harness

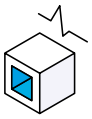
EXECUTIVE BRIEF

Deliver More Software Faster Without Hiring More

End-to-End Automation & AI/ML are Key to Unlocking Efficiency

Engineering leaders have long been challenged to deliver more software faster while keeping risk, reliability, and costs under control. Now, you have to do all of that — but without hiring more. While that may seem impossible, advanced automation technology can help you do more with less.

Here's a look at how automation and machine learning (ML) can help drive efficiencies throughout the software delivery lifecycle (SDLC):



Automated Testing

Today, there's a much wider range of automated tests that can be used to reduce costs, improve test coverage, ensure consistency, detect defects early, and improve the overall quality of the software delivered. With ML, you can run thousands of these tests simultaneously and even rely on the ML to autonomously determine which tests are necessary to run. Automated security testing can generate a list of prioritized vulnerabilities, along with remediation recommendations, which saves developers significant time.

Automated Rollback and Feature Toggles

In the event of a deployment failure, you can automatically roll back the deployment to the previous version in minutes, reducing downtime and eliminating the need for manual intervention. Teams can increase their velocity while reducing risk and minimizing the need for a deployment rollback by toggling features on and off right in production. The ability to toggle features integrated with CI/CD allows teams to deploy more often, iterate rapidly with customers, and deliver higher quality software sooner.

Controlling Cloud Costs

You can avoid unnecessary cloud spend by detecting anomalous cloud spend patterns down to the infrastructure level using ML. Automatically shut down idle cloud instances or run them on automated, fully orchestrated Amazon EC2 Spot instances to right-size the infrastructure supporting application services. Gain granular visibility into cloud inventory to optimize resources, and govern usage with custom reports and alerts. You can also drive team accountability by attributing costs, forecasting, budgeting, identifying waste, and applying recommendations across teams based on business objectives.

Safeguard Reliability from Efficiency Initiatives

Run proactive chaos engineering tests to identify potential failure modes and minimize the chance of production failures from happening at all. This ensures efficiency initiatives don't jeopardize application reliability. When reliability concerns do crop up, you can notify teams ahead of time, pinpoint when violations occur, and halt deployments altogether if key reliability metrics aren't met.

Triage with Visibility

Real-time visibility into usage, cost, and reliability data on a per-feature basis allows engineering teams to find and solve related production issues almost instantly, rather than having to trigger a rollback and spend hours or days triaging and resolving. This helps engineering teams work more efficiently and minimize time spent on rework and firefighting.

Actionable Engineering Insights

Centralized dashboards give teams a comprehensive view of the software delivery lifecycle at any stage. This provides actionable insights across teams to identify bottlenecks and process improvements that can increase productivity. By finding inefficiencies in people and processes, you raise the bar for the entire engineering organization to deliver more, faster, without hiring more engineers. The data can also be used to articulate the engineering team's value and efficiency improvements to business leaders by demonstrating how benchmarks are improving over time.

See How Harness Can Do All This and More

The Harness Platform offers a suite of automation tools designed to optimize the software delivery process. By leveraging Harness, engineering organizations can streamline their workflows, eliminate manual tasks, and achieve significant improvements in productivity to deliver more software faster without hiring more engineers. Harness can also help reduce the risk of errors, improve the quality of code, and ultimately drive more revenue for the business.

Ready to see it in action? Request a personalized demo today!

Request a Demo