



DevSecOps and Platform Engineering

Integrating Security into Agile Development

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Agenda:

What is DevSecOps?

Evolution from DevOps to DevSecOps

Core Components of DevSecOps

Challenges in Implementing DevSecOps

Difference Between IT and Platform Engineering

Core Components of Platform Engineering

DevSecOps and Platform Engineering Synergy

New Scenario

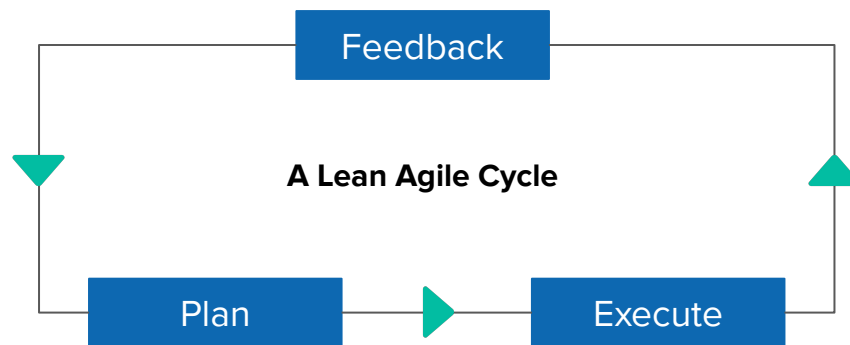
Two Case Studies

Future Trends

My Book, About Batoi, and Contact Information


What is DevSecOps?

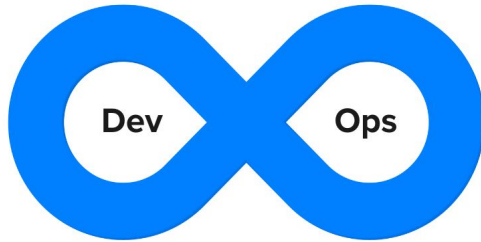
- A cultural and technical movement integrating security practices within DevOps.
- Aims to automate security at every phase of the software lifecycle.
- Ensures security is a shared responsibility across development, operations, and security teams.



Evolution from DevOps to DevSecOps

Timeline:  **DevOps:** Collaboration between development and operations.

 **DevSecOps:** Includes security as a core component.



Key Difference:

DevOps = Development + Operations

DevSecOps = Development + Security + Operations

Core Components of DevSecOps



Continuous Integration
and Continuous Delivery
(CI/CD)



