
AWS
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NOV. 27 – DEC. 1, 2023 | LAS VEGAS, NV

NTT DATA

ENT107-S

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Strategies for automated scaling, remediation, and smart self-healing

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Global Lead, Cloud Transformation Services
NTT DATA

aws

We're more than your traditional IT services provider

330,000 professionals | $108B
#83 on Fortune Global 500[1]
#35 World's Most Valuable Brands[2]

190,000 professionals | $30B
Top 10[3] IT Services Provider ranked by revenue in 2022
Top 10 Most Valuable IT Services Brands[4]

- NTT Corporation operates **200+ data centers** worldwide
- Process **100 million healthcare claims** annually
- Serve **25 of the leading financial institutions** in North America
- Serve **90+ federal agencies** and military branches
- Serve the **top 10 automotive** companies worldwide
- Apply **45+ years** of **applications experience**
- Support **6.2 million end users** and **23+ million service desk** contacts annually

[1]Source: Fortune Global 500 (2022)
[2]Source: Brand Finance Global 500 (2022)
[3]Gartner®, "Market Share Analysis: IT Services Worldwide, 2022" (2023)
[4]Source: Brand Finance IT Services 25 (2023)

Transform businesses for success, disrupt industries for good, & shape a better world for all

Financial services & insurance

Manufacturing & automotive

Public sector

Health & life sciences

Consumer & hospitality

Your complete partner to accelerate …

Digital experiences | **Workforce transformation** | **Business resilience** | **Data-driven enterprise**

Business consulting

Digital advisory & innovation | People & organization | Supply chain | Governance risk & compliance

Secure by design

Digital applications

Applications development & management

Enterprise apps & configured platforms

Data & intelligence

Launch by NTT DATA

Digital workforce

Workplace services

Business processes

Edge services

Digital infrastructure

Network services

Cloud services

Technology services

Digital backbone

Sustainable by design

NTT DATA Enterprise Platform

NTT DATA

Hybrid cloud markets are growing

By 2025, 90% of all managed service workloads will be hybrid IT*

Public Cloud Services*

USD $491B in 2022

Will reach $976B in 2025
CAGR 19.4 by 2025

Private Cloud Services*

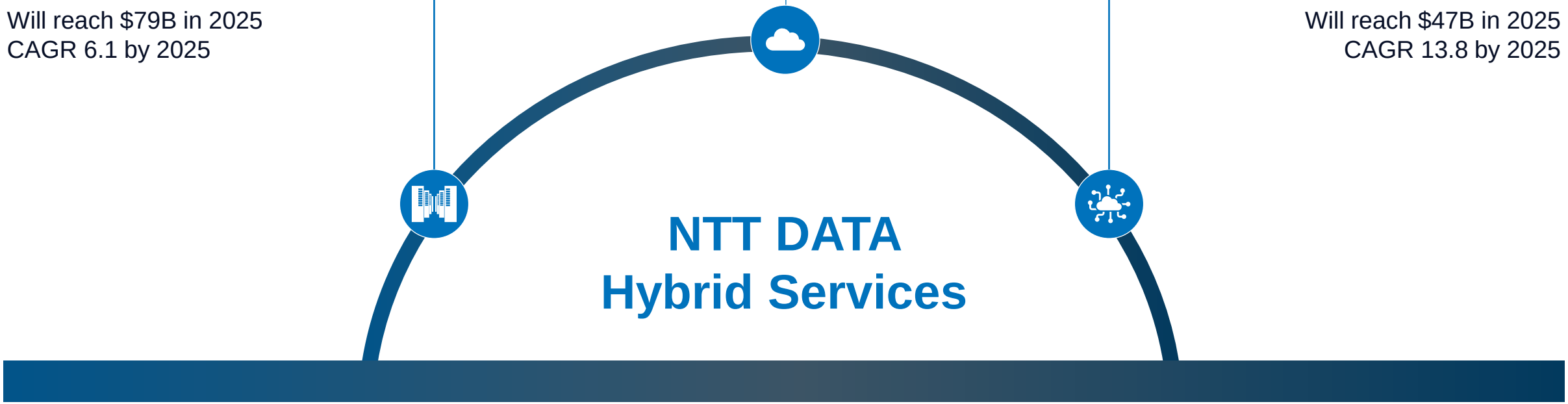
USD $66B in 2022

Will reach $79B in 2025
CAGR 6.1 by 2025

Managed Services for Cloud and Edge*

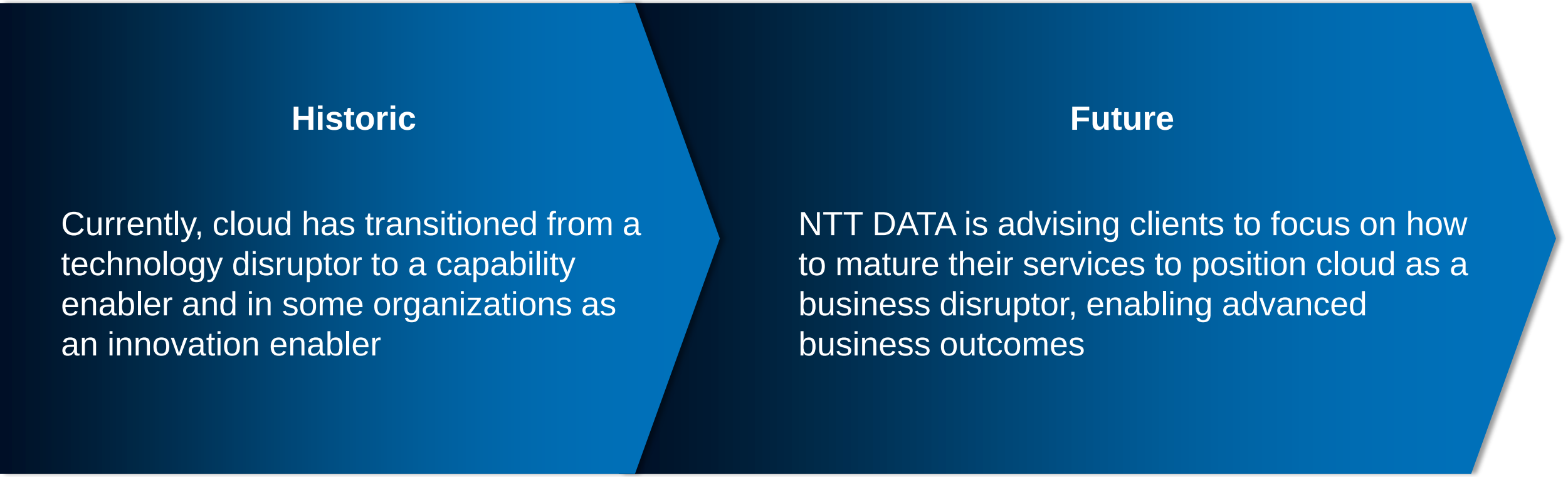
USD $32B in 2022

Will reach $47B in 2025
CAGR 13.8 by 2025



*Sources: Gartner – see notes for details

The strategic shift



“By 2027 most organizations will be seeking to utilize cloud as a business disrupter”

