SUSE

Taming the Beast:
Overcoming Cloud-Native Complexity

Delivers consistent, highly automated, and secure user experience across 2,200 locations ... even amidst natural disasters

Transforms ideas into mass production 80 percent faster with 75 percent less management burden
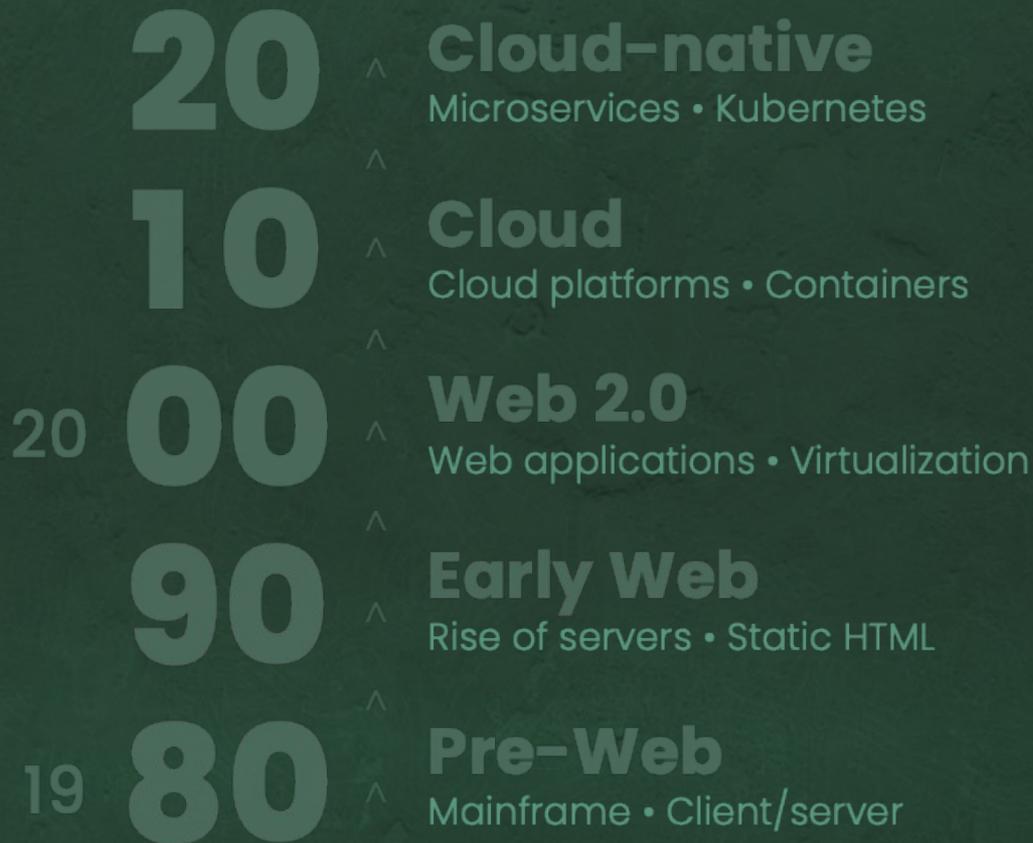
Sharpens its competitive edge with cloud-ready apps to transform from a legacy bank into a secure platform-banking institution of the future

How did we get here?

20 10 Cloud-native
Microservices • Kubernetes

20 00 Cloud
Cloud platforms • Containers

20 00 Web 2.0
Web applications • Virtualization

90 Early Web
Rise of servers • Static HTML

19 80 Pre-Web
Mainframe • Client/server

Cloud-native advantages

Agility and Speed
Rapid development and portability
Flexible scaling and infrastructure

Resilience and Reliability
High availability
Fault tolerance

Efficiency and Cost Optimization
Improved resource utilization
Reduced infrastructure costs

TODAY

95% of new digital workloads are deployed on cloud-native platforms [1]

90% of cloud-native deployments rely on containers for modern applications [2]

