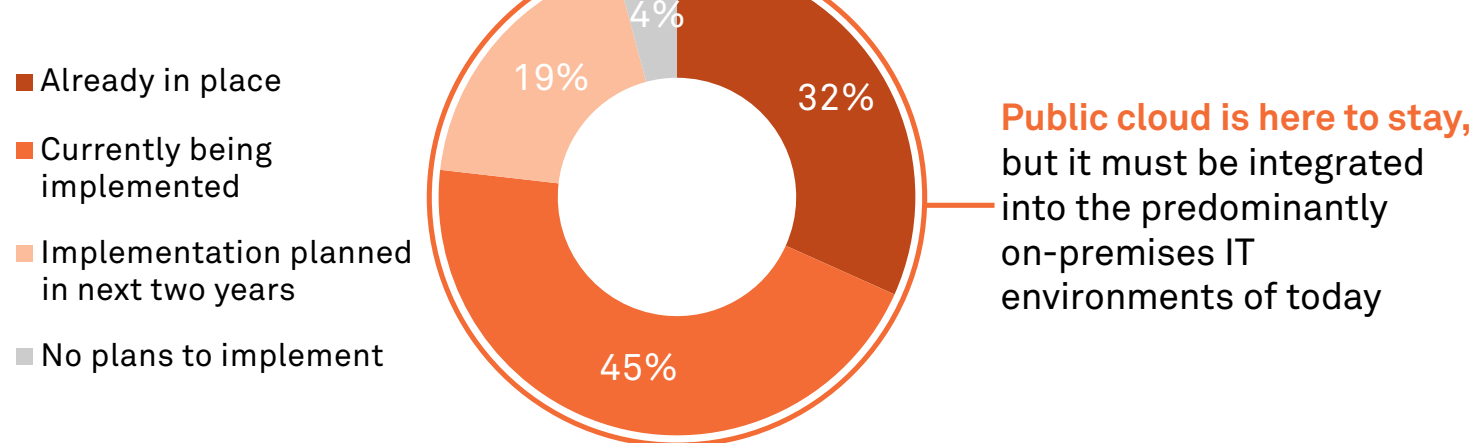# Hybrid IT Fuels Modern Data Architectures

The Future of IT is hybrid, which means flexible and agile, but also more complex

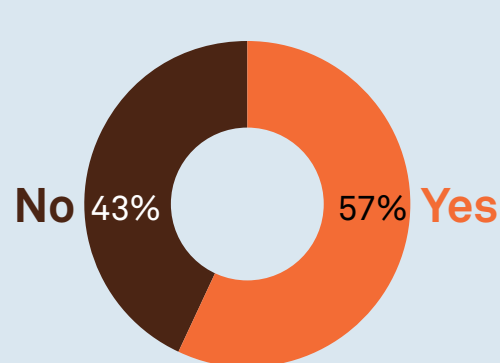### Current state of hybrid IT implementation

Base: Respondents with at least some IT infrastructure in public cloud environments (n=554)

- Already in place — 32%
- Currently being implemented — 45%
- Implementation planned in next two years — 19%
- No plans to implement — 4%

Public cloud is here to stay, but it must be integrated into the predominantly on-premises IT environments of today

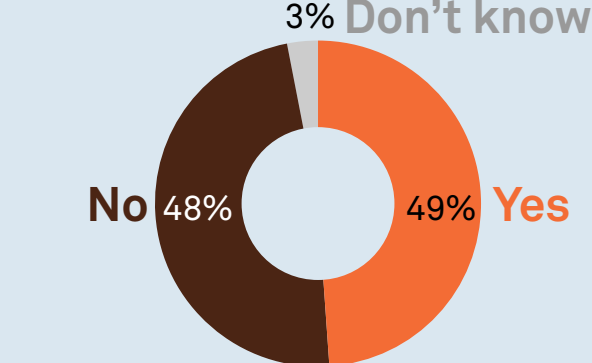## Optimal placement for data and analytics workloads is easier said than done

Data/analytics workload repatriation from public cloud to on-premises IT during the past year?

Base: All respondents (n=561)

No 43% / 57% Yes

Data/analytics workload repatriation from public cloud to on-premises IT in the coming year?