– Gartner

Our clients are transforming their business by optimizing the core, unlocking the legacy and disrupting with digital innovation

Cloud enablement

Cost-driven optimization

Modernization of legacy systems

“Business applications” driving cloud (20% of workloads)

Public cloud

Cloud adoption & maturity

Consumer-driven innovation

Digital/AI experimentation in targeted process points

“User applications” driving cloud – complexity (20% of workloads)

Public cloud

Cloud-enabled disruption

Ecosystem innovation

Run via intelligent workflows

Delivering a transformed enterprise experience

On an open architecture

Hybrid Cloud delivers a value proposition that should enable the full potential of today's rapidly evolving technologies

Open innovation

- Expanded revenue opportunities with broad ecosystems
- New business platforms
- More breakthrough ideas
- Faster technology development
- Accelerated time-to-market
- Improved team productivity, optimized costs & efficiencies

Resilient & scalable architecture: Hybrid or multi

- Cloud capabilities enabled everywhere
- Ability to plug into ecosystems & innovation
- Broader economic opportunity for modernization
- Consistent security & risk framework
- Standardized core skills
- Consistent operating model

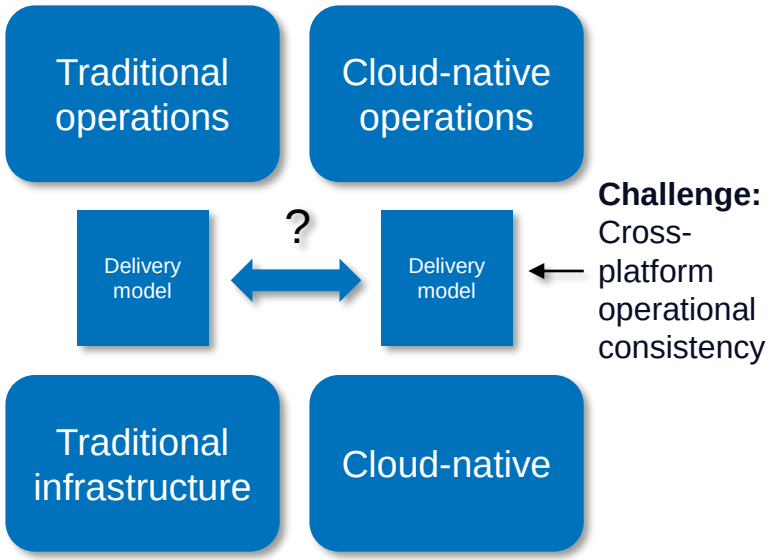
Enable the full capabilities of digital & innovation

Business acceleration	Enable new products, services & revenue streams
App services & developer productivity	Speed app release from months to weeks
FinOps & cost optimization	Reduce tech debt, improve cost mgmt. & reliability
Regulatory & risk	Reduce risk costs & automate proactive protection
Strategic optionality	Increase agility, flexibility, resilience, & transformation

Infrastructure operational modes in a hybrid mode

Three modes of operation we see today

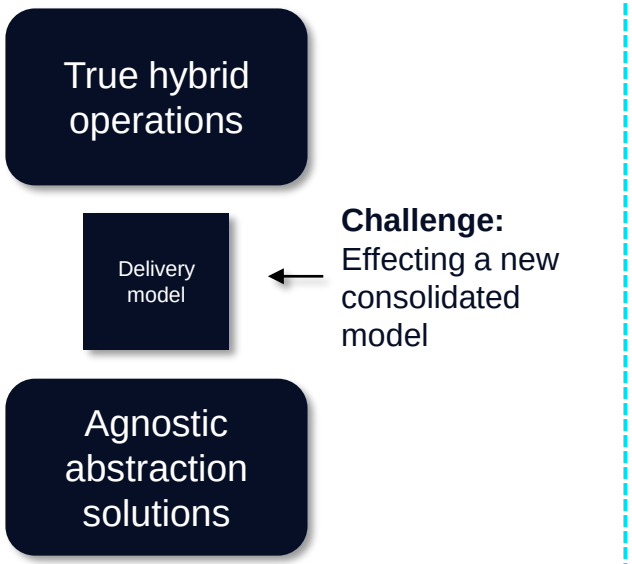
Separated/traditional



Challenge: Cross-platform operational consistency

- Functional / tower specialism
- Separate cloud and traditional operations
- Technical legacy in traditional ops
- DevOps integrated in cloud-native

