

HOW A FINTECH UNICORN REDUCED DEVOPS TICKETS BY 70%

www.kubiya.ai

CHALLENGE

A fast growing payment provider for businesses reached Unicorn status, tripling its headcount in 12 months. While its Dev team grew to close to 100 developers, Ops remained relatively small with only 6 team members.

Ops key objectives were to innovate, optimize infrastructure, replace legacy systems and design advanced alerting.

Unfortunately progress was slow and the small team was consumed by the repetitive, day-to-day tasks. As their team lead noted "our Slack on-call channel was like a booby-trapped warzone, exploding with requests from the Dev team, leaving us with zero bandwidth for innovation work."

Mundane activities such as provisioning infrastructure, triggering pipelines, troubleshooting, accessing data and more, overloaded the Ops team with repetitive 'superurgent' tasks and the associated context switching.

On the Dev side, waiting hours and sometimes days for requests to be handled was creating frustration and slowing down time to market.

With a tech stack that included AWS, Airflow, Argo, GitHub Actions, Helm Charts, Jenkins, Pulumi, Terraform, Slack and more, the small Ops team was struggling to handle over 100 tickets a week in addition to their core work and transformation goals.

AT A GLANCE

CHALLENGES

- Repetitive DevOps tasks
- Limited Ops bandwidth
- Long waiting times for Dev requests

BENEFITS

- Reduced DevOps tickets by 70%
- Easy Dev access to infra and operational processes

"Our Slack on-call channel was like a boobytrapped warzone, exploding with requests from the Dev team, leaving us with zero bandwidth for innovation work."



AI-DRIVEN ASSISTANT DELIVERS A SECURE AND CONVERSATIONAL SELF-SERVE EXPERIENCE TO DEVS

www.kubiya.ai

SOLUTION

While evaluating various options for DevOps self-serve, one critical consideration was finding a solution that would be easy for the Dev team to adopt without a steep learning curve and the inherent context switching required by internal developer platforms.

The team also could not afford to spend too much time implementing a self-serve system. As such, workflow creation and maintenance needed to be something that could be accomplished in minutes, without excessive, manual lift up. Likewise, integrations with 3rd party solutions needed to be at a plug-and-play level, especially with the company's large and varied tech stack.

Finally, the Ops team needed a solution that would allow them to control the varying levels of access and permissions to ensure proper compliance and security.

After researching many different solutions, the team chose an Al-driven assistant. Its conversational Al capabilities allowed their Devs to use natural language over Slack (and CLI if desired) to access their engineering infrastructure. Users were authenticated using Auth0 while permissions and access control were managed directly per the relevant workflow.

This made their complex infrastructure accessible to end-users who lack operational expertise while acting as a proxy with guardrails. This gave Ops full control over temporary and permanent permissions for who can do what.

At the same time, this helped reduce DevOps tickets by 70% while eliminating the long delays Dev's typically experienced.

The cost of adoption for Ops was also negligible as workflows could be created with simple English prompts and maintained using a no-code builder and/or yaml-based domain specific language.

"Adoption for Ops was negligible as workflows could be created with simple English prompts and maintained using a no-code builder."



REDUCED OPS TEAM'S TICKETS BY 70% ALLOWING THEM TO FOCUS ON INNOVATION AND CORE GOALS

www.kubiya.ai

RESULTS

Reduced Ops team's tickets by 70% allowing them to focus on innovation and core goals

With an Al-powered assistant that understands natural language requests and handles all the Dev team's operational needs, Ops was freed from repetitive requests and tasks. The actual implementation of this self-serve solution was nearly effortless. With out-of-box integrations and a robust SDK, any 3rd party solution could be incorporated into a workflow. Leveraging large language models made it a cinch to build even complex workflows in seconds, using just a simple, English prompt.

Eliminated DevOps context switching

Previously, the day-to-day of the DevOps team could not be planned as urgent requests would come in odd hours, requiring context switching multiple times a day. With the Al-powered assistant handling the majority of the requests, context switching and on-call requests were reduced significantly, transforming the experience of the Ops team.

Enabled effortless orchestration of complex workflows

With much of the stack integrated into its Al-powered assistant, the Ops team was able to build workflows across multiple platforms. These workflows, with a few inputs from end-users, could run end-to-end flows, reducing the complexity and coordination previously required across platforms.

Near-zero maintenance work for Ops team

Using a no-code builder with a broad set of features, existing workflows could be easily edited to support complex processes and steps. For any further, granular fine-tuning, the Ops team would use a yaml-based domain specific language for editing the workflows.

Improved Dev experience by providing them immediate access to infrastructure, operational processes and knowledge

Devs no longer needed to wait hours or days to provision cloud resources, trigger pipelines or troubleshoot workloads. All of this and more could be accomplished by having a simple conversation with the virtual assistant in Slack.

Seamless adoption and minimal learning curve

As the Dev team already was familiar with and working with Slack, being able to access operational workflows directly from Slack required zero learning curve nor any need to constantly switch to yet another work environment for finding and triggering workflows.

Improved compliance and security by providing precise and controlled access to sensitive resources

Built-in integration with leading identity providers made it easy for the Ops team to authenticate all users. Policies for each and every workflow could be created and maintained with full attribute based access control (ABAC). Comprehensive logging and reporting made it easy for the Ops team to monitor all user activity.