

2021 Data Infrastructure Trends

Digital business initiatives are placing unprecedented pressures on both IT organizations and the infrastructure they manage. ESG recently surveyed IT storage professionals to better understand this situation, examining infrastructure investment strategies for both on-premises data centers and public cloud services as well as gaining insights into the growing movement toward as-a-service technology delivery models. IT buyers were also asked about their consideration drivers and forward-looking strategies.

Digital Business Acceleration in an Era of Distributed Operations



64% agree that the complexity of their IT infrastructure **slows IT operations and digital initiatives.**

Nine out of ten IT orgs have to move faster than 3 years ago.



Nearly half of them by **more than 50%.**



59% identify **data as their business.**



48% report **1 PB or more** of active data storage across their entire environment. (Mean of 6.7PB)



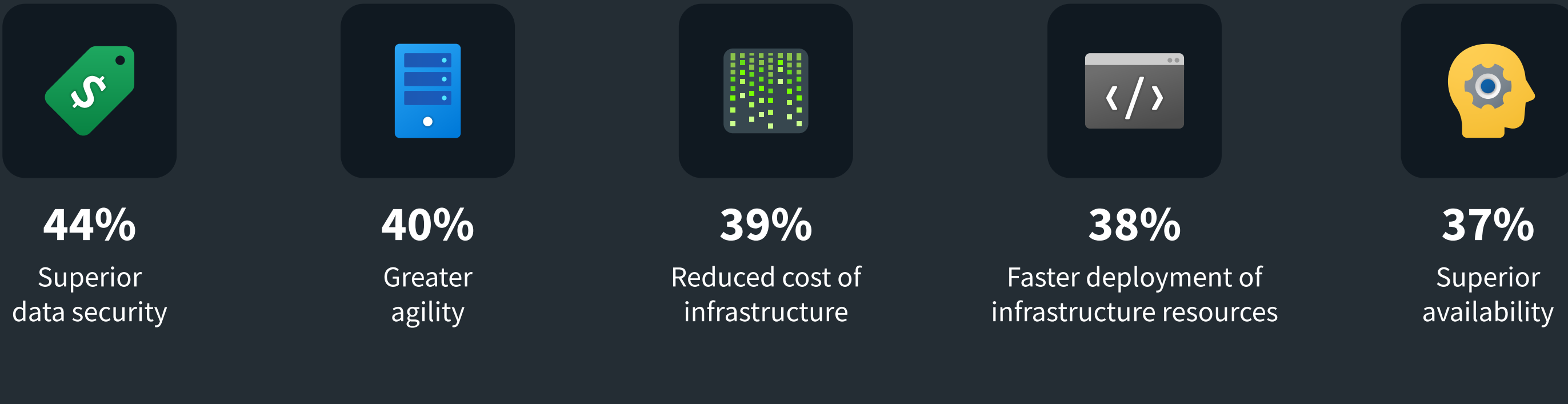
60% regularly encounter **issues with visibility** across all their data.

Public Cloud Becomes the Core of IT



NEARLY HALF of organizations (48%) take a **cloud-first approach.**

» Top 5 benefits of public cloud.