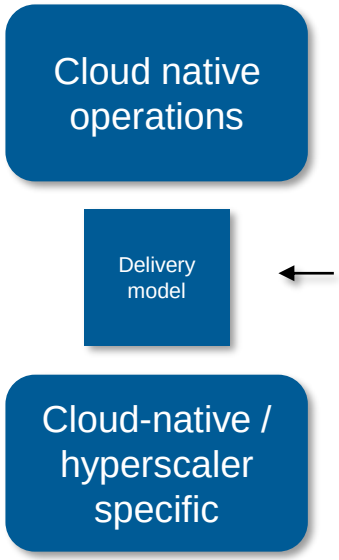
Consolidated/cloud-native



Challenge: Effecting a new consolidated model

- DevOps enabled
- Cross-functional teams
- SRE functions

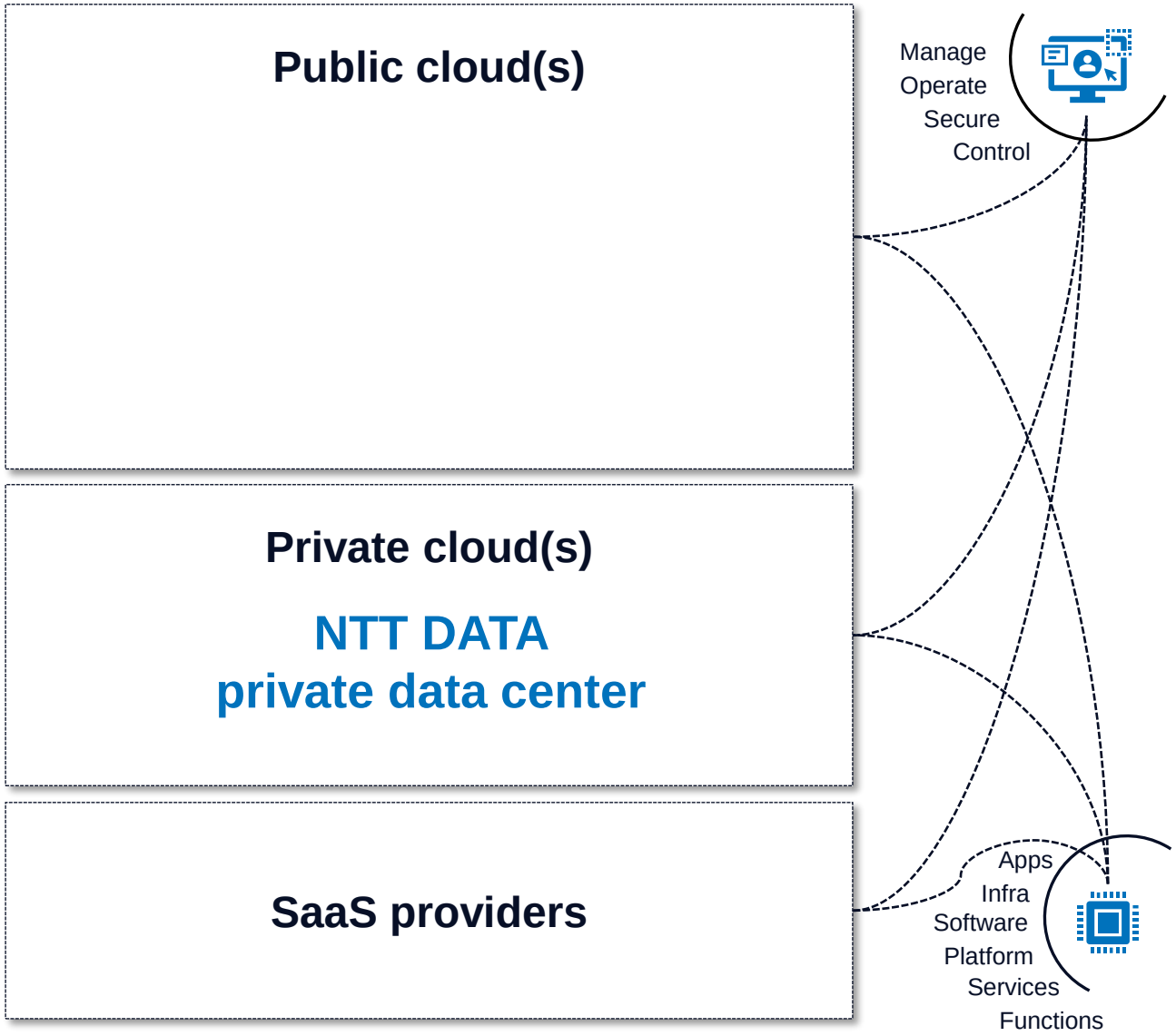
Born in the cloud



Target for many but not an option for most

- Born in the cloud
- One hyperscaler
- DevOps enabled
- Cross-functional teams
- No legacy/tech debt
- Cloud-native tooling

Functional solutions



NTT DATA creates cross-platform operational consistency

Abstraction

Methods that decouple connectivity, configuration, and data from the underlying physical technology, location, or service

Portability

Methods that allow systems to run across multiple clouds without modification or customization

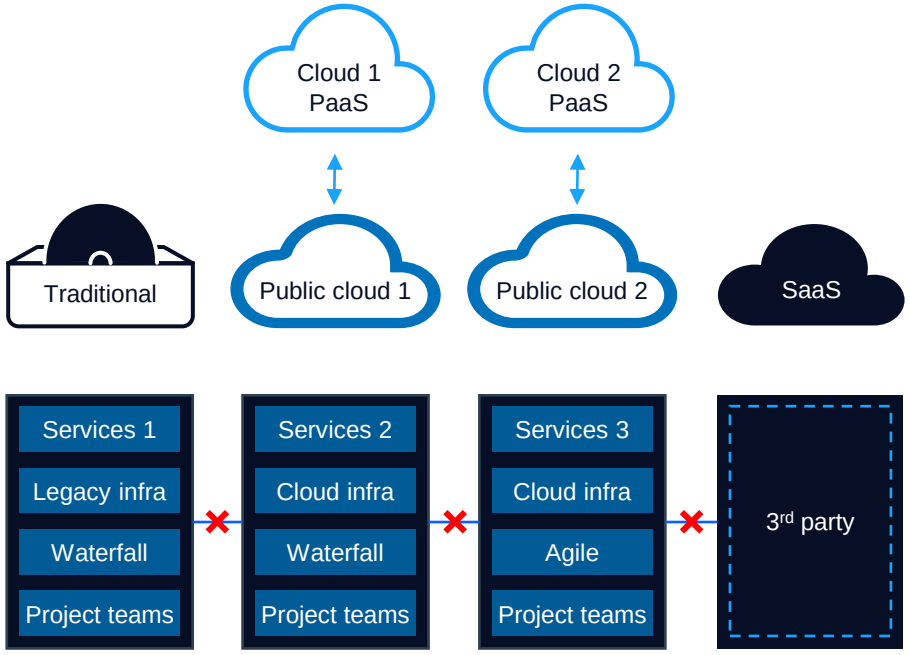
Common management

Systems and tools that allow standardized and integrated management and control across multiple clouds

Enabling the platform approach

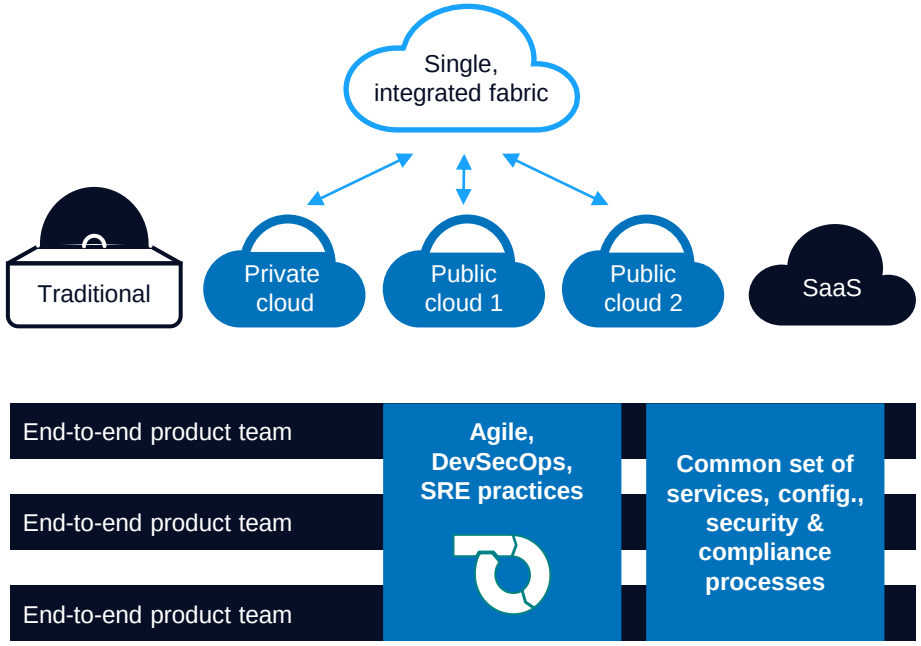
Companies need to transform their technology & operating model