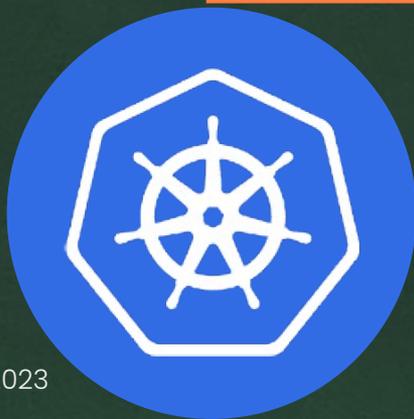**91**% of production containerized applications are orchestrated by Kubernetes [3]

Kubernetes adoption is accelerating

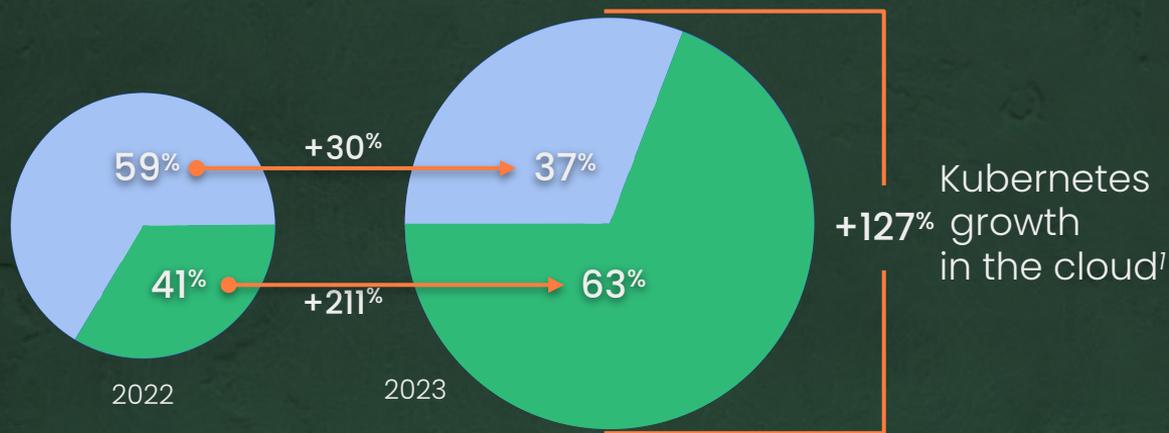*Kubernetes has become the operating system of the cloud*

2022

2023

+127% Kubernetes growth in the cloud[1]

Kubernetes adoption is accelerating

Kubernetes has become the operating system of the cloud

+30%

59%

37%

+211%

41%

63%

2022

2023

+127% Kubernetes growth in the cloud[1]

Top Adopters *(by industry)*[2]

1. Financial Services
2. Retail / E-commerce
3. Telecommunications
4. Manufacturing
5. Healthcare
6. Media / Entertainment
7. Travel / Hospitality
8. Public Sector

■ Application workloads
■ Auxiliary workloads *(security, service mesh, monitoring, etc.)*

Cloud-Native ≠ Public Cloud

Workloads

Container —	On-prem	Private	Public	Hybrid/Multi	Edge
Virtual Machine —					
Bare Metal —					

