

CLOUD PLATFORMS AS INNOVATION ENGINE:

AUTONOMY FOR DEVELOPERS, CONTROL FOR ENTERPRISES.

The cloud promises to make cutting-edge technologies accessible to everyone – with scalable resources on demand, faster development, and more autonomy for teams.

But what happens when this promise backfires? When development slows down because demands on developers increase, costs explode, and sensitive data suddenly lands unprotected on the public internet? The central question is: How can we abstract this cloud complexity and create a Golden Path that enables teams to unleash their full innovation potential in the cloud – without losing sight of security, compliance, and costs?

CHALLENGE

With the shift to cloud-based software development, developers must now master not just code, but distributed systems, microservices, infrastructure configuration, deployments, monitoring, and operations.

Applications that previously ran in a protected customer network are now exposed to security risks. Misconfigurations or isolated solutions can also drive up costs. The central challenge is to relieve developers of this complexity so they can focus on building new business applications – while the organisation ensures cost control, security, and compliance.

! APPROACH

We developed a self-service platform that empowers users to build, deploy, and operate applications quickly, securely, and without deep cloud expertise.

The goal was to combine short release cycles with high software quality and maximum security. We created a thoughtful abstraction of cloud services integrating source code management, deployment, identity and secret management, observability, and quality management. The result is a simple interface for developers that leaves room for innovation while consistently enforcing the company's compliance and security policies.

IMPLEMENTATION

1 SELF-SERVICE APPLICATION PLATFORM

A central platform with pre-built templates and sample applications was created. Developers could create and deploy new applications within minutes.

2 CI/CD PIPELINE TEMPLATES

These templates ensured that applications were automatically built, scanned for vulnerabilities, tested, and deployed to the cloud. This increased quality and significantly shortened release cycles.

3 OPTIMISED NETWORK INTEGRATION

Without manual network configuration, services could communicate within defined network segments – encrypted by default and without additional effort for development teams.

4 CLOUD SQL FOR DATABASES

Using Google Cloud SQL as a managed PostgreSQL solution, databases could be provisioned quickly and reliably. Backup and disaster recovery plans were integrated by default to ensure business continuity.

5 HASHICORP VAULT

Through the integration of Vault, credentials and secrets were centrally managed and securely distributed. Developers no longer had to worry about secret management themselves, minimising security risks.

6 MONITORING & ALERTING SYSTEM

Developers monitor the health of their applications in real time. Alerts were set up so that immediate notification and fast response is possible in case of incidents.

7 SECURITY CHECKS

Applications underwent automated security and compliance checks with every deployment to ensure they meet the highest security standards. This minimises risk and preserves customer trust.

8 ON-DEMAND SCALING

The platform enabled applications to scale on demand. Only the resources actually needed were used, saving costs long-term without sacrificing flexibility.

RESULTS

The self-service platform quickly became the company-wide standard solution for all 600 developers. Instead of going through lengthy cloud training, they were able to work productively from day one.

At the push of a button, authorised users receive a preconfigured repository with practical templates for development and containerisation, blueprints for deployment, integrated secret management, integrated code analysis and security checks, automatic permission assignment, and – if needed – a dedicated database and all necessary services in the target environment.

The result: massively shortened onboarding, significantly faster release cycles, a substantially reduced time-to-market for new applications, the highest security standards, and cost-efficient cloud usage through on-demand scaling.

Behind this transformation lies a simple truth: Technology only unfolds its full potential when it reduces complexity rather than increasing it. With the Self-Service Application Platform, our team created a solution that empowers development teams to take ownership, deliver faster, and drive innovation sustainably – a foundation for growth, competitiveness, and true digital sovereignty.