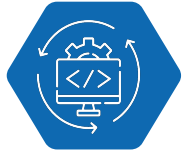
Monitoring and Logging



Security Automation

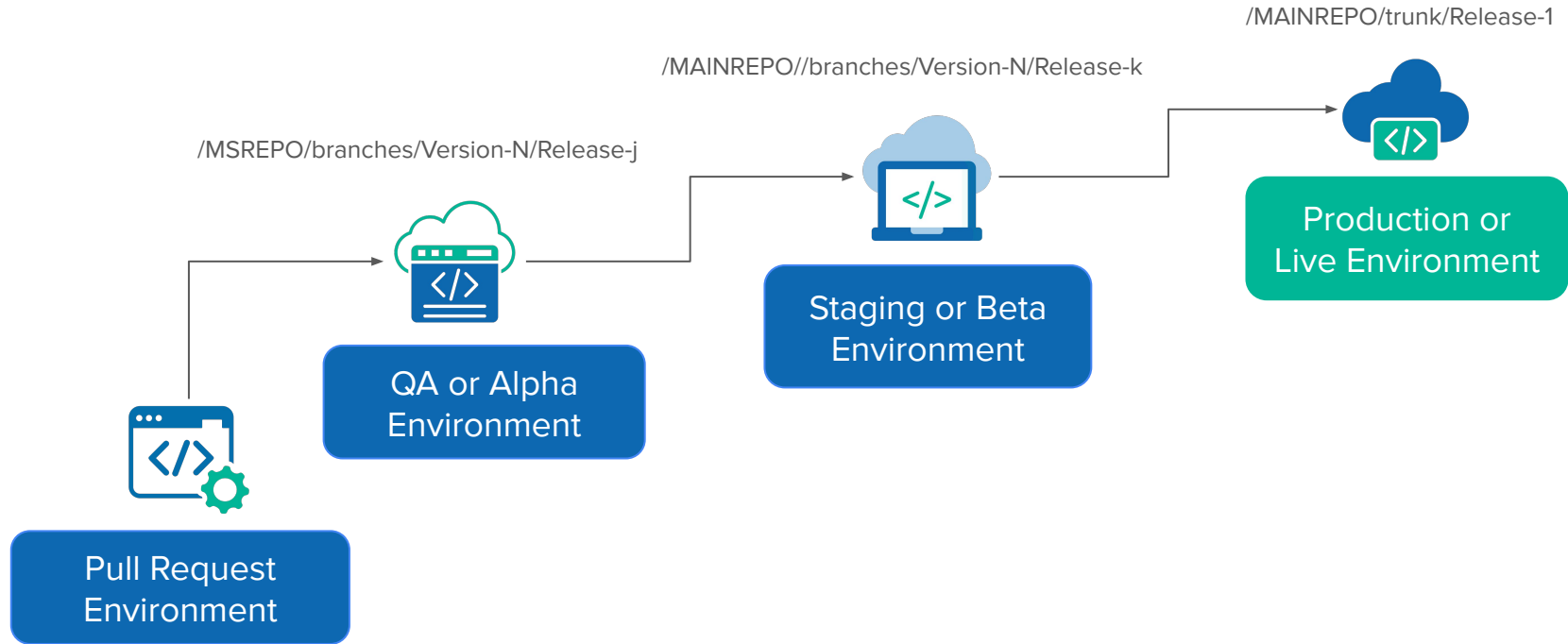


Compliance as Code

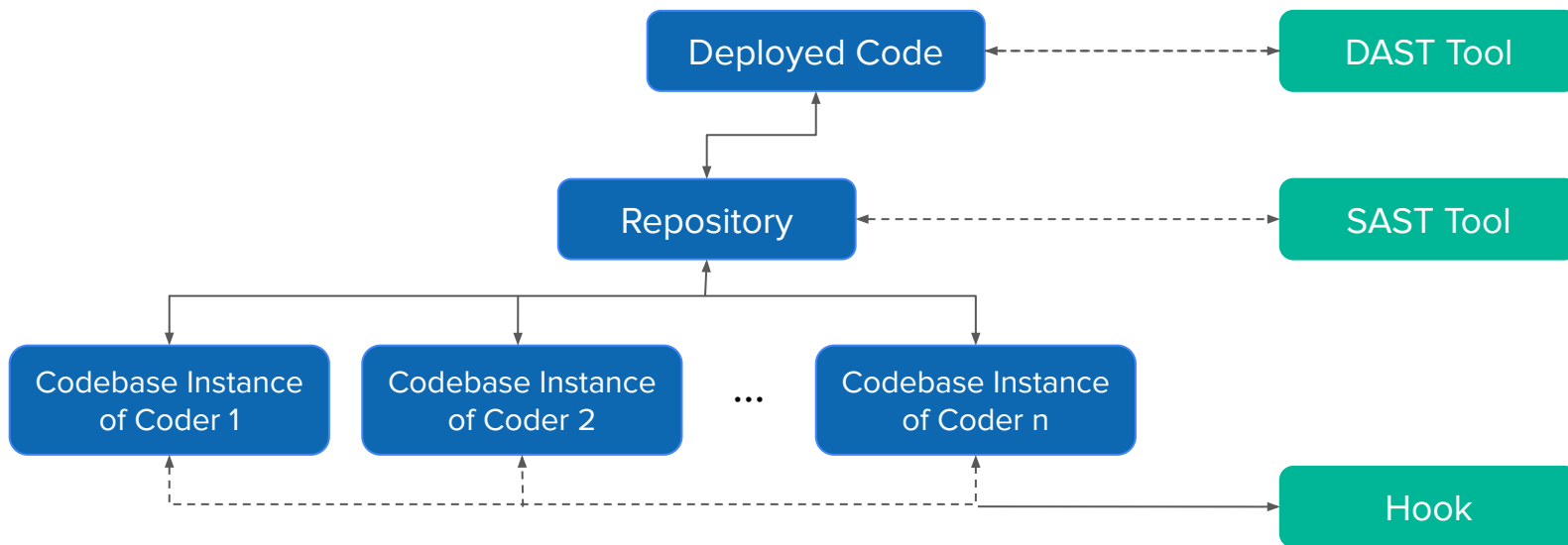


Infrastructure as Code (IaC)