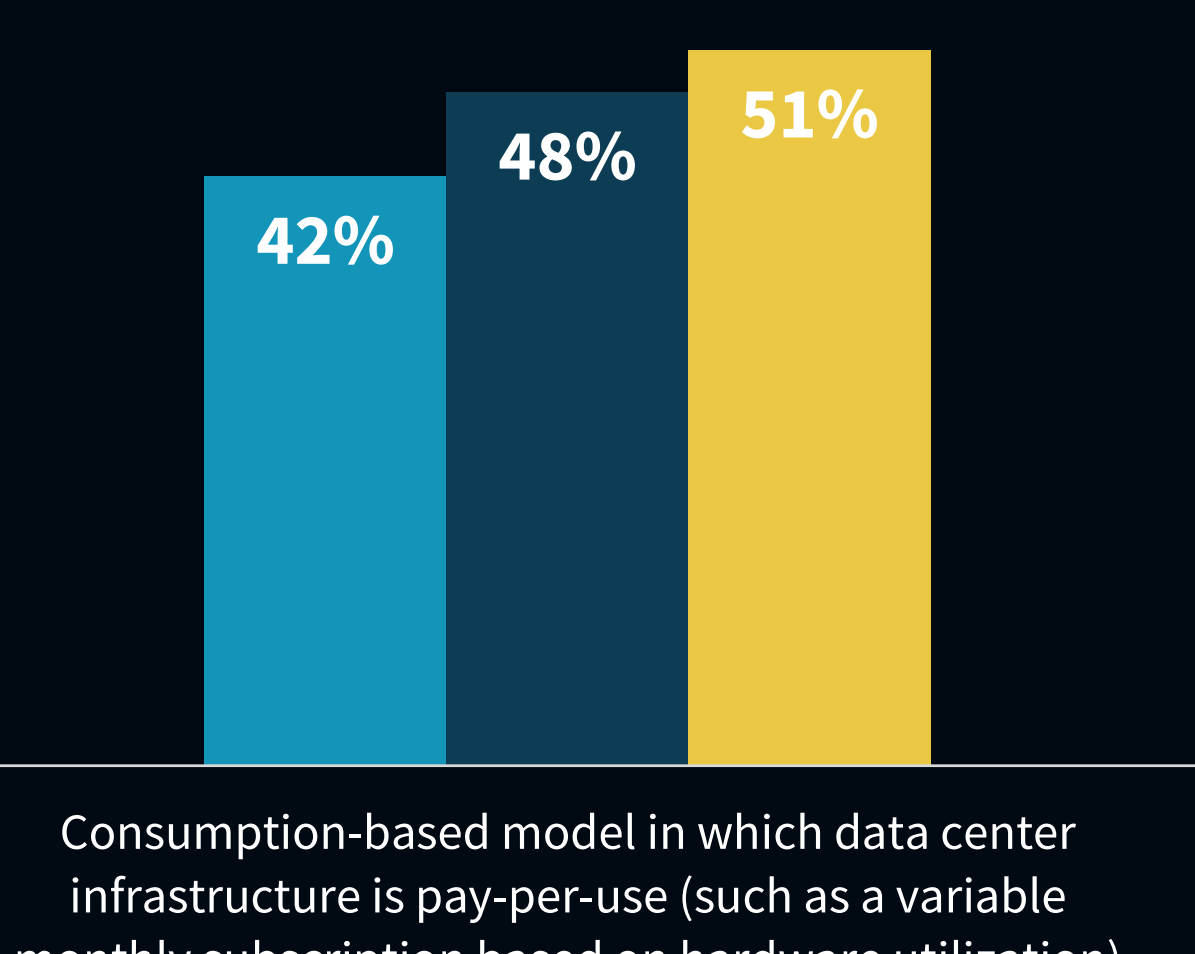


The Rise of Consumption-based IT

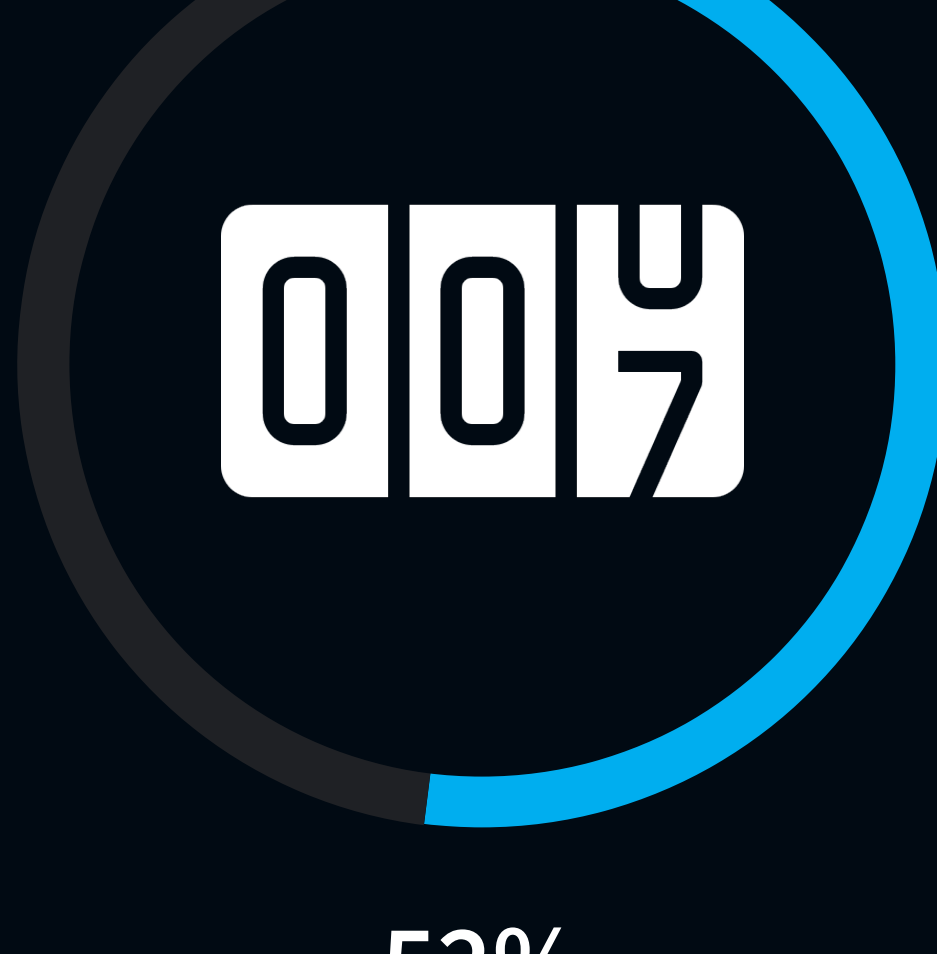


63% agree that it is often **challenging to properly size workloads** for the optimal infrastructure environment.

» Preferred payment model for on-premises data center infrastructure.



