Wayfair sharpens its DevOps edge with ServiceNow, enhancing the e-commerce experience for customers

Industry: Retail  
Location: Boston, Massachusetts  
Size: 9,700 employees

Award-winning, online customer experiences are driven by a deeply embedded DevOps culture at Wayfair

Wayfair, one of the world’s fastest-growing e-commerce businesses, has long embraced technology innovation. Offering shoppers a selection of more than 10 million items spanning home furnishings to housewares, the family of brands includes Wayfair, Joss & Main, AllModern, Birch Lane, and Perigold. The company’s award-winning websites enable customers to discover, assemble, and purchase products to create the home of their dreams.

To provide this compelling experience, Wayfair’s relies on a team of DevOps engineers that enable its software community to deliver over 300 software releases every day—an average of one every five minutes. Operating at this pace requires highly optimized continuous integration (CI) and continuous delivery (CD) pipelines. Every development second counts, whether committing code to Git, integrating with Jenkins, testing with Codeception, or deploying via Artifactory. Once code is deployed, operations needs to be just as agile and embrace the DevOps mantra: “release fast, fail fast, and revert faster.”

Wayfair needed end-to-end visibility into its pipeline and operations

To optimize its DevOps performance, Wayfair required better visibility into its pipeline and operations. “We had a state-of-the-art DevOps pipeline, but didn’t know how it was performing. We got information from individual tools but lacked the capability to bring it all together,” says Tameem Hourani, Director of DevOps at Wayfair.

Challenge
Gain visibility across DevOps and production monitoring tools to optimize pipeline performance

Products
• Now Platform®
• ServiceNow® IT Service Management

Solution
ServiceNow provides a single platform for IT service delivery, giving Wayfair a consolidated view of its web stack infrastructure, applications, and services to help optimize its DevOps CI/CD pipelines.
ServiceNow has given us the insights we need to drive continuous improvements across our production operations stack. The results speak for themselves: quicker service delivery, better code quality, and less downtime.

Tameem Hourani, Director of Production Operations at Wayfair. “We needed a single system to correlate and analyze all our data—a single pane of glass through which we could see everything in our pipeline of tools and production monitoring systems.”

Revert times was one area of DevOps that required better visibility. To accelerate revert times, operations personnel needed full knowledge of code changes. For example, when there was a slowdown in a website’s response time, the team needed to know what software had been deployed to production. Without that information, the team would not know what to revert. However, if nothing had changed, it could point to different issue within the web stack, such as a load balancer or a web server.

With ServiceNow, Wayfair gains unprecedented insights across the DevOps toolchain, helping accelerate time to market for software releases

To help unite data from multiple systems, Wayfair selected ServiceNow. “We could have started from scratch by bringing all of our tool metadata into a warehouse,” says Tameem. “However, ServiceNow offered us faster time to market. The solution integrated easily with our tools and we could use built-in IT service management capabilities, such as incident and change records. Instead of building a completely new application, we could simply incorporate it in to the Now Platform.”

Wayfair integrated its monitoring tools into ServiceNow, followed by its CI/CD toolchain. This gave the company a consolidated view across its web stack infrastructure, applications, and services for the first time.

In the event of an issue, ServiceNow sends a Slack notification to the operations team. A team member then analyzes logs in Kibana and correlates them with recent software changes. This approach has helped Wayfair to reduce revert times from 12 to 2 minutes.

Software release quality improves with ServiceNow, cutting production code rollbacks in half

By bridging development and operations with ServiceNow, Wayfair also improved release quality.

“Using ServiceNow, we don’t just see what’s happened—we can see why,” explains Tameem. “For example, if there’s a spike in incidents, we can use ServiceNow data to track them to test suites or code changes, and revise our tests to reduce the number of issues making it into production.”

In just six months, ServiceNow helped Wayfair to cut production code rollbacks in half—from 9% to 4.5%.

ServiceNow helps accelerate Wayfair’s CI/CD pipeline, speed service delivery, improve code quality, and reduce downtime

ServiceNow insights also help Wayfair to accelerate its CI/CD pipeline. With data from ServiceNow, Wayfair’s platform development team can better understand toolchain and process performance and identify bottlenecks. This capability allowed the team to prioritize pipeline-related work, helping reduce average integration times by 95%—from 32 to 2 minutes.
Knowledge sharing is at the base of a blossoming DevOps culture at Wayfair

According to Tameem, Wayfair has a growing DevOps culture in which people are constantly learning by sharing internal knowledge and through the DevOps ecosystem. As a result, the company is continuously improving its technology and engineering platforms.

“ServiceNow has given us the insights we need to drive continuous improvements across our production operations stack,” says Tameem. “The results speak for themselves: quicker service delivery, better code quality, and less downtime.”