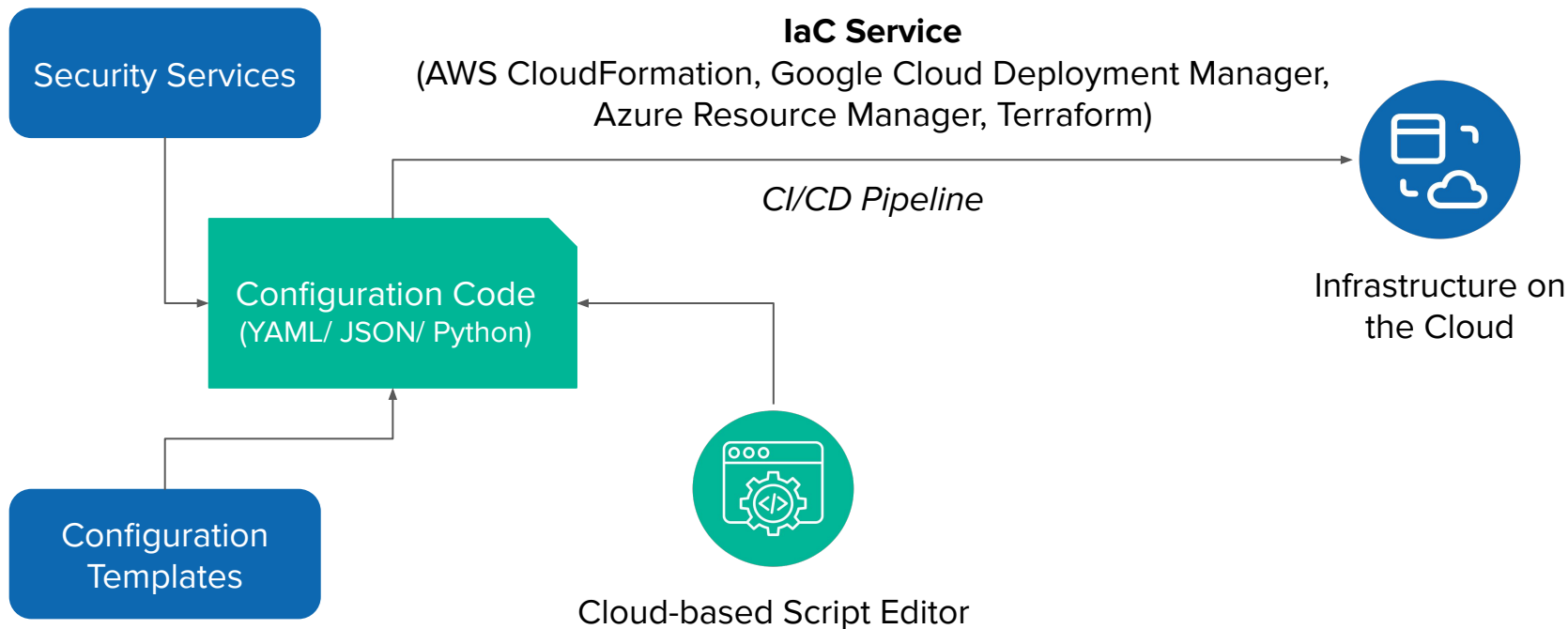
Continuous Integration and Continuous Delivery (CI/CD)