Consumption is pay-per-use (such as a variable monthly subscription based on hardware utilization)



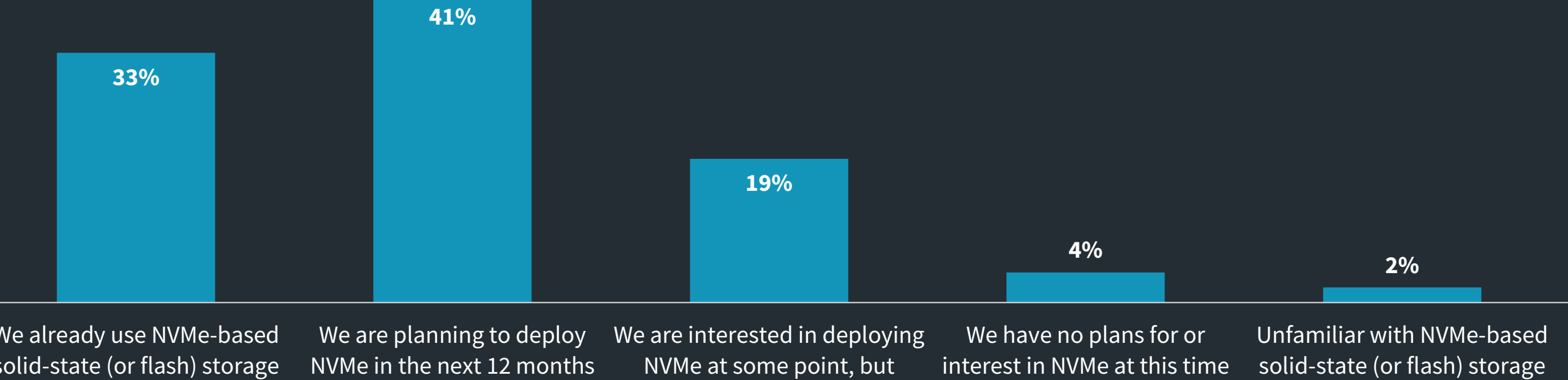
52% of organizations procure at least some of their on-premises data center infrastructure via a consumption-based model.

Top 3 benefits of data center infrastructure pay-per-use.

