

WHITEPAPER

From I&A Silos to Platform Engineering

The IT Organisation Transformation

80%

Platform Teams

DevOps

New Normal

I&A

Convergence

5x

Hype Cycles

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1. Executive Summary

The traditional separation between Infrastructure (I) and Applications (A) departments—a cornerstone of IT organisation design for decades—is rapidly dissolving. Driven by cloud adoption, DevOps practices, and the rise of Platform Engineering, organisations are fundamentally restructuring how they deliver technology value.

- Gartner predicts 80% of software engineering organisations will have platform teams by 2026
- Platform Engineering has appeared on 10+ Gartner Hype Cycles—a 5x increase from prior year
- DevOps is mainstream: The 'throw it over the wall' model between Dev and Ops is obsolete
- Infrastructure as Code (IaC) means infrastructure teams now work like application teams
- New roles emerge: Platform Engineers, SREs, and DevSecOps specialists are in high demand

2. The Traditional I&A Model

For most of IT history, organisations maintained a clear separation between two domains:

2.1 Infrastructure (I)

The Infrastructure team was responsible for the physical and virtual foundation: servers, networks, storage, data centres, and operating systems. Their focus was on availability, capacity, and stability. Success was measured in uptime percentages and incident response times.

2.2 Applications (A)

The Applications team focused on software development: writing code, building features, and delivering business functionality. Success was measured in projects completed and functionality delivered.

2.3 The 'Wall' Between Teams

In the Waterfall era, these teams operated in sequence. Applications developers would complete their work and then 'throw it over the wall' to Infrastructure for deployment. This created:

- Blame culture when deployments failed
- Slow release cycles (months, not days)
- Misaligned incentives (Dev wants change; Ops wants stability)
- Knowledge silos and communication gaps

3. Forces Driving Convergence

3.1 Agile, Scrum & DevOps

DevOps emerged as a cultural and professional movement stating that the people who build software (Dev) should also be responsible for running it (Ops). 'You build it, you run it' became the mantra.

3.2 SaaS (The Application Model)

Software as a Service fundamentally changed the IT department's role. Instead of managing servers and patches, the focus shifted to integration, governance, and identity management.

3.3 Cloud IaaS/PaaS

Cloud computing transformed infrastructure from hardware management to code-based provisioning. Infrastructure as Code (Terraform, Pulumi, CloudFormation) replaced manual configuration.

4. Platform Engineering: The New Paradigm

Platform Engineering has emerged as the dominant model for how modern organisations structure their technology delivery capabilities. Gartner has recognised it as a Top Strategic Technology Trend in both 2023 and 2024.

4.1 What is Platform Engineering?

Platform Engineering is the discipline of designing and building toolchains and workflows that enable self-service capabilities for software engineering organisations. The platform team creates and maintains an Internal Developer Platform (IDP).

"By 2026, 80% of software engineering organisations will establish platform teams as internal providers of reusable services, components, and tools for application delivery."
— Gartner

4.2 Key Principles

- Developer Experience (DevEx): The platform must be easy and enjoyable to use
- Self-Service: Developers can provision what they need without tickets or waiting
- Golden Paths: Opinionated, pre-approved ways to accomplish common tasks
- Abstraction: Hide infrastructure complexity; expose simple, consistent interfaces
- Product Thinking: Treat the platform as a product with internal customers

5. New Organisational Structures

The I&A convergence has created entirely new organisational models:

Traditional Role	Modern Equivalent	Key Responsibilities
Infrastructure Manager	Head of Platform Engineering	IDP, automation, golden paths
Application Manager	Product/Feature Team Lead	End-to-end product ownership
Server Admin	Site Reliability Engineer (SRE)	Reliability, observability, automation
Network Engineer	Cloud Network Architect	Cloud networking, security, IaC
DBA	Data Platform Engineer	Data infrastructure, pipelines
Security Team	DevSecOps Engineers	Security embedded in pipelines

6. Skills & Talent Implications

6.1 High-Demand Skills

Skill Category	Specific Skills	Demand Level
Infrastructure as Code	Terraform, Pulumi, CloudFormation, Ansible	Very High
Container Orchestration	Kubernetes, Docker, Helm, Service Mesh	Very High
CI/CD Pipelines	GitHub Actions, GitLab CI, Jenkins, ArgoCD	High
Observability	Prometheus, Grafana, Datadog, OpenTelemetry	High
Cloud Platforms	AWS, Azure, GCP (multi-cloud preferred)	Very High
Security Integration	SAST, DAST, SCA, Policy-as-Code	High

7. Recommendations for IT Leaders

- Accept that Platform Engineering is not optional: Gartner's 80% prediction means this is a when, not if decision.
- Invest in Developer Experience: The platform team's success is measured by developer satisfaction and adoption.
- Reskill your infrastructure team: Traditional infrastructure roles must evolve to code-centric approaches.
- Don't confuse the portal with the platform: Start with APIs and orchestration; the UI can come later.
- Treat platform as a product: Apply product management principles: roadmaps, user research, iterative improvement.
- Partner strategically: Fill skill gaps with nearshore partners who understand Platform Engineering.

Sources & References

Gartner

Top Strategic Technology Trends 2024; Hype Cycle for Platform Engineering 2024/2025

PlatformCon

Platform Engineering community data; 24,000+ member Slack community

Google DORA

State of DevOps Reports; HEART Framework for Developer Experience

McKinsey & Company

Platform operating model research; Developer productivity studies

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