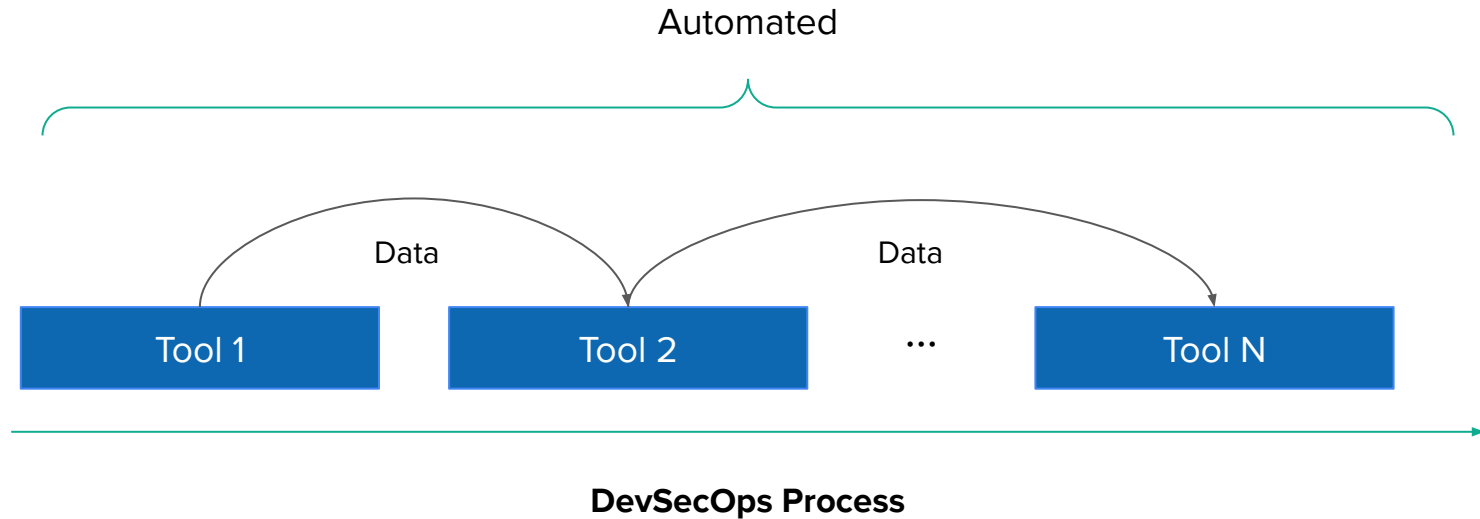
Security Automation



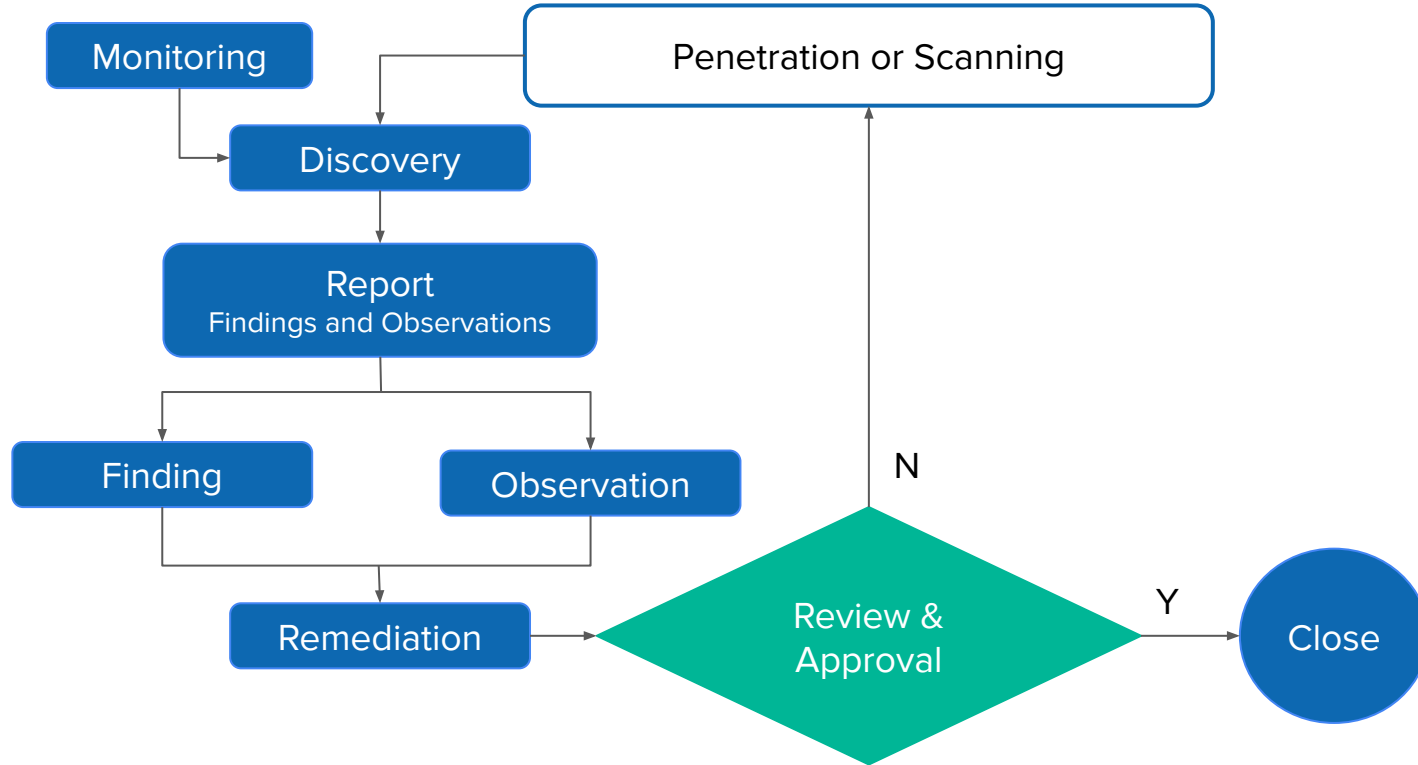
Infrastructure as Code (IaC)