Base: All respondents (n=561)

3% Don't know
No 48% / 49% Yes

Public cloud is not the only (or necessarily best) choice for data & analytics workloads

Security and control are key motivations for modernizing data and analytics workloads on-premises

Factors fueling on-premises modernization/retention of data/analytics workloads

Base: Organizations modernizing/retaining data/analytics workloads on-premises (n=188)

55% Ensure data and system security

41% Maintain control over data locality/sovereignty

Modernization and on-premises data and analytics workload execution are not mutually exclusive
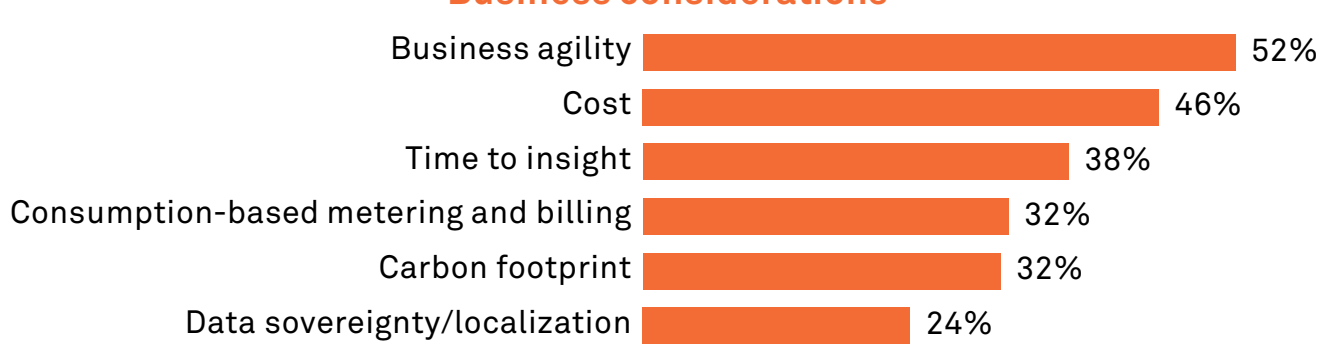
Private cloud checks all the technology and business boxes for organizations that are looking for on-premises infrastructure:

- ☑ Performance
- ☑ Business agility
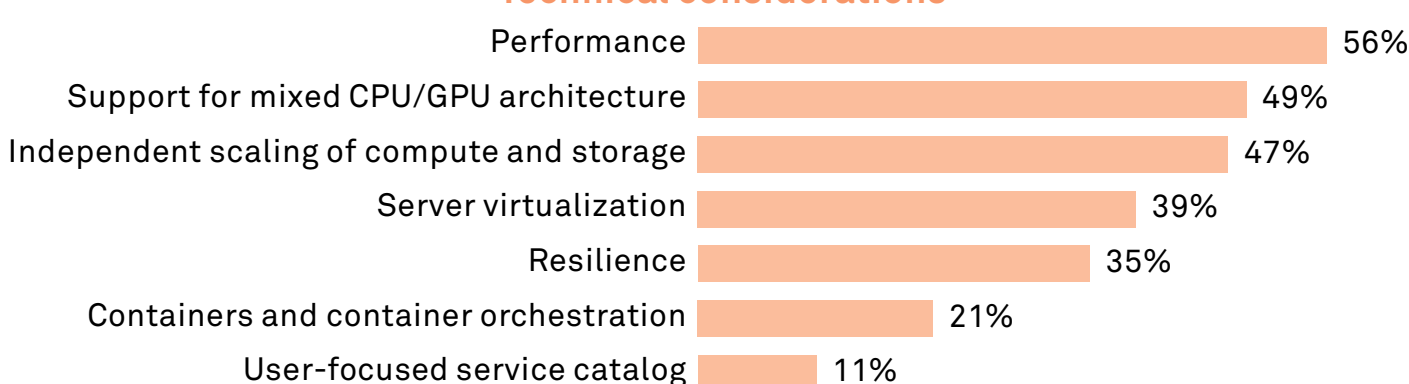- ☑ Speed and scale
- ☑ Overall cost

Data/analytics workloads: key selection criteria for on-premises/hosted datacenter infrastructure

Base: All respondents (n=562)

Business considerations

Business agility	52%
Cost	46%
Time to insight	38%
Consumption-based metering and billing	32%
Carbon footprint	32%
Data sovereignty/localization	24%

Technical considerations

Performance	56%
Support for mixed CPU/GPU architecture	49%
Independent scaling of compute and storage	47%
Server virtualization	39%
Resilience	35%
Containers and container orchestration	21%
User-focused service catalog	11%

Private cloud fits the bill for data and analytics workload modernization on-premises

With private cloud, you've got all the bases covered for data and analytics workload modernization

95% agree to some extent that private cloud adoption will **facilitate migration of workloads to public clouds.**

94% agree to some extent that private cloud adoption will facilitate **transformation of IT architecture to a hybrid IT environment**

Base: All respondents (n=562)

Reimagining your IT estate to ensure that data and analytics workloads can operate in an environment that maximizes

- Flexibility
- Availability across multicloud and hybrid IT environments
- Scalability
- Security/governance/control
- Optimized time to insight

Source: 451 Research, custom survey commissioned by Cloudera, 4Q 2021