Kubernetes • Kubernetes • Kubernetes • Kubernetes • Kubernetes • Kubernetes

Distributed Enterprise

Cloud-Native Development Principles

Containerization Microservices Orchestration CI/CD
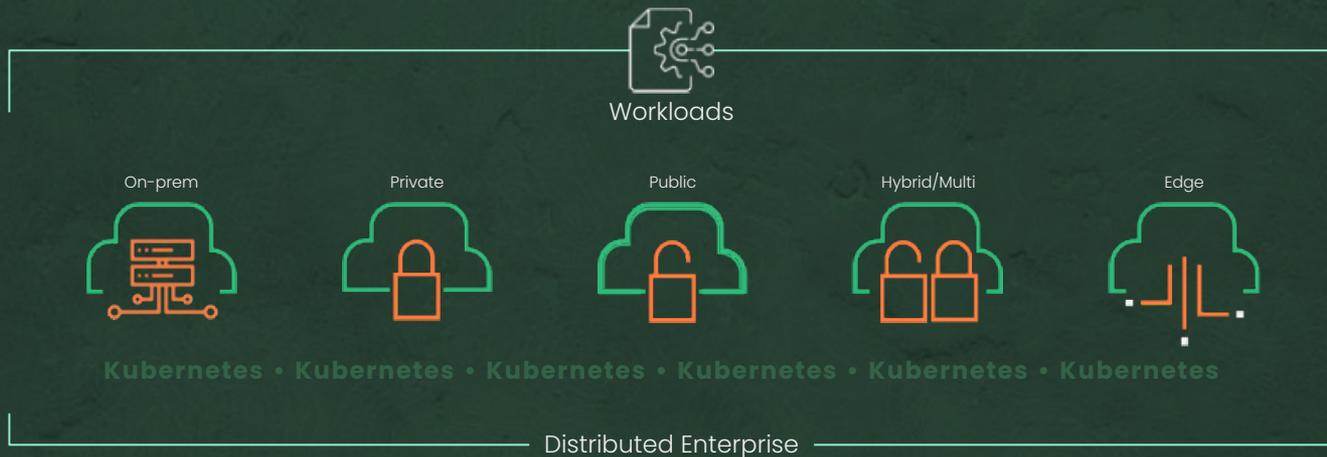
Navigating Kubernetes Challenges

Organizational

Technological

Operational

Stakeholder divide

Skills shortage

Complexity

Developer productivity

Scalability

Security

Navigating Kubernetes Challenges
Overcoming

Strategy — Establish clear objectives for cloud-native that align with stakeholder expectations

People — Invest in people, skill enhancements, and knowledge sharing across communities

Tools — Choose the right tools for security, consistency, and pan-cloud portability

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K3s Lightweight Kubernetes

Managing a platform in K3s allows us to rest easy that we'll be available even in disconnected scenarios, ensuring workloads are running smoothly. Further, standalone mode allows us to build immutable, on demand QA clusters for our developers.

Rancher Prime

Rancher Prime simplifies our multi-cluster operations and security challenges with a centralized console for provisioning, diagnostics, audits, monitoring, and alerts.

Zachary Hardin, Home Depot

Transforms ideas into mass production 80 percent faster with 75 percent less management burden

Kubernetes

*"The groundwork has been done and, in the process, we have stripped away a multitude of inefficient processes. Not only has this already transformed our working lives, but **Kubernetes is also guiding the way toward true operational change in manufacturing.**"*

Rancher Prime

*"A major driver for working with SUSE Rancher is to create an agile application framework for manufacturing that allows us to keep pace with technological developments. **By creating a cloud-native architecture, we're eradicating old-fashioned practices to make us more innovative.**"*

Roland Paxián, Continental AG

OLB BANK

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NeuVector Prime

*"Adhering to DORA's[1] evolving standards is crucial. NeuVector Prime's **advanced cybersecurity capabilities** will be instrumental in aligning our processes with these new regulations, ensuring our proactive preparedness …"*

Rancher Prime

*"**What used to take days now only takes minutes**, thanks to our automated CI/CD processes and Rancher Prime's efficient platform."*

Tim Westphal, Oldenburgische Landesbank

[1] *Digital Operational Resilience Act, European Union*

SUSE Values for Cloud-Native Success

Insights *and* **Best Practices**

Continuity *and* Consistency

Consistent experience across the continuum of data center, cloud, and edge at any scale

Agility *and* Efficiency

Build and deliver innovative applications faster and optimize cloud infrastructure spend

Security *and* Velocity

Cloud-Native design that tailors for proactive safeguards from pipeline to production

Thank you

Rancher • NeuVector • K3s • RKE • SUSE Manager • SUSE Linux Enterprise Micro • SUSE Linux Enterprise Server • SUSE Liberty Linux