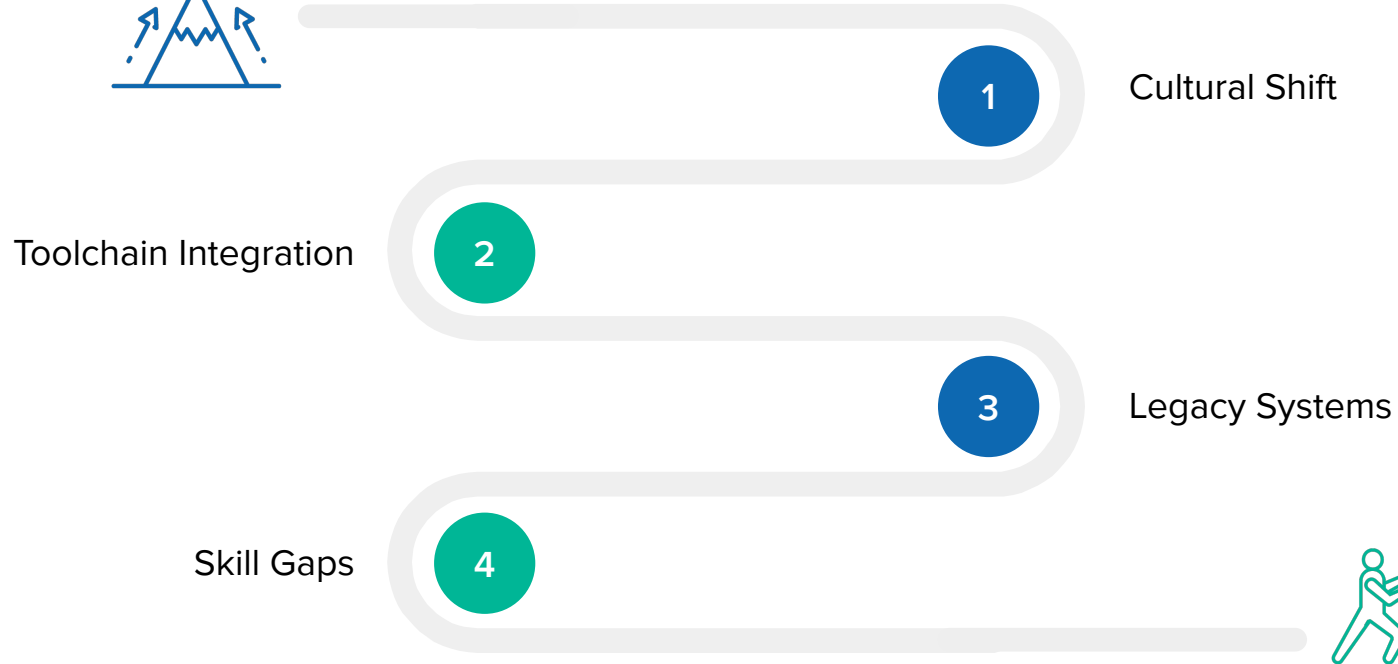
Monitoring and Logging



Compliance as Code



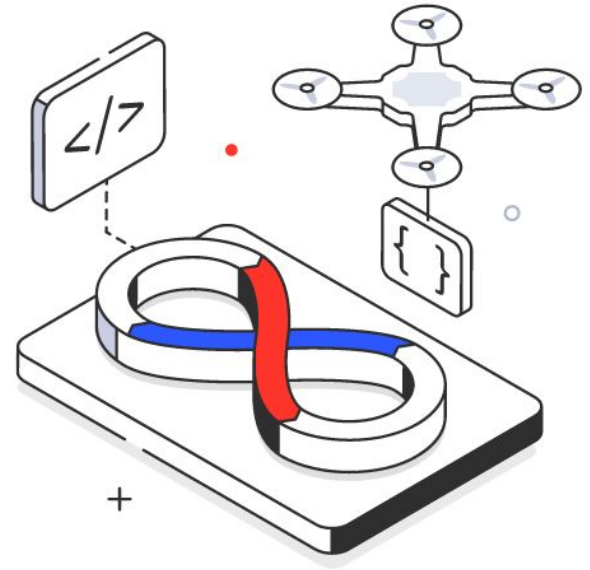
Challenges in Implementing DevSecOps



What is Platform Engineering?

▶ Creating a dedicated platform to support software development.

▶ Focuses on providing reusable infrastructure and automation to enable developers to deploy code more efficiently.