Separate environments with traditional op. model



- Separate environments, often managed by different teams
- Ticket-based system
- Ad-hoc configuration activities
- Manual compliance & security
- Siloed teams that are aligned to project

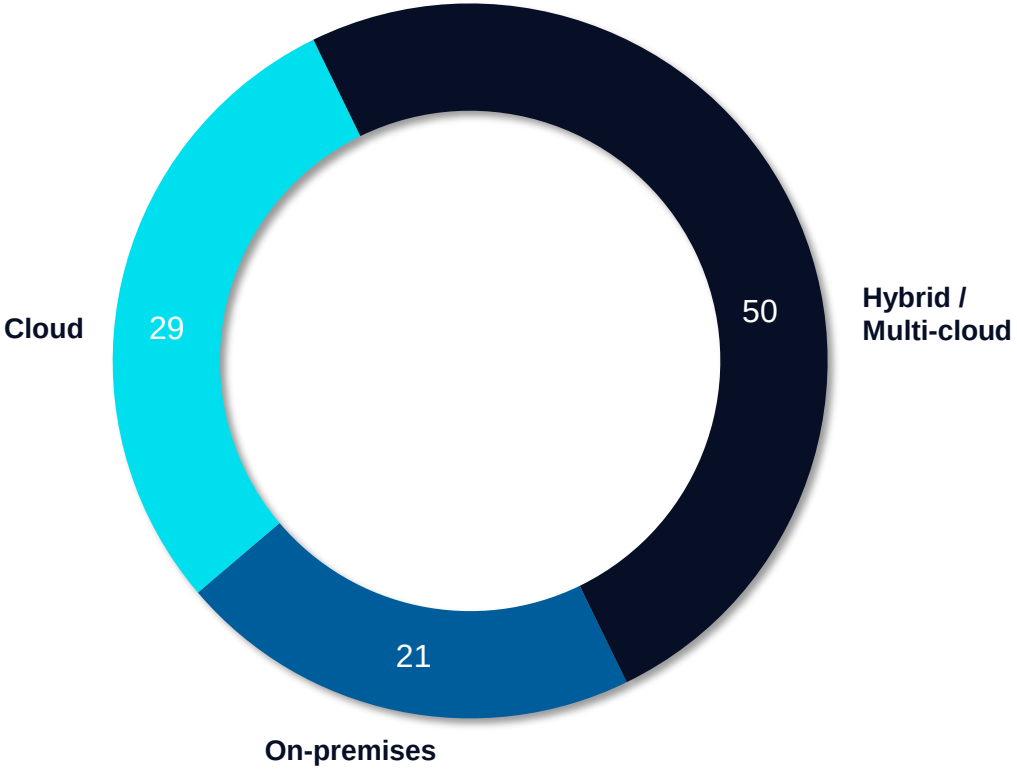
Single hybrid platform & operating model



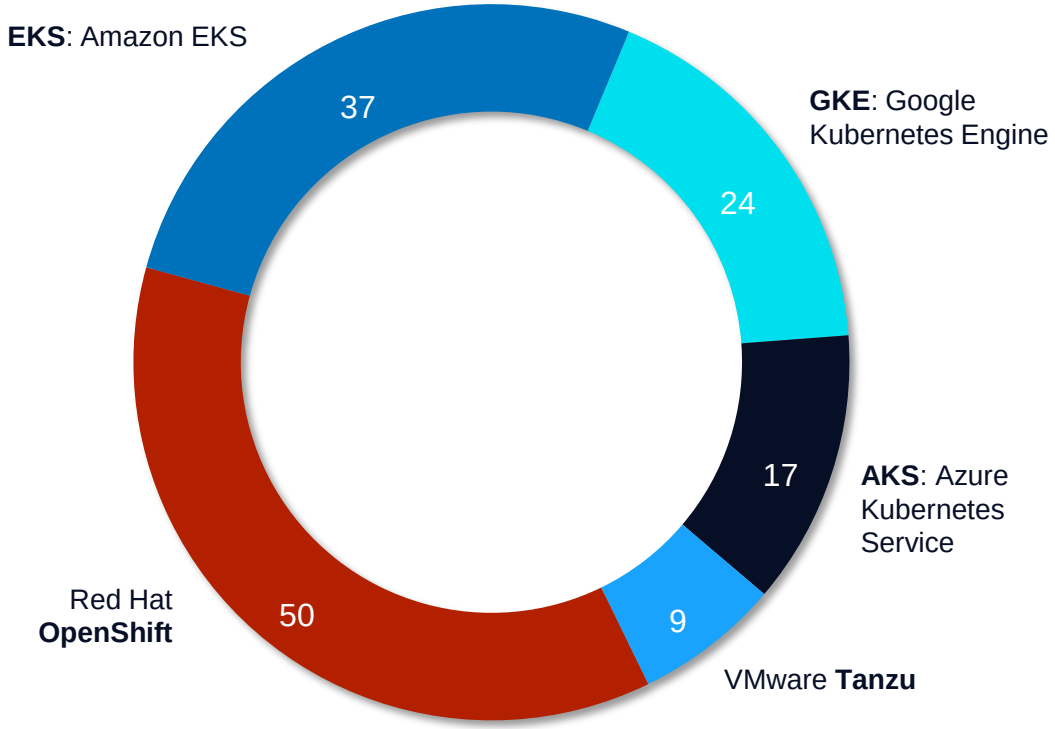
- Single abstracted hybrid fabric, managed consistently
- Automated API-consumable services
- Standardized & centralized configuration management
- Compliance & security policy fully automated as a code
- End-to-end teams that are aligned to persistent products

