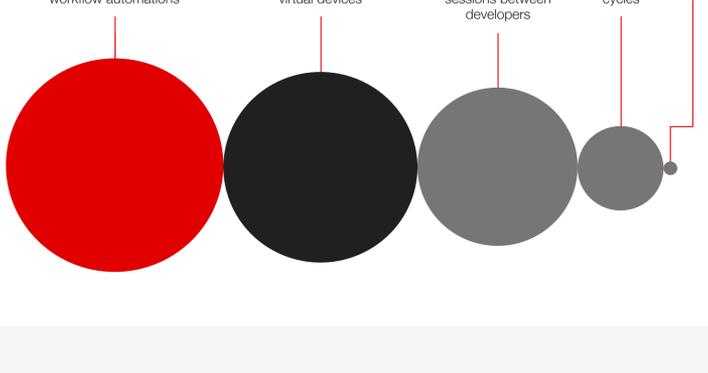
A majority (58%) of respondents believe that less than 51% of their app development team will be back in the office by the end of 2021.

What percent of your team (anyone involved in build and release pipeline) do you expect to be in the office vs. fully remote by the end of 2021?



In order to support remote app building and release processes, most survey respondents are increasing reliance on workflow automations (66%) and virtual devices (59%).

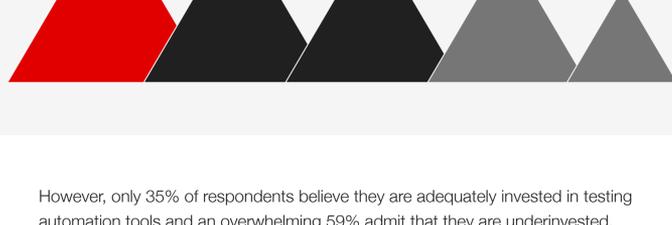
How is your build and release workflow changing, if at all, to support remote work?



## 59% of IT leaders admit they are underinvested in testing automation tools

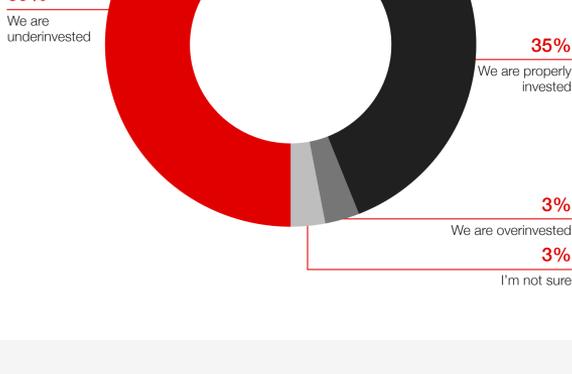
75% of respondents are hoping to optimize their operations and focus on strategic initiatives through test automation this year. The others hope to reduce testing time (69%) and cost (41%), as well as improve test quality (65%). In fact, the IT leaders surveyed use a combination of cost, quality, and speed of release to measure the return on investment (ROI) of testing automation tools.

What are your goals for test automation in 2021?



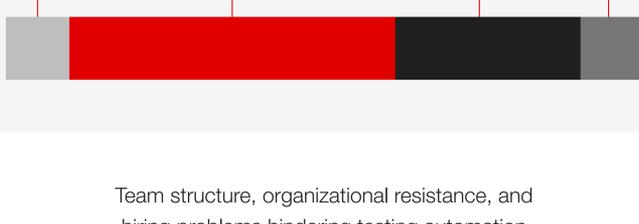
However, only 35% of respondents believe they are adequately invested in testing automation tools and an overwhelming 59% admit that they are underinvested.

What is your current investment level in automation testing?



Full adoption of automated testing is also lagging as 90% of the respondents say more than 25% of their software testing is done manually.

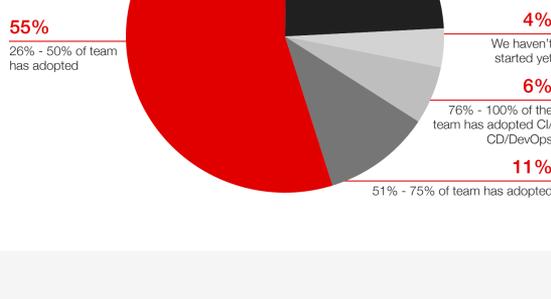
What percent of your software testing is currently "manual" vs "automated"?



## Team structure, organizational resistance, and hiring problems hindering testing automation

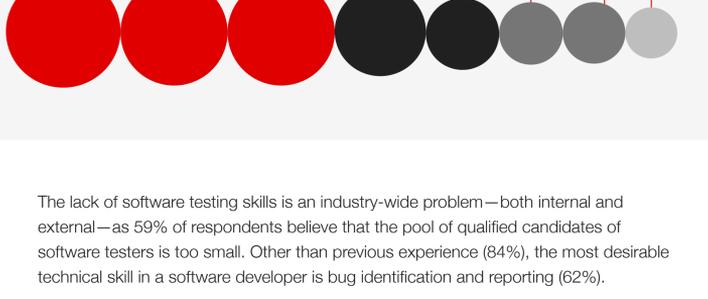
79% of respondents say only 1% to 50% of their development team has adopted a CI/CD/DevOps process, and 4% of respondents' teams haven't even started.

How far along is your development team in the adoption of a CI/CD/DevOps process?



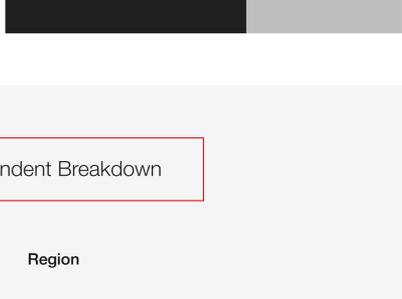
Challenges that might be leading to low adoption of DevOps processes include the additional workload of creating new automated tests for each new feature (55%), resistance to change (52%), and lack of internal skill sets (52%).

What are the key challenges you face in adopting a CI/CD/DevOps process?



The lack of software testing skills is an industry-wide problem—both internal and external—as 59% of respondents believe that the pool of qualified candidates of software testers is too small. Other than previous experience (84%), the most desirable technical skill in a software developer is bug identification and reporting (62%).

What are the key skills that you are looking for when hiring a software tester?



## Respondent Breakdown

### Region



### Title



### Company Size