Difference Between IT and Platform Engineering



Traditional IT

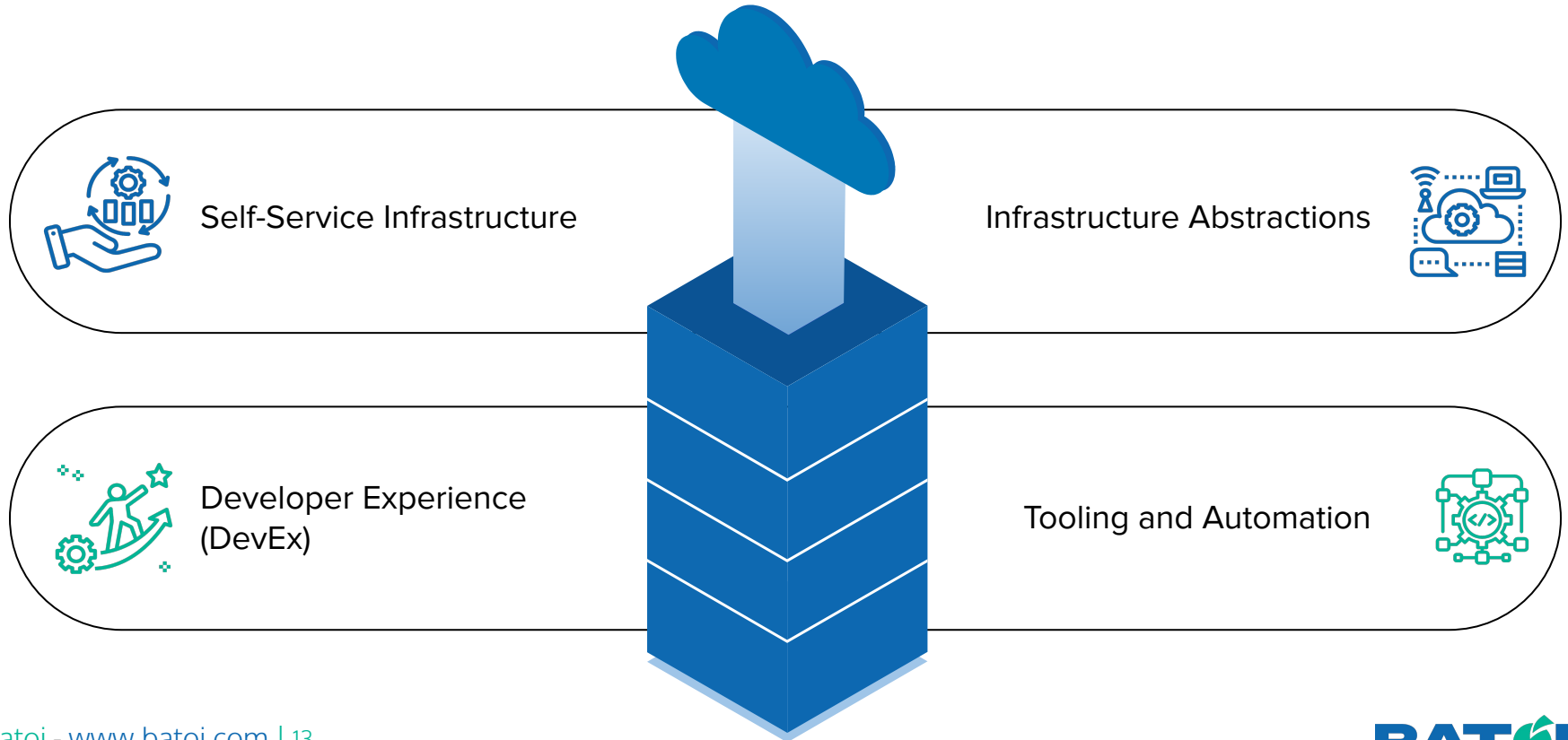
- Manual processes
- Reactive approach
- Centralized control