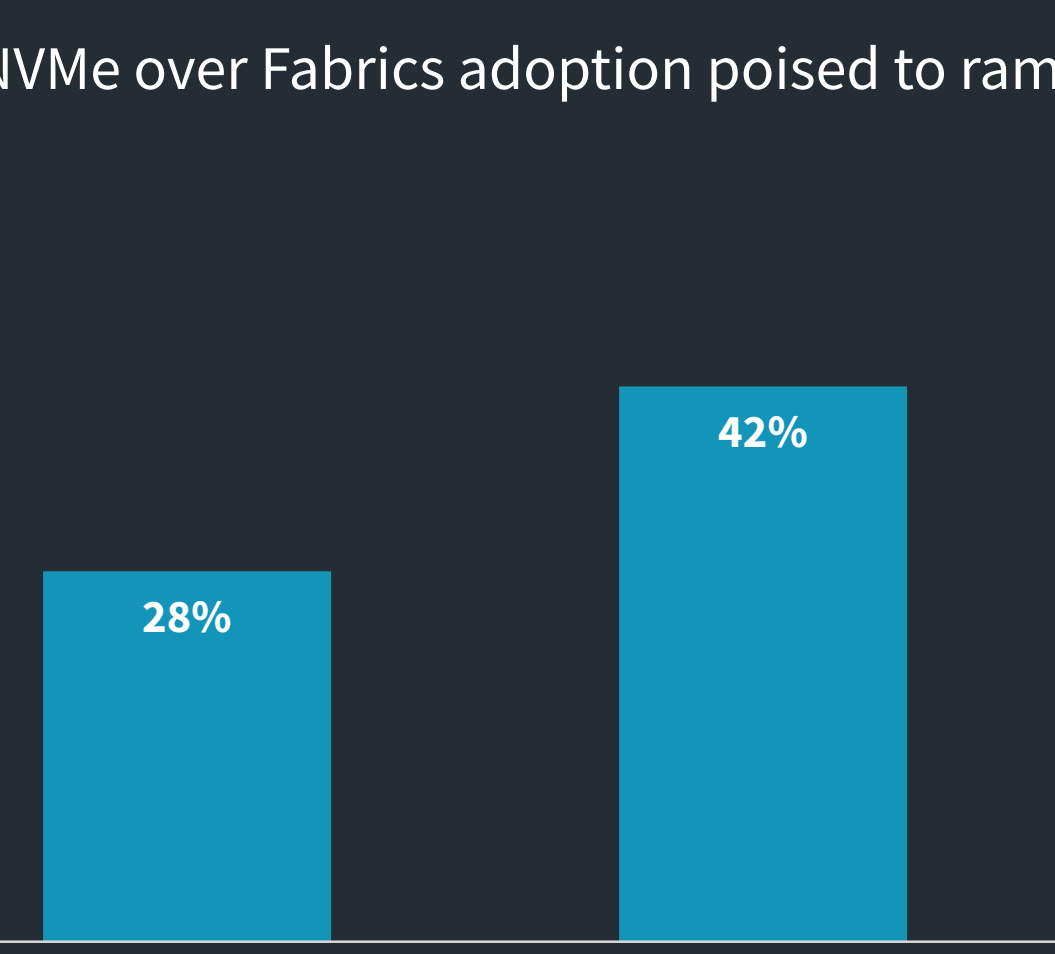
- Accelerated IT initiatives by **moving cost into future quarters**, increasing the amount of infrastructure that can be deployed today
- Accelerated IT initiatives by **freeing up personnel from infrastructure and systems** to address other tasks
- Accelerated deployment of **new infrastructure capabilities**