Kubernetes Platform Management: Trends

Larger organizations* favour hybrid or multicloud approaches

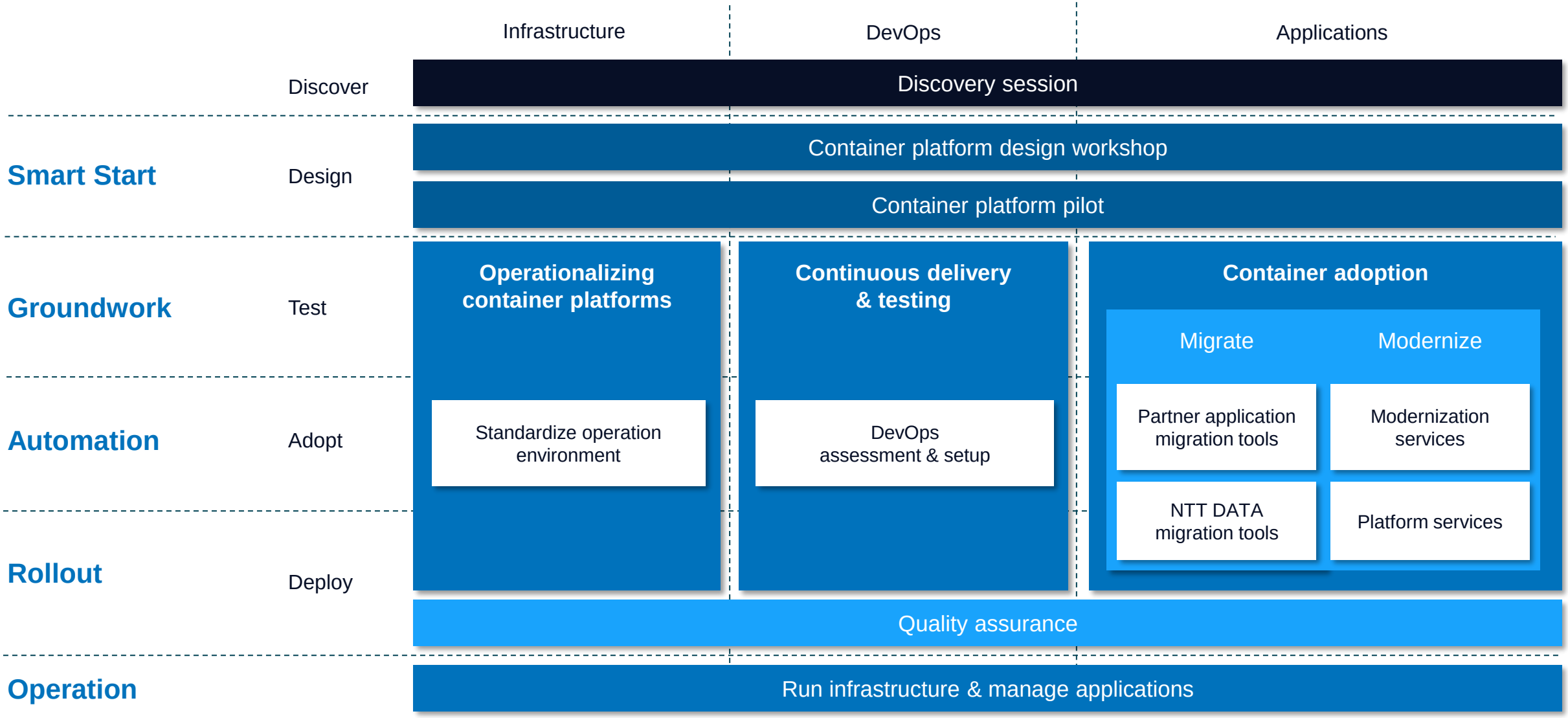


Most organizations are using Red Hat OpenShift & Amazon Elastic Kubernetes Services (Amazon EKS)



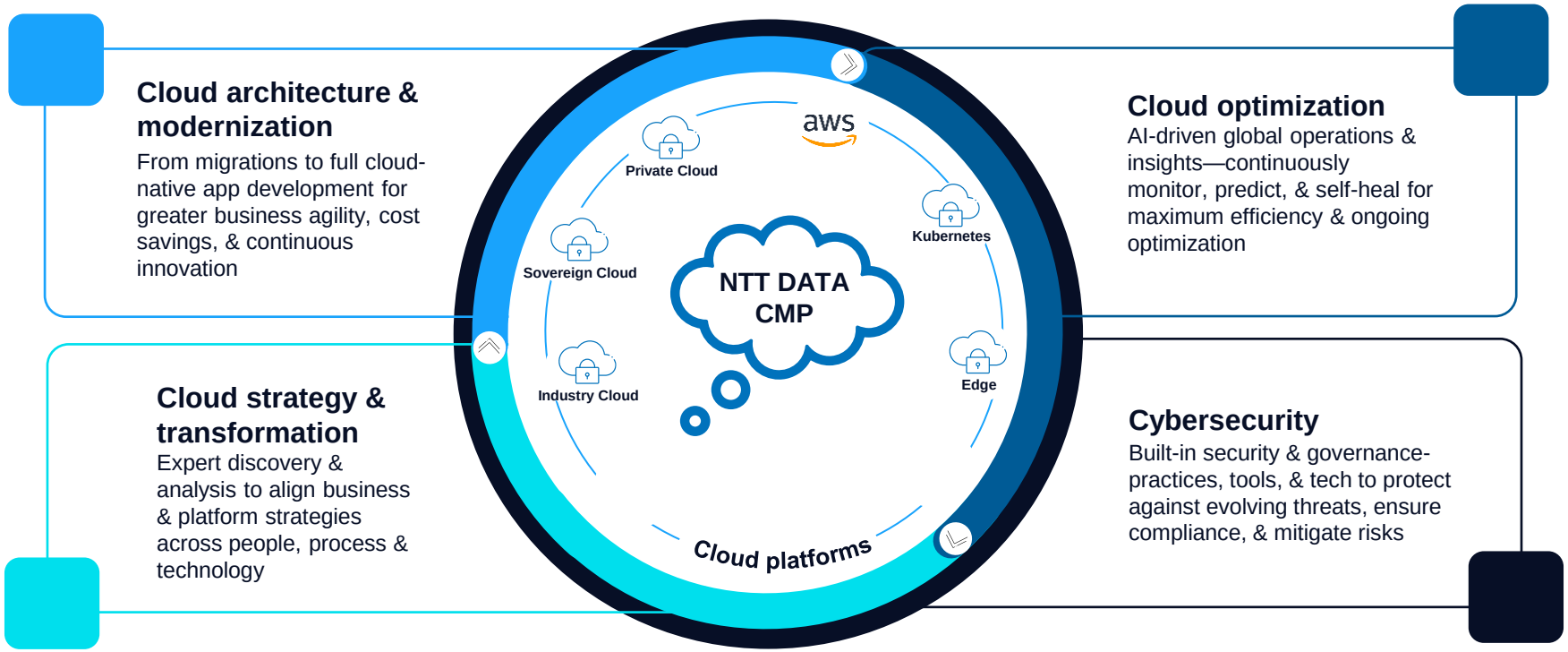
*Large organizations = 1,000+ employees or more
Source: Red Hat: Kubernetes adoption, security, and market trends report 2022

A services framework for hybrid container-based platforms



NTT DATA Cloud & IT Infrastructure services

A continuous end-to-end framework to meet clients where they are on their cloud transformation journey