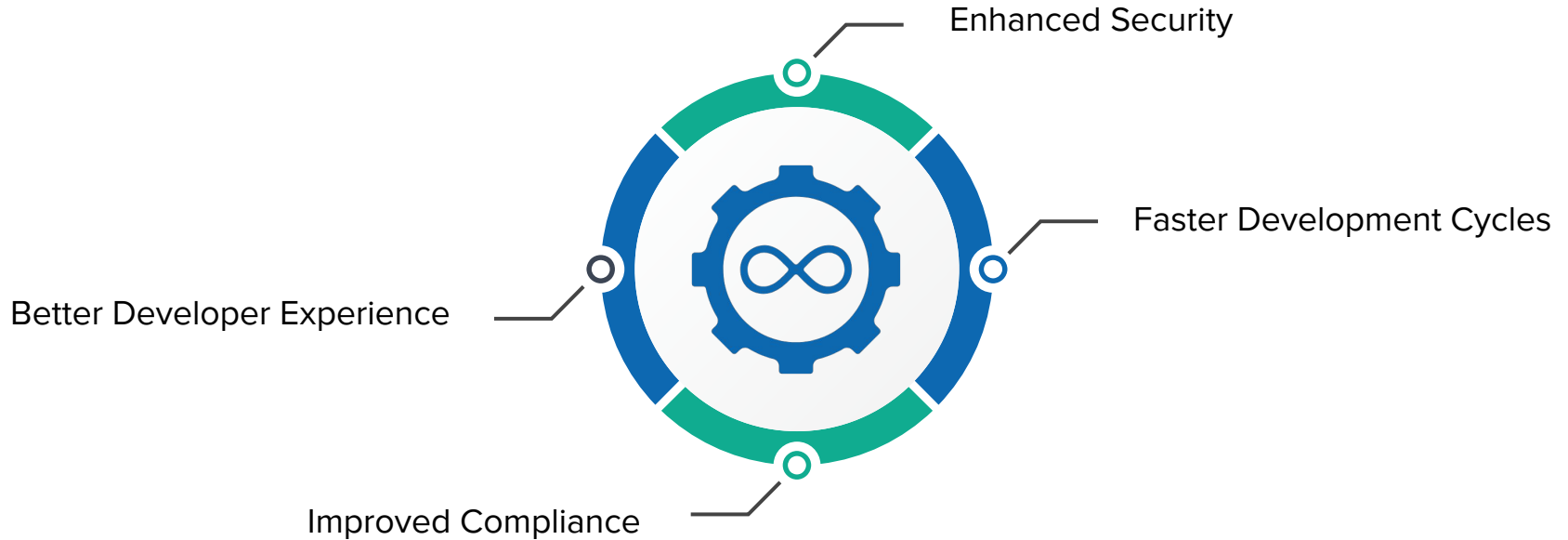
Platform Engineering

- Automated processes
- Proactive approach
- Decentralized, self-service infrastructure