NVMe Flash & NVMe-OF Adoption Poised to Take Off

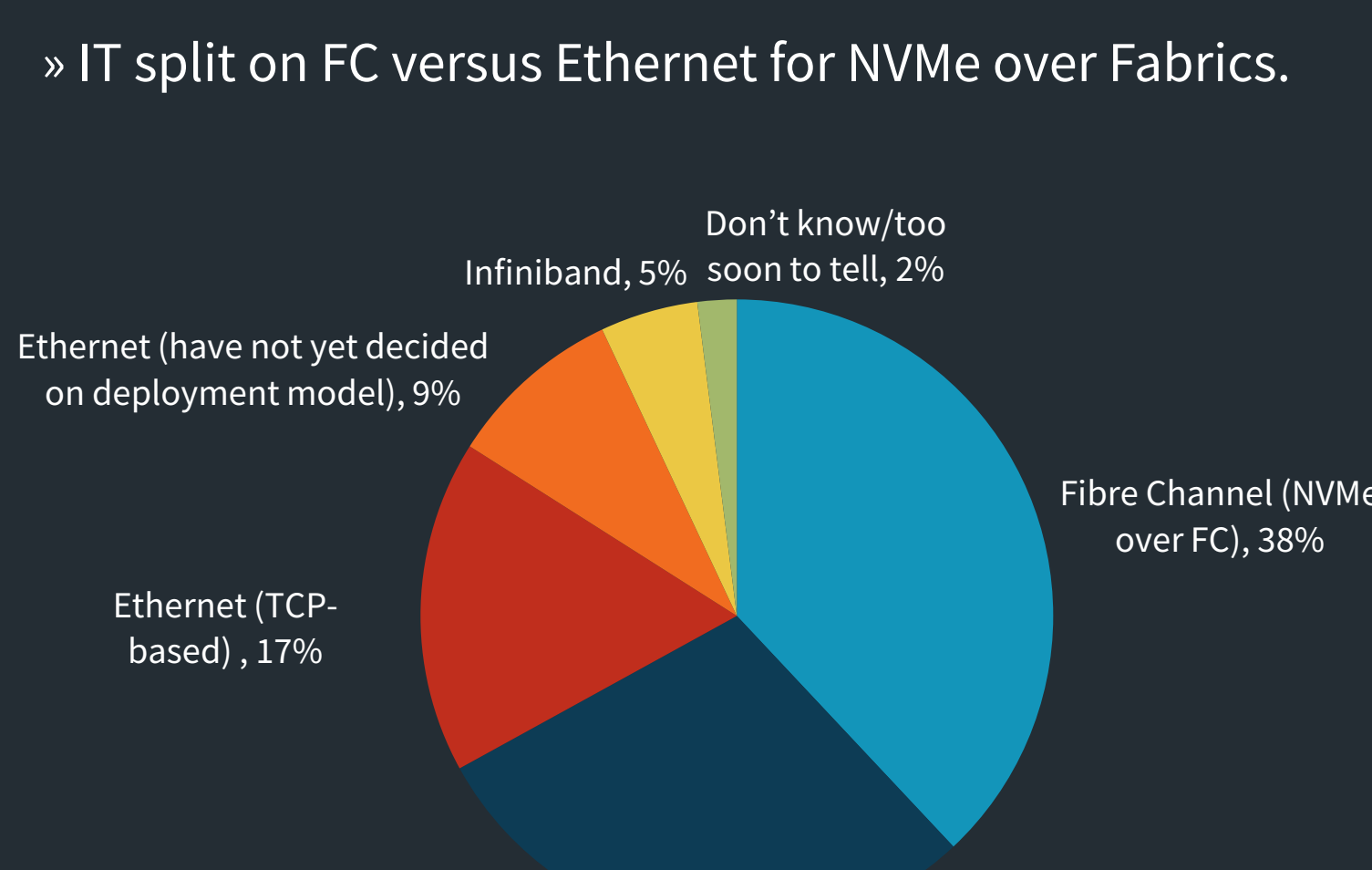
» NVMe usage.



» NVMe over Fabrics adoption poised to ramp.