Benefits

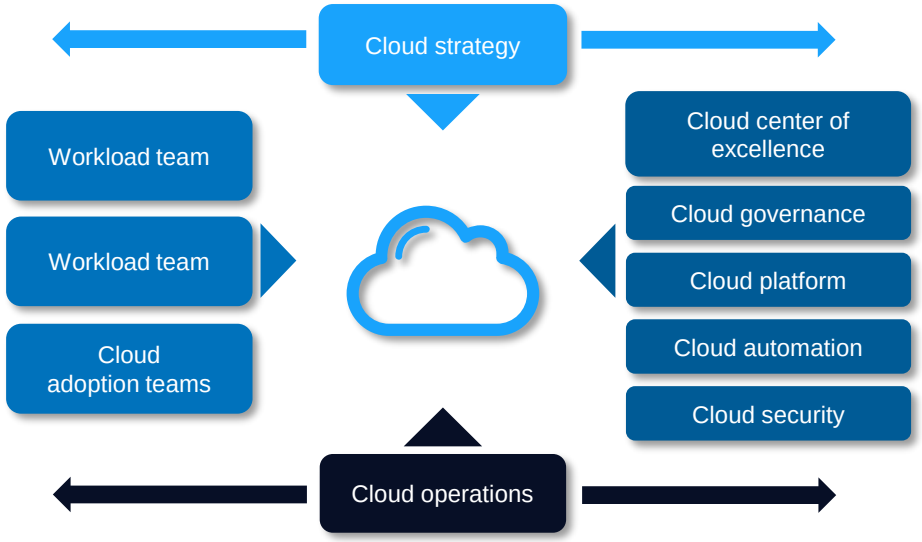
End-to-end solutions | Experience | Specialization | Global services

Driving business outcomes though…

Managing risk | Controlling costs | Improving & securing digital engagements | Finding dollars for innovation

NTT DATA's Cloud Center of Excellence accelerator program

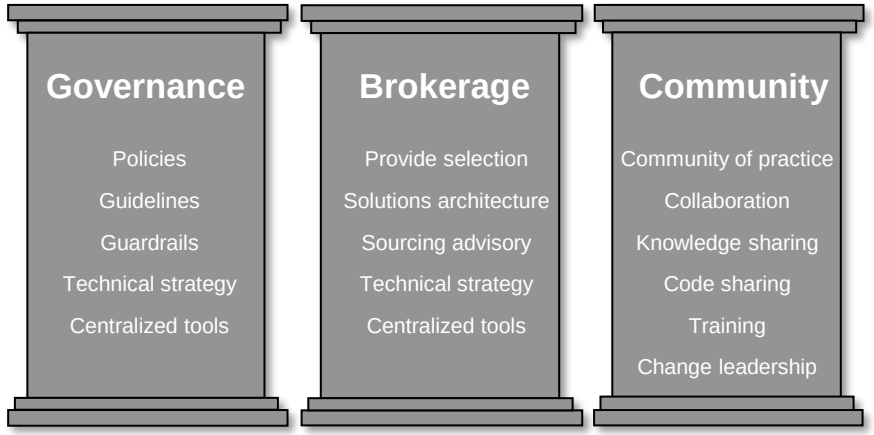
CCoE structure



CCoE interactions points

- Cloud strategy
- Cloud adoption
- Cloud governance
- Cloud operations
- Cloud platform(s)
- Cloud automation
- Cloud security
- Cloud workloads
- FinOps
- Metrics

CCoE pillars



CCoE drives organizational change

- Organization operations
- People cloud skills & development
- Native software dev practices
- Native services & tooling

- Security, governance & compliance
- Change management
- Vendor relationships & contracts
- IT operations

- Data storage & management
- Business continuity & disaster recovery
- Collaboration & communication
- Cost management

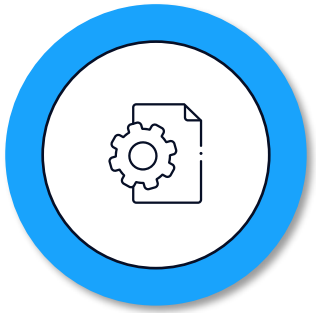
- Organizational structure & roles
- Organizational culture & change
- Integration & interoperability
- Monitoring & performance management

Cloud management and operations

Cloud cost optimization

Improved ability to forecast cloud expenses, minimize costly risk & re-invest in innovation

