

# Cloud Native Engineering Practices

Cloud-native application engineering is the backbone of modern software development and delivery, enabling organizations to adapt and compete in today's AI everywhere era. Cloud-native approaches promise to supercharge application delivery. Yet running modern-day app environments is hard due to legacy systems, technical debt, engineering and organizational complexity, skills shortages, and ever-growing security risks. IDC's *Cloud Native Engineering Practices* is a continuous information service that provides primary research-based analysis on the attitudes, challenges, and requirements organizations have as they build and run their cloud-native capabilities. It spans the entire application value chain, ranging from development to release, deployment, monitoring, remediation, improvement, and operations. It is designed to help vendors understand at a deeper level the maturity, pain points, approaches, and technology strategies of end-user organizations. It also maps the competitive landscape and profiles vendor capabilities across the technology and IT services arena.

## MARKETS AND SUBJECTS ANALYZED

- Default architectural components covered under cloud native: the intersection of containers and container orchestration, microservices, and APIs
- Emerging architectural components, such as serverless and event-driven architectures
- Global and regional views of enterprise maturity and strategies to scale cloud-native application environments
- Business, technical, and organizational — investment priorities, pain points, and mandates for cloud-native application engineering
- Cultural differences, attitudes, and organizational priorities among software engineering personas, including developers, operators, IT architects, and senior IT leaders
- Cloud-native software engineering competitive landscape
- The integration of DevOps, CloudOps, and DataOps, with a view of app-centric engineering
- Cloud-native application engineering software and services forecasts
- Emerging topics shaping the cloud-native agenda, including AI and sustainable software engineering

## CORE RESEARCH

- Buyer Priorities and Adoption Strategies
- Persona-Based Challenges and Pain Points to Scaling Cloud-native App Delivery
- Cloud-native Application Engineering Trends
- Cultural and Skills Considerations for Successful Cloud-Native Application Engineering
- Cloud-Native Application Engineering Software Forecast, 2024–2029
- Cloud-Native Application Engineering Services Forecast, 2024–2029
- Cloud-Native Application Engineering Competitive Landscape, 2025
- Cloud-Native AI: Sustainable Software Engineering Practices

In addition to the insight provided in this service, IDC may conduct research on specific topics or emerging market segments via research offerings that require additional IDC funding and client investment. To learn more about the analysts and published research, please visit: [Cloud Native Engineering Practices](#).

## KEY QUESTIONS ANSWERED

1. How ready are organizations for cloud native? How big is the appetite for investment and transformation?
2. What strategies are observed in building, maintaining, and improving operations for cloud-native estates?
3. What are the approaches to scaling cloud-native engineering capabilities, and how do these impact IT organizational structures, culture, processes, technical environments, and skill sets?
4. How big is the market, and where are the opportunities from geography, technology, service provisioning, and delivery phase perspectives?
5. In what capabilities should vendors and service providers invest, and what strategies should they adopt to help organizations transition to cloud-native capabilities and apps?
6. How is cloud native changing the app engineering competitive landscape? How are ecosystems and relationships between vendors evolving?
7. What strategies should technology vendors and/or service providers adopt to help organizations compete with software in a digital world?

## COMPANIES ANALYZED

This service reviews the strategies, market positionings, and future directions of several providers in the cloud-native application engineering market, including:

Accenture, Amazon Web Services (AWS), Atlassian, Broadcom VMware, Capgemini, CircleCI, CloudBees, Cognizant, Deloitte, Infosys, GitLab, Google, Harness, HCL Tech, IBM, Microsoft,

MongoDB, Oracle, OutSystems, Red Hat, Salesforce, ServiceNow, SUSE, TCS, and Wipro, among others