



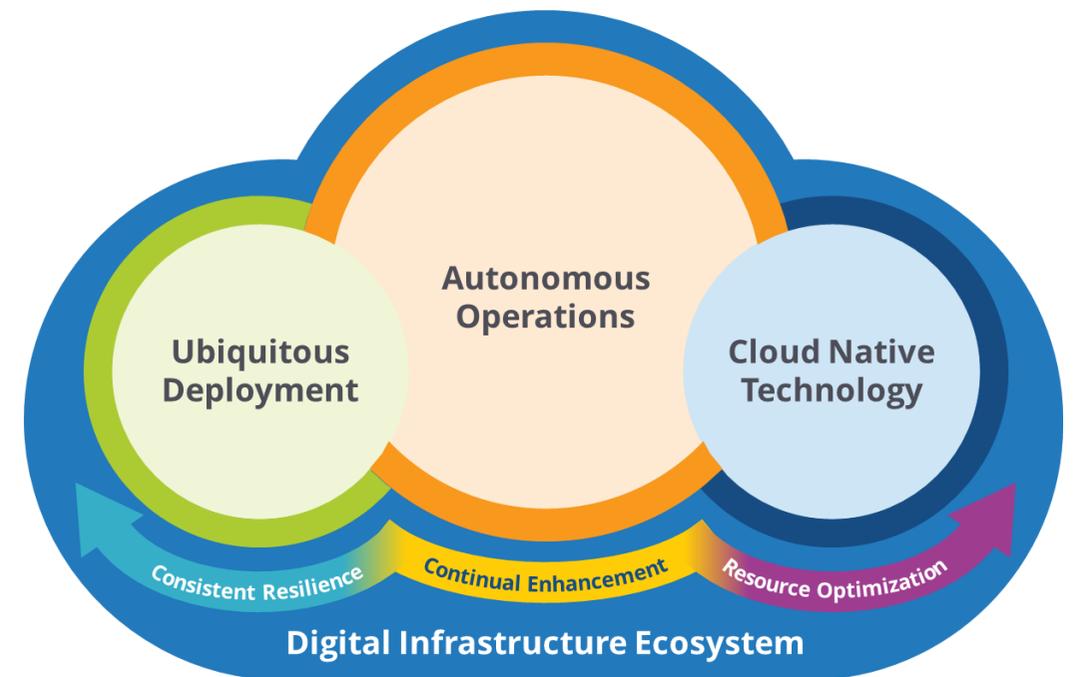
# Future of Digital Infrastructure: Adopting a Holistic Approach for Ubiquitous Deployment



**In the Future of Digital Infrastructure, digitally driven enterprises will take a holistic approach to deployment across the digital infrastructure ecosystem. Timely access to innovative infrastructure resources – both shared and dedicated – will be imperative to support adaptive, resilient, secure, and compliant digital business models.**

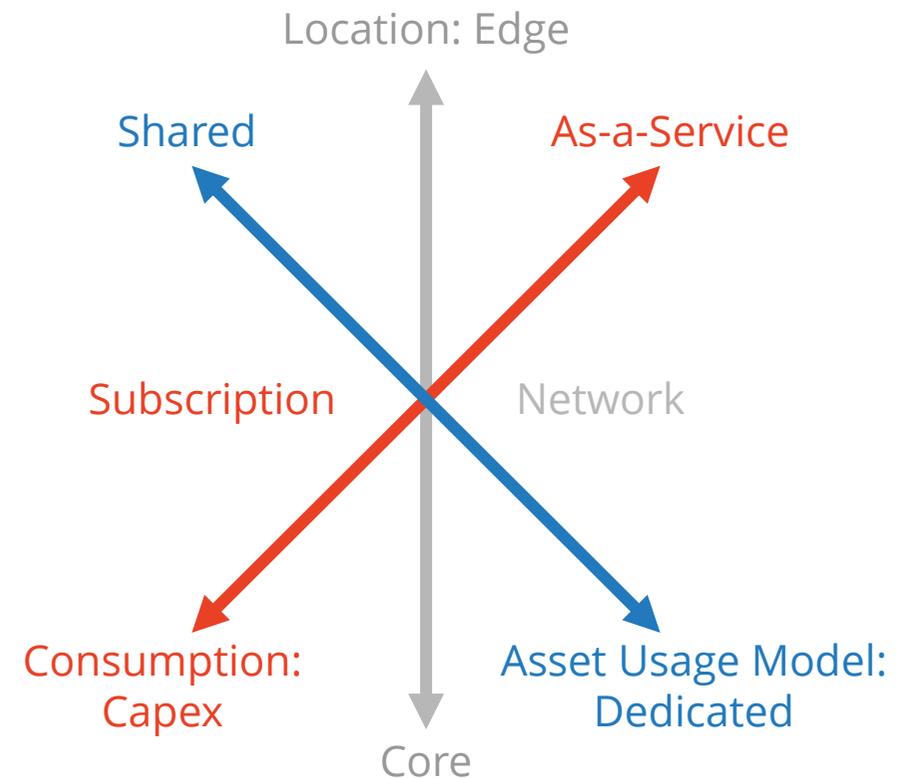
The emerging digital infrastructure ecosystem will be built on a cloud foundation, taking better advantage of flexible consumption and asset usage models. Infrastructure deployment models will evolve as well, extending beyond traditional centralized enterprise and cloud data centers. Leveraging resources in locations, such as network-based MECs, metro colocation facilities, and on campuses, will help enterprises deliver enhanced customer experiences, embed intelligence/automation into business operations, and support ongoing industry innovation.

