

# Go Faster, Innovate More, all at a Lower Cost

Learn How with

# ≫Total Costs Must Be Cut





We all face pressure to reduce costs. When you are deploying software at scale and speed, any inefficiencies in

the process are instantly visible and increase the overall costs. What were the primary reasons that poor delivery processes increased costs?



We all constantly face cost pressure.

OpsMx customers have delivered large returns on their investments, enabling them to save money while they are achieving their other goals with continuous delivery.







#### Too many errors in production

One of the biggest cost drivers in software delivery is too many errors moving to production. Errors that slip through the verification process have a direct impact on the bottom line: the cost of a production error may amount to \$1M per hour or more. CD can't eliminate all production errors, but it can help.

80% of production errors could have been caught in pre-production



#### High infrastructure costs

With a poor release process, infrastructure costs eat into everyone's budget. When testing or staging systems are idle, money is wasted. Creating a system that automatically provisions and tears down infrastructure has saved OpsMx customers millions of dollars.

#### Lagging developer and engineer productivity

One hidden but real cost is a decrease in productivity due to release processes. At most companies, senior engineers, SREs, and DevOps staff are currently called upon to perform tasks that can now be automated. Automating release processes improves productivity that can be the equivalent of multiple additional engineers.

OpsMx customers have proven that their investments in CD have a strong return, reducing hard costs like infrastructure and costs due to production errors, as well as indirect costs like lower productivity.



## A Multinational Technology Conglomerate

This customer develops, manufactures and sells complete networking hardware, software, and solutions. Being in a competitive market, they naturally focus on cost optimization and increasing profitability.

### The Challenge

### Improve profitability while increasing innovation

This industry leader, who dramatically improved release speed, has simultaneously saved millions of dollars by reducing errors and reducing developer wait times.

The cost of correcting errors increases as an update moves forward in a software delivery pipeline. This organization had too many errors discovered in production because the agreed-upon processes were not always followed.

Developer and engineer productivity are watched closely at this networking giant. Previously, developers were often forced to wait for infrastructure to be available due to the manual provisioning of test environments, or to wait for an SRE to complete a release process.

Engineers maintained extensive "spaghetti code" scripts that failed too frequently, causing release errors and frustrating stakeholders.

### The Result

Millions of dollars saved due to reduced errors in production

Both of these challenges - too many production errors and decreased productivity - have been resolved with OpsMx Enterprise for Spinnaker.

Through automation, the company has essentially eliminated errors in production due to release errors, This alone has repaid their investment in the solution many times.

Nearly 2000 developers use the automated system. Their productivity has soared.

Because the system has eliminated most scripting, pipeline maintenance is dramatically reduced.

Further, developers use a self-service model to onboard more than 80% of new services, further improving productivity.



OpsMx Customers Eliminate Costs

## Leading Financial SaaS Provider

This customer provides the leading collaboration platform for financial service companies. Their reduced software costs increase profitability and free up extra budget for innovation.

### The Challenge

### Control costs in development and production

The team needed to reduce their overall development and production costs and chose OpsMx Enterprise for Spinnaker to transform to a modern CD environment.

The company targeted two areas for cost improvement.

First, The system infrastructure and deployment processes for this organization were both extremely complex. Due to the complexity, development and test environments were infrequently de-provisioned. This means they sat idle, creating extra infrastructure cost. This was the first major cost to tackle

Second, the overall complexity prevented developers from being able to independently move software through a CD pipeline - they were forced to wait for SREs.

This extra wait time clearly impacted development productivity, so the speed of introducing new features was lower than their goal.

The Result

### Millions of dollars saved due to reduced infrastructure costs

The new release process now automates the provisioning and de-provisioning of infrastructure leading to a dramatic reduction in overall infrastructure spend.

Additionally, both developer and SRE teams saw an immediate increase in productivity. Developers are now able to independently manage pipeline execution, so they waited less and developed more. SREs can nowfocus on their specific tasks rather than supporting development.



OpsMx Customers Eliminate Costs

## >> A Leading Online Destination Website

This customer provides a well-known site, serving more than 200M unique monthly users. Improving developer productivity leads directly to competitive advantage.

### The Challenge

- Reduce load on senior engineers
- Reduce errors in production

For our client whose business runs on the internet, customer satisfaction is the most important parameter for success. Any production errors can lead to customer defection and revenue loss for the company.

To avoid this, senior engineers were assigned the task of ensuring that errors did not move to production. For an average update, senior engineers formerly spent three hours reviewing and analyzing logs and metrics generated during testing. The company wanted to reduce the error rate even further, without increasing staff costs.

### The Result

Savings of \$1M per year from improved productivity and reduced production errors

OpsMx Autopilot automated the update verification process, nearly eliminating the time that senior engineers must manually invest. Autopilot adds a layer of intelligence to the CD solution, using machine learning to analyze large amounts of testing data.

Autopilot uses both supervised and unsupervised learning. As time goes on, the software gets smarter and identifies more errors automatically.



### OpsMx Customers Eliminate Costs

# A Leading Network and Cyber Security Provider

This customer delivers advanced networking and cyber security solutions around the globe. To provide their customers with the highest ROI, they systematically target inefficiencies across the board.

### The Challenge

### Reduce the cost of correcting build errors

Another of our customers is a leader in networking and cyber security. They are constantly innovating to repel security attacks.

In their software development process, they execute thousands of builds daily. Inevitably, a small percentage of the builds fail; every build error has a large cost associated with it. Triaging and correcting these build errors is a complicated process that directly impacts the productivity of the entire development team, as a single build failure can impact multiple development streams.

In the previous system, senior engineers were forced to manually correct the build issues: gathering data, analyzing logs, and identifying the root cause for each build error.

The company undertook a project to reduce the time and cost of build failures. They chose OpsMx Autopilot to automate the process. They set a target of reducing time spent on build failures by 75%, which would drive a corresponding decrease in triage costs.

### The Result

Automated build failure analysis saves the equivalent of 5 senior engineers

Autopilot can work with any build system; in this case, our customer uses Jenkins. Autopilot automatically gathers the relevant data and uses machine learning to evaluate every build.

First, it determines whether there has been a failure, and then identifies the probable root cause of the failure.

For this customer, many of the build failures were due to transient infrastructure issues. Autopilot identifies these hard-to-diagnose cases, saving the engineers enormous time. Other causes of failures are also identified by the ML algorithms, and because Autopilot learns as it is used, it continues to improve its success rate.

Following implementation of Autopilot, the company was able to achieve their targets. With the improvements in developer productivity, they have been able to save the equivalent of five full time developers.

#### C O S T

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