

Buildkite

Buildkite Opens New Revenue Streams with SuperOrbital



Founded in 2014 and headquartered in Australia, Buildkite is a continuous integration and delivery (CI/CD) platform that combines the power of a company's build infrastructure with the convenience of a managed, centralized web UI.

The company's hybrid SaaS platform is designed to facilitate growth. It is fast, reliable, secure, and able to scale to the needs of the most demanding high-growth tech companies such as Shopify, Pinterest, Wayfair, Cruise, and Canva.

SuperOrbital's expertise in the ecosystem and how that distills into a taste sense of what is right, such as the best way to do something that will feel familiar and help our customers leverage the expertise they already have. —Sam Cochran, Principal Engineer

CHALLENGES

- Engineering capacity limitations
- Missing out on an untapped market
- Limited Kubernetes expertise

Buildkite's unique hybrid SaaS model offers its clients the opportunity to build, orchestrate, manage, and design pipelines for their software, web applications, and more. The unique combination of SaaS, on-premises, and self-managed components provides an ultrahigh level of security throughout the entire toolchain. All sensitive data is contained within the customer's own environment. Additionally, the hybrid model is extremely scalable, which ensures production workloads can be managed with ease.

In 2022, Buildkite turned its attention to Kubernetes. According to the Cloud Native Computing Foundation (CNCF), Kubernetes is emerging as the 'Operating System' of the Cloud. In 2021, 96% of organizations were evaluating or running their application workloads on Kubernetes¹. It was important for Buildkite to offer a Kubernetes experience that felt natural to its customers. The company doesn't use Kubernetes for its own workloads and at the time, lacked the internal capacity and expertise to take on the project. Their goal was to move deeper into a quickly growing market by expanding an offering that would work in Kubernetes across a variety of cloud platforms.

"We were heavily invested in AWS and had a great offering there, but we wanted to unlock the same great offering on other platforms, and Kubernetes seemed like the way to go," said Sam Cochran, Principal Engineer. "It was the right time to push and grow, to support our existing customers, and to help new customers get on board within the platforms and environments they already leverage."

They began the search for a vendor to partner with and were referred to SuperOrbital. "We wanted a partner who understood the Kubernetes world and what people expected of it, and could help us build a solution that would look and feel great when used," said Cochran. "We were impressed with how deeply familiar SuperOrbital was with the Kubernetes ecosystem, their taste for what is good in that ecosystem, and their previous domain expertise."



SAM COCHRAN
PRINCIPAL ENGINEER

SHAPING MILESTONES THAT DELIVER HIGH IMPACT

The project began with an initial discovery phase. SuperOrbital led the project and worked with Buildkite's customers to gather feedback on building a product that would not only feel natural but would also have the features they really needed. Conversations centered around the discovery process to flesh out what the stack should look like and the milestones that people expected the stack to achieve.

A key benefit of the discovery phase was the ability to gain insights into the right experience that Buildkite's customers expected, and this would help shape milestones that could deliver high impact early on.

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CNCF Annual Survey 2021

(("When we show customers what we have now, universally their eyes light up because it's exactly what they wanted."—Mike Morgan, Solutions Architect

VALUE CREATED

- Greater scalability alongside user workloads
- Sharpened competitive advantage
- Increased new and deepened existing revenue streams

SUPERORBITAL'S FOUR-PHASE APPROACH



Discovery
End user needs and priorities

ProposalRoadmap to a North
Star architecture

Implementation Key customer checkpoints Partnership
Through launch and
beyond

"Engineers are a picky bunch. They like things that taste right and are put off by things that may work but are low quality," said Cochran. "SuperOrbital's expertise in the ecosystem and how that distills into a taste sense of what is right, such as the best way to do something that will feel familiar and help our customers leverage the expertise they already have."

Once the discovery phase was complete, SuperOrbital created a proposal for the next step which included a roadmap for development, project milestones, key customers who could validate each milestone, and insights into the best path forward.

One of SuperOrbital's core principles is to provide value at every step and the proposal outlined how Buildkite could continue the implementation work internally if they chose to do so.

"SuperOrbital surpassed my expectations. The discovery phase allowed us to test the waters. It was a great confidence builder before we moved into the second engagement with them," said Cochran.



MIKE MORGAN SOLUTIONS ARCHITECT

EFFECTIVE SOLUTION DESIGN SHORTENS TIME TO MARKET

The industry at large is focusing more on containers, and in particular Kubernetes, which has become the de facto orchestration standard. A strong Kubernetes stack strengthens that narrative and industry alignment.

Kubernetes has become the new normal. The platform empowers organizations to build and run scalable applications in public, private, or hybrid cloud environments while allowing engineers to make high-impact changes with ease.

According to Mike Morgan, Solutions Architect, "People have been asking for a Kubernetes agent solution for as long as I've been at Buildkite. Some teams have a lot of expertise, and they have the resources to make their own solution. Others don't. It's been a challenge because while you can rely on experts to build it themselves,

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SOLUTIONS

- Kubernetes engineering
- Roadmap
- Product defining customer interviews
- Solution design

the smaller teams can't. They just don't have the bandwidth. Being able to provide something that's standardized means that not every customer is forced to reinvent the wheel, particularly if it's during a proof of concept, and this will be huge for us."

Buildkite provided a technical brief of the interface and the desired outcome, which was to have a stack that could autoscale Buildkite jobs seamlessly on customer Kubernetes clusters. This also included documentation for the customers and the Buildkite team. It was imperative that Buildkite could take over and own the stack once the project was complete.

"SuperOrbital gave us the capacity we were lacking at the time. They acted as a bridge while we were getting the team up to speed and able to work on these things. Coming out of the tail end of the engagement, it worked well to bring our newer engineers up to speed and then transfer that knowledge. SuperOrbital provided the kickstart we needed," noted David Barrell, Engineering Manager.

During the implementation, there were regular check-ins between the two teams. As each milestone approached, there was Q&A, testing, end-customer validation and feedback, and iteration until the end of the engagement.

"Because of SuperOrbital, we launched our solution months ahead of schedule. We now have something that we can use to leverage new conversions with new customers and expand offerings to existing customers," said Cochran.

All of Buildkite's customer-facing code is open-source. It's auditable and understandable, so customers can dive in to see how things work and contribute to it. During the implementation, SuperOrbital continued to interface with Buildkite's customers through GitHub to gather customer feedback, identify any issues, and calibrate as needed.

PARTNERSHIP PROVES FRUITFUL

As a result of the partnership, Buildkite has a Kubernetes story that will increase conversions, offer a competitive advantage, and open up new revenue streams. "In the past, if someone asked for a Kubernetes agent deployment solution, we didn't have anything to give them," said Morgan. "This will shorten the trial process and be massively helpful. When we show customers what we have now, universally their eyes light up because it's exactly what they wanted."



SuperOrbital specializes in Cloud Engineering, Distributed Systems, and all things Kubernetes. Working as your technical partner, we embed seasoned engineers within your team to help solve the most difficult challenges. Our knowledge and expertise will help you confidently execute critical, high-risk, and high-profile assignments. To learn more about how SuperOrbital can transform your company or supercharge your skills, visit superorbital or email hello@superorbital.jo.