Improved business agility

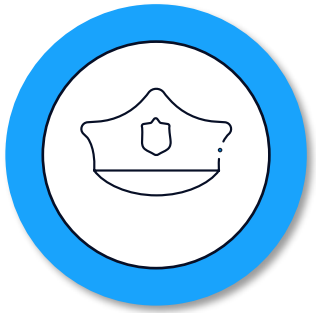


With automated, AI-driven global operations

Simplified multicloud complexity

By detecting threats that were missed by other controls

Maximum up-time & optimal system performance



Through proactive monitoring & management

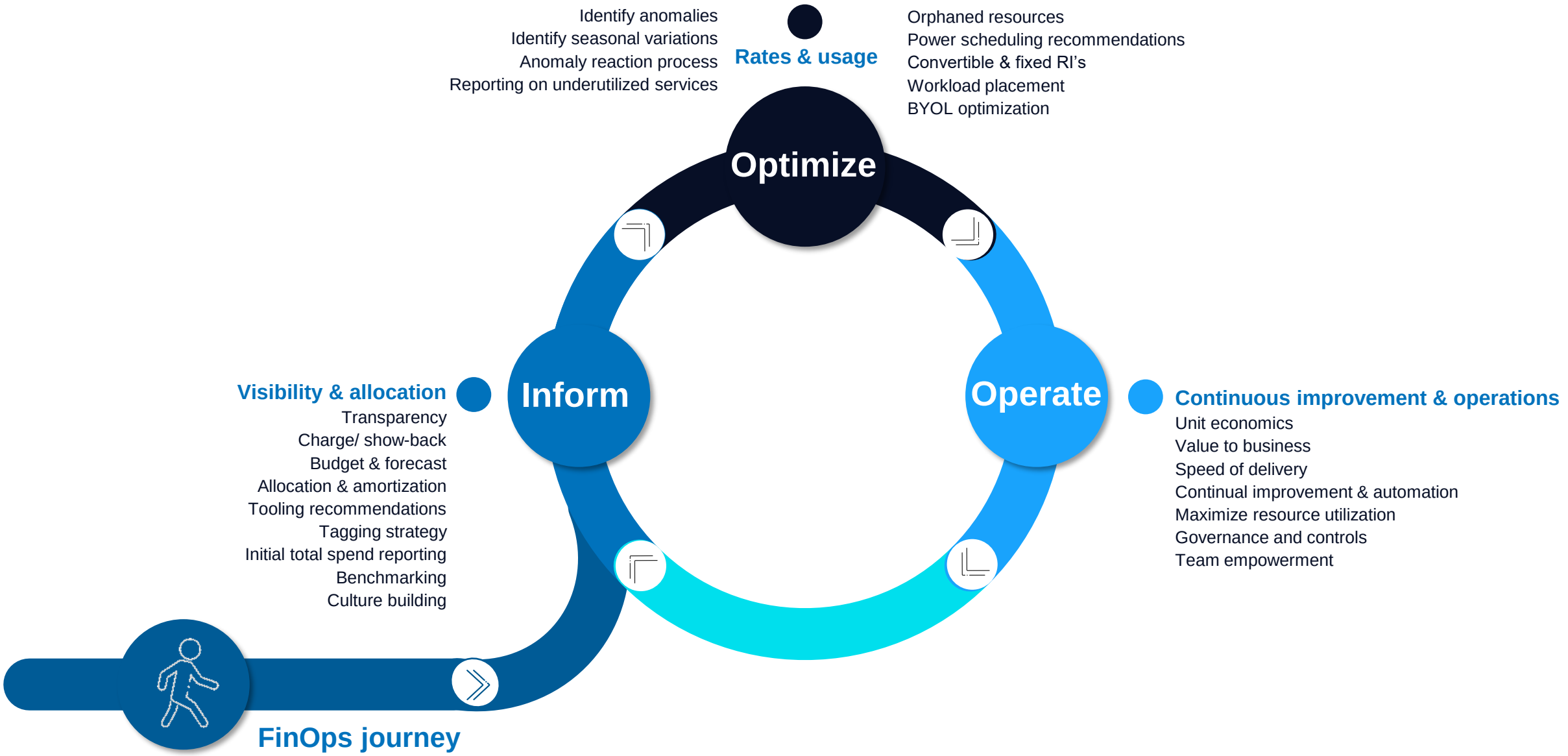
Strong security posture

Minimize data security risks & improve business performance through cyber resilience

Public cloud | **Private cloud** | **Edge compute** | **Applications**

Multi-cloud | **Containers** | **Database** | **Infrastructure services**

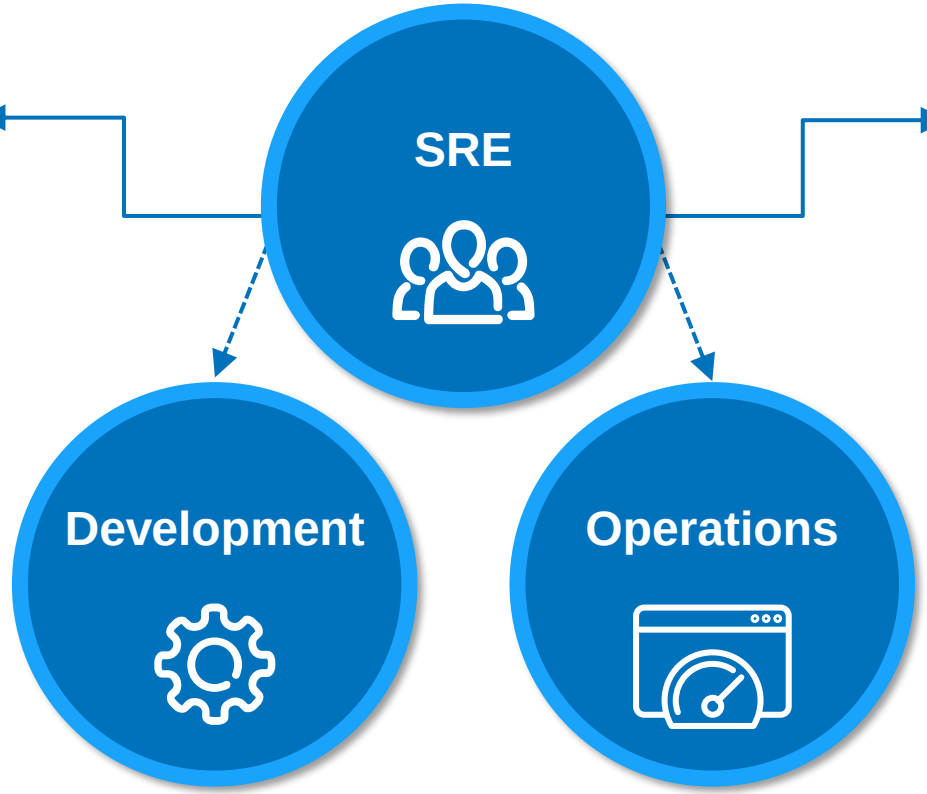
NTT DATA can guide you on your entire FinOps journey



The SRE team is focused on improving overall reliability, from both the product and platform perspectives. This calls for tight collaboration with the build and run organizations to standardize processes, drive automation, and better governance.

Product reliability

- Codified best practices
- Capacity planning
- Performance: availability, latency, & efficiency
- Reusability