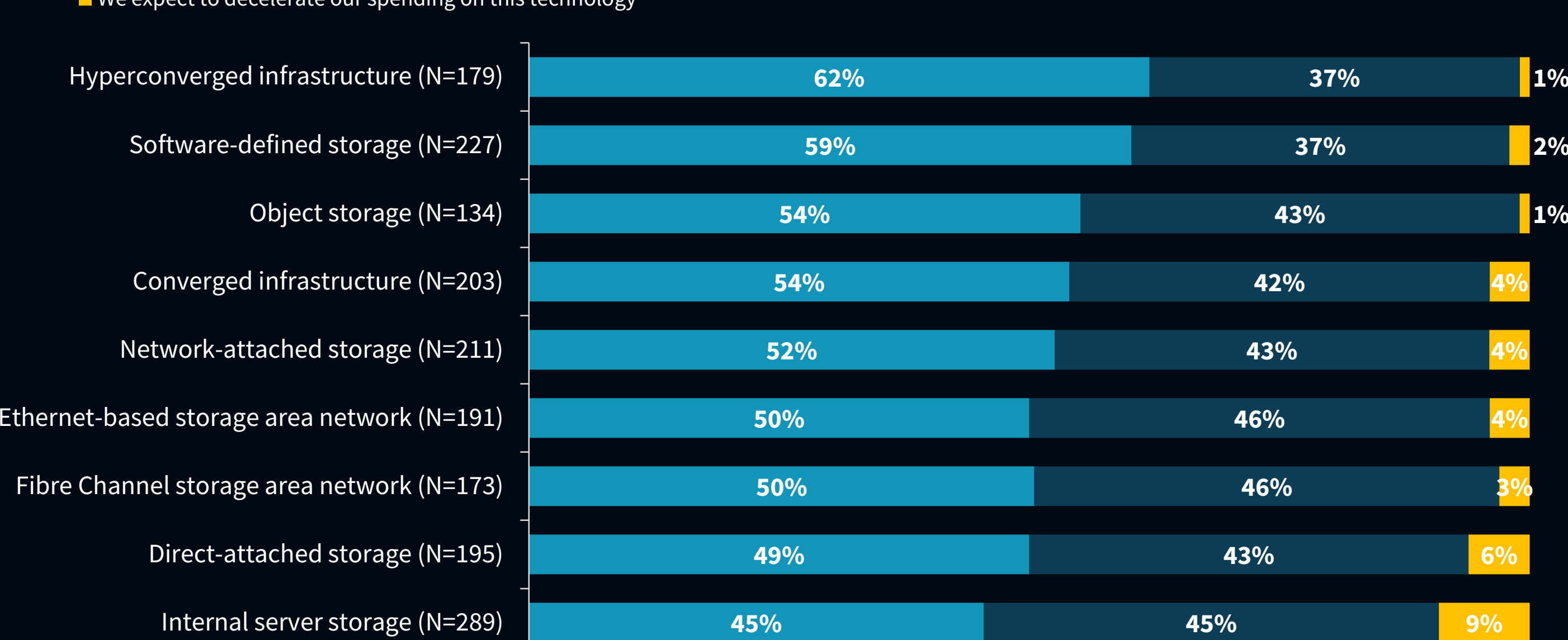


» IT split on FC versus Ethernet for NVMe over Fabrics.



Data Center Infrastructure Investment Continues

■ We expect to accelerate our spending on this technology
 ■ We expect to maintain our spending on this technology
 ■ We expect to decelerate our spending on this technology

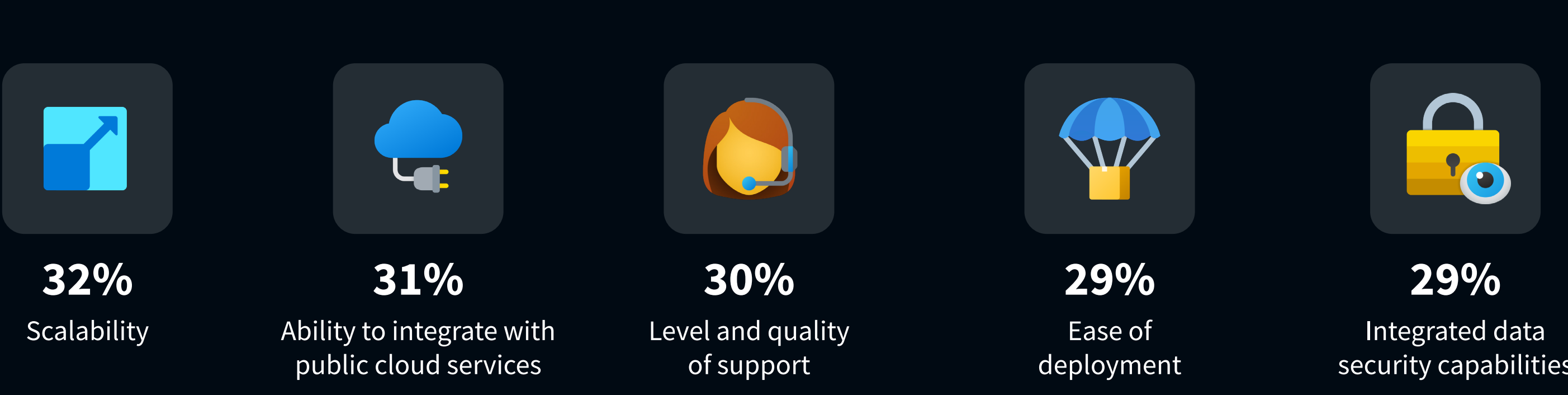


64% view data center design as **strategic** and believe it can lead to a competitive advantage.



84% have new data center projects active or on the horizon.

» Top 5 buying criteria among active data center infrastructure projects.



For more data and analysis from this ESG research study, including actionable recommendations for IT organizations looking to support the business and serve as a competitive differentiator, read the ESG Research Report, *Data Infrastructure Trends: Accelerating IT Operations in the Era of the Distributed Cloud.*

[LEARN MORE](#)