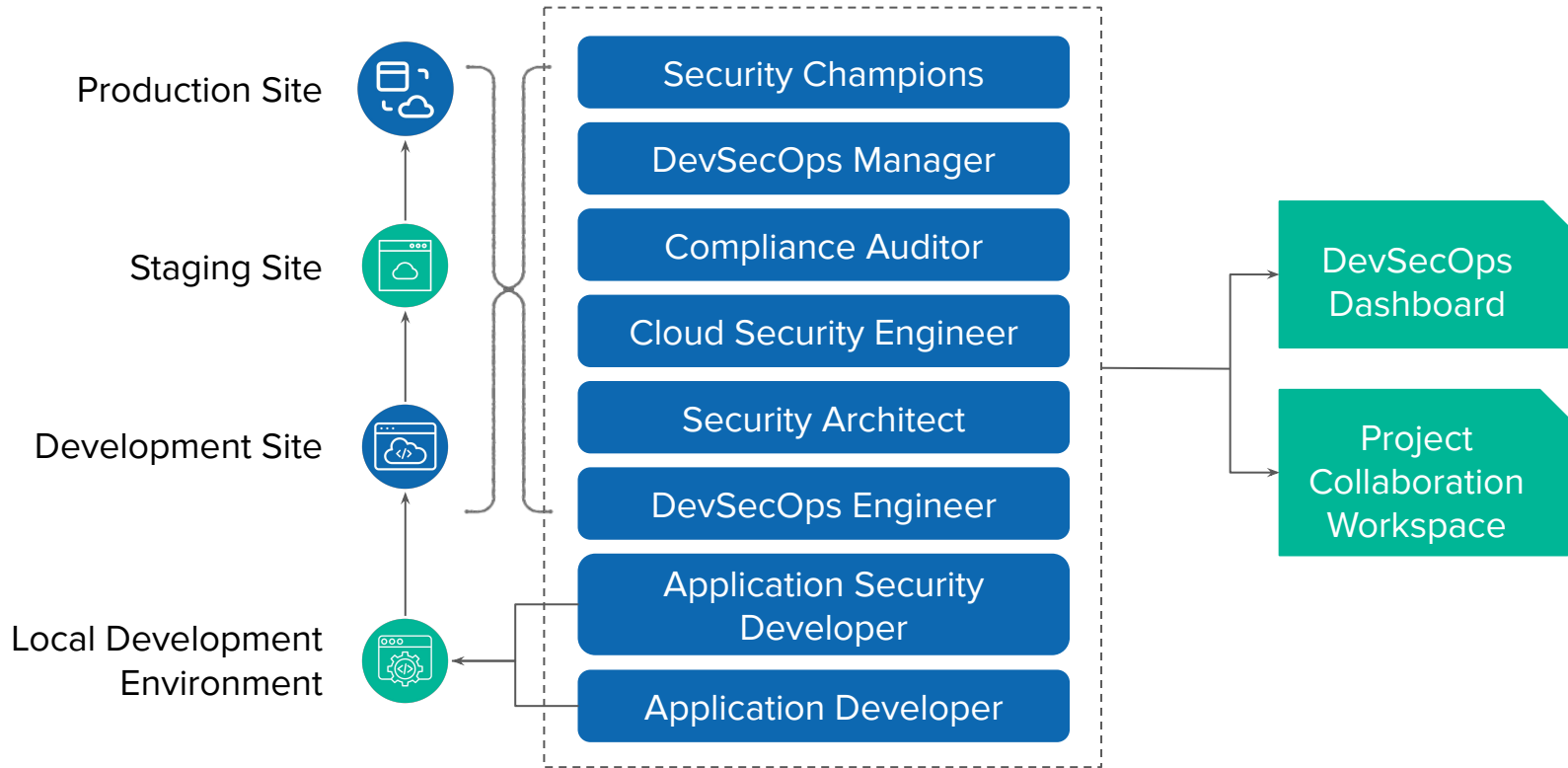
Core Components of Platform Engineering



DevSecOps and Platform Engineering Synergy



New Scenario



Case Study 1: Financial Services Company

Challenge	Solution
<ul style="list-style-type: none">• Slow software updates due to a highly regulated environment.• Siloed development and operations teams, leading to delays and security vulnerabilities.• Heavy reliance on legacy systems that needed to be more secure and modernized.• Manual compliance processes added further delays.	<ul style="list-style-type: none">• Implemented DevSecOps practices with automated security checks in the CI/CD pipeline.• Adopted Infrastructure as Code (IaC) for consistent environment management.• Developed a self-service platform for secure, compliant environments on demand.• Integrated compliance as code to automate regulatory adherence.
<ul style="list-style-type: none">• Reduced Deployment Time: Deployment time was cut by 50% from weeks to days.• Enhanced Security: Security vulnerabilities reduced by 40% through automation and monitoring.• Improved Compliance: Automated compliance ensured adherence to regulations without manual intervention• Increased Productivity: Developers saw a 30% productivity boost by focusing more on coding than infrastructure management.	

Case Study 2: E-commerce Platform

Challenge	Solution
<ul style="list-style-type: none">● Rapid growth required maintaining development speed while ensuring security● Traditional end-of-process security checks caused delays and left vulnerabilities.● Managing complex environments for development, testing, and production was challenging.	<ul style="list-style-type: none">● Adopted DevSecOps with early security integration in the CI/CD pipeline.● Implemented automated security testing● Developed a self-service platform with consistent, pre-configured environments.● Simplified infrastructure management for faster deployments and scaling.

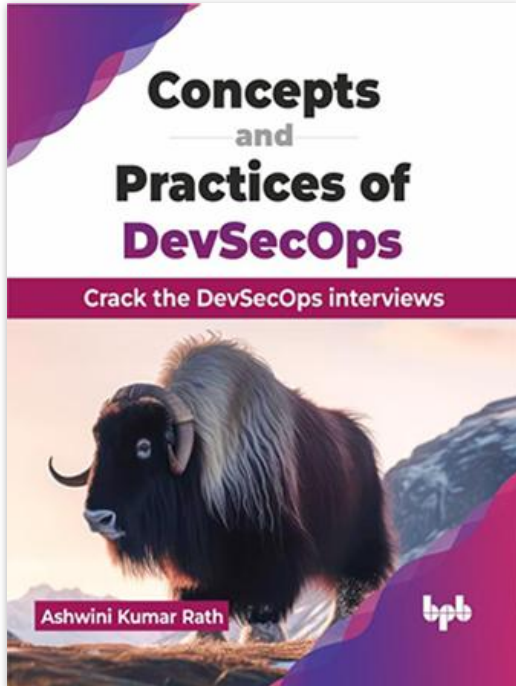
- **Faster Releases:** New feature release time reduced by 40%.
- **Improved Security:** Security incidents were reduced by 35%.
- **Scalability:** Seamless scaling during peak seasons with no downtime
- **Cost Efficiency:** 25% savings on operational costs through automation.

Future Trends

- 1 AI and Machine Learning in Security Automation
- 2 Evolution of Infrastructure as Code (IaC)
- 3 The Rise of GitOps
- 4 Increased Focus on Developer Experience (DevEx)



Concepts and Practices of DevSecOps



Released in 2024

Book is Available on:

amazon



About Batoi

Next-Gen, AI-Powered, DevSecOps-Integrated RAD Platform. Globally Operated. Trusted by Industry Leaders.
Offering Source Code Availability and Manageability.

14+

Years in Business

5000+

Apps and Sites Built

10+

Industry Verticals Served

Batoi RAD solutions have found usage in many organizations.



Thank You

For more information, please contact us;
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