**Within the next several years, most enterprises will find that half of the new infrastructure deployed in their own facilities will be in edge locations, not corporate datacenters.**



When evaluating digital infrastructure, organizations will need to identify where it falls along the three axes of the Ubiquitous Infrastructure Deployment Matrix – Location, Consumption, and Asset Usage. This determination will help enterprises establish budget and chargeback approaches, identify which workloads best align with specific scale and performance predictability characteristics, and determine how much IT organizations will need to rely on remote management and autonomous operations to manage resources and data.

- **Location** – Digital transformation success requires a rethinking of IT resource placement. Faced with a range of requirements for latency, reliability, cost, security, and compliance, enterprises will increasingly need to deploy and access infrastructure in network and edge locations.
- **Consumption** – Organizations must leverage a range of consumption models from up-front, CapEx-based acquisition to as-a-Service to ensure that investment is aligned optimally with business requirements.
- **Asset Usage** – The most significant – and most underappreciated – impact of public cloud IaaS in the past decade has been the reintroduction and global extension of shared (not just dedicated) infrastructure as an important enterprise deployment option.



## The Opportunity for Technology Suppliers

Increasingly distributed deployment models expose risks associated with immature processes for data governance and asset management. Enterprises need partners that can help address these risks and facilitate ubiquitous deployment of resources and deliver faster access to innovative technologies.

Suppliers and their partners will need to determine where they fit – and how they can add value – in the emerging digital ecosystem. They must be able to accelerate customers' shift to autonomous operations for digital infrastructure. They will also be required to meet supply chain certification, carbon neutrality, and sustainability targets as preconditions for doing business.

By 2024, 80% of enterprises will overhaul relationships with infrastructure providers to better execute their digital strategy for ubiquitous deployment of resources and for more autonomous IT operations.

## Advice for Business Leaders

- **Altered Operations Processes** – Enterprises will need to adjust IT sourcing, procurement, budgeting, security, and management processes to better leverage flexible/as-a-service solutions for on-premises infrastructure.
- **Shift to Cloud Native** – Improved infrastructure agility and operational efficiency will accelerate the shift to core business applications built on cloud-native architectures that work across diverse (core/edge) deployment options.
- **Tackling Data Management** – The need for uncompromising data security, governance, and trust across all deployment locations calls for a single company-wide data management strategy to break down data silos.
- **Unified Governance** – Enterprises will require increasingly automated management systems for cloud infrastructure, networks, and datacenters to counter business resiliency threats, minimize infrastructure costs, and reduce operational complexity.



In the next few years, organizations must take a more holistic approach when assessing and leveraging all available deployment options across the digital infrastructure ecosystem. A digital enterprise's revenue will increasingly depend on the responsiveness, scalability, and resiliency of the dedicated infrastructure assets deployed in its own facilities as well as third-party shared and dedicated infrastructure resources in metro and regional locations.

A critical factor in the transition to cloud-centric digital infrastructure will be timely access to innovative technology using the most appropriate consumption and asset usage models. To better align infrastructure with desired business outcomes, enterprises will need to augment traditional up-front, CapEx-based acquisition strategies with a range of flexible consumption models, including as-a-service. A key enabling development will be the creation of easy-to-consume, network-based and local IaaS bundles from cloud provider partners.

To learn more about IDC's Future of Digital Infrastructure research, contact your Account Representative or read the latest blog, "A Transition to Digital Infrastructure is in Your Future – But You Need New KPIs to Succeed" at: <https://bit.ly/3c74HCV>.

The IDC report, [Future of Digital Infrastructure: Ever Faster Delivery of Reliable Digital Services and Experiences](#) (IDC #US46807920), introduces IDC's Future of Digital Infrastructure framework.

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