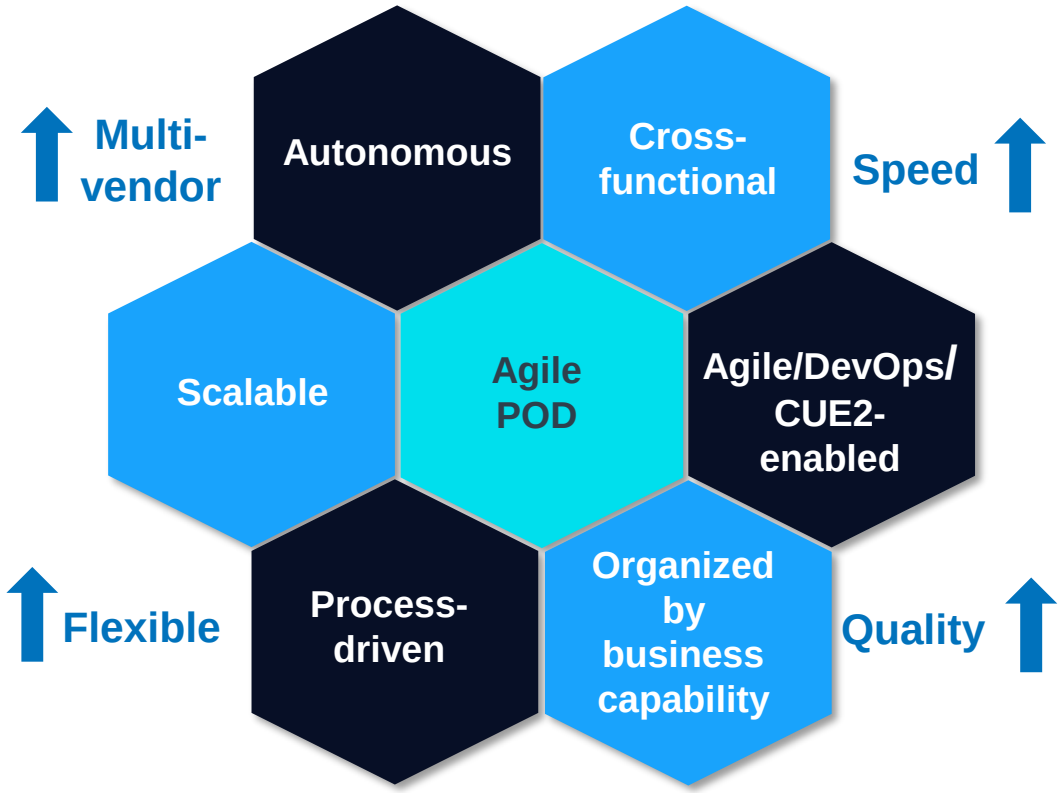
Platform reliability

- Release automation
- Platform orchestration
- Environment management
- Monitoring & instrumentation
- Emergency response

The SRE team is envisioned as a highly-skilled team working across the spectrum, starting with design-build with an increased focus on deployment process automation and operational environment stability, reliability, and availability. This team will facilitate ongoing continuous improvement and focus on eliminating toil

Agile Pods from NTT DATA – *f* [Sourcing agility, business agility, IT agility]

NTT DATA's Agile POD (product-oriented design) program utilizes the best engineering automation (i.e. DevOps) and people composition to maximize the modularity, scalability, and manageability of large programs



Team characteristics:

- Focuses on agile development, support, and operational excellence to the core
- Collaborates to form cohesive groups that cater to larger common business objectives
- Mixes technical consultants' skills based on business need
- Delivers one or more product increments through a "community of PODs"
- Includes client resources for tighter collaboration
- Establishes clearly defined interfaces between client and NTT DATA
- Scales up/down on demand and evolves capabilities over time
- Offers flexible pricing: capacity-based, outcome-based, milestone-based, or other

Site Reliability Engineering (SRE) Agile PODs

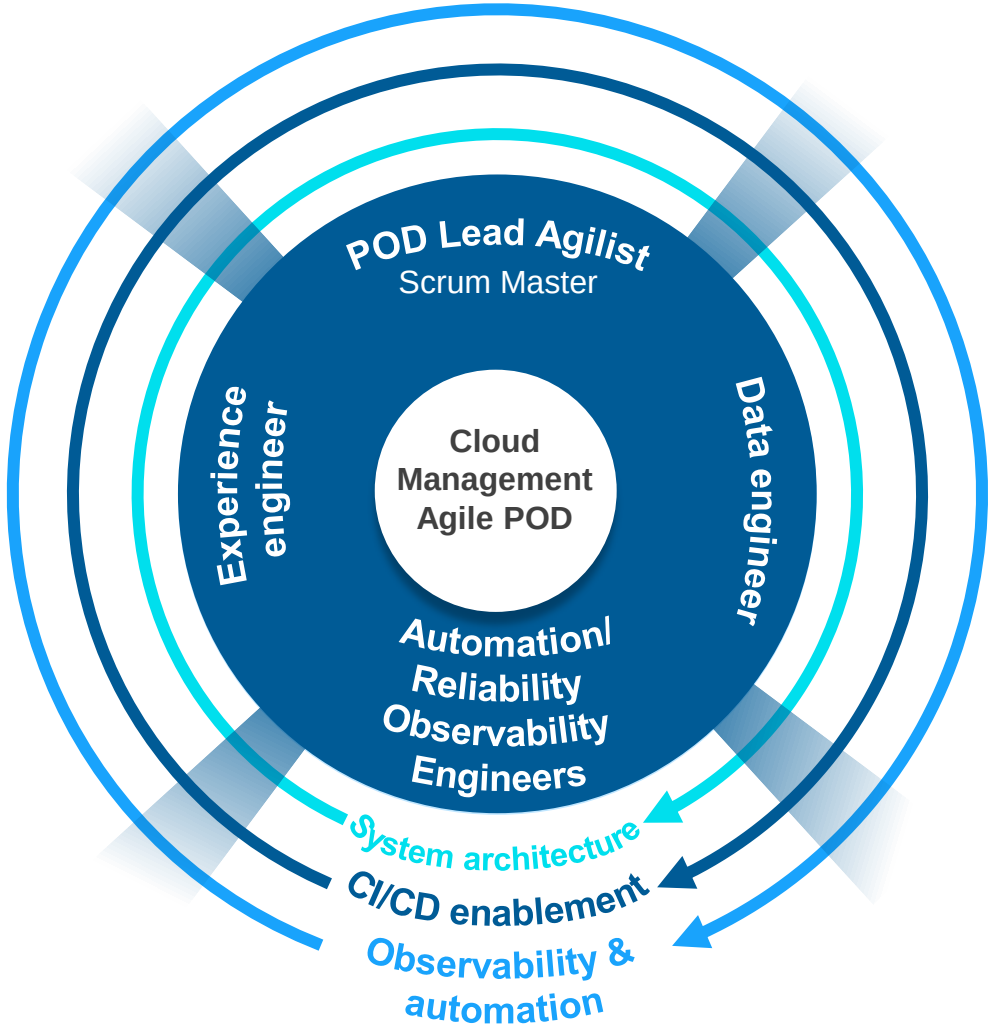
SRE Agile PODs are responsible for designing, deploying, managing, and automating technology assets

SRE principles

- Reduce organizational silos
- Implement gradual changes
- Leverage tooling & automation
- Measure everything

Agile POD anatomy

- Independent with a single shared purpose
- Self-managing, cross-functional skills
- Features become tasks & every task has an owner within the POD
- Minimum dependency on external resources



Activities & deliverables

- Run, maintain, scale, automate operations
- Day-to-day XLA-based ecosystem support
- Outcome, capacity, demand services model
- Administrative support for the tech stack & DevOps toolset
- Automate tasks & activities wherever possible
- Provide incident management escalation
- Provide SRE function: availability, latency, performance, efficiency, change management, emergency response, capacity planning

NTT DATA's Cybersecurity Services

Provide integrated security services from strategy to operations and incident response on a global scale

Consulting services

Technology integration

Unified managed detection & response

Crisis response

Security architectures	Infrastructure security	Endpoint security	Data security	Ethical hacking
Governance, risk & compliance	Applications security	Cloud security	Identity & access management	OT / IoT security
Emerging technologies	SOC solutions	Threat management	Anti-fraud	Physical security

End2End

Specialization

Experience

Global services

Thank you!

Please complete the session survey in the mobile app

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