The edge has emerged as an essential execution venue for industrial digital workloads. More enterprises are adopting edge infrastructure for digital workloads, including enterprise IoT use cases. Many industries benefit greatly from workloads at the edge that require the high-performance, ultra-low-latency the edge can deliver.

Driven by industry- and application-specific requirements, we expect 53% of all IoT workloads to be executed in an edge/near-edge venue by 2022.

But not every edge is the same:

- Enhanced application performance
- Security/data sovereignty
- Support for low-latency applications
- Recognition of unique operational venues and requirements

That map directly to what enterprises say they consider most important when choosing a workload execution venue.

- Cost of supporting infrastructure: 45%
- Availability of supporting infrastructure: 44%
- Data sovereignty, ability/legality to house or move data from a venue: 42%
- Ability to provide physical, digital security to location: 40%
- Latency and/or performance considerations: 28%
- Resiliency of available infrastructure: 27%

Many industries benefit greatly from workloads at the edge that require the high-performance, ultra-low-latency the edge can deliver. 78% of organizations have or plan to have hybrid IT architecture in place in 2021.

As a critical component of an enterprise hybrid IT architecture, an edge private cloud can support key industry use cases to deliver unique advantages, including:

- Rapid time-to-deploy
- Distributed business process operations
- Greater operational control
- Mission-critical app/use case performance
- Achievement of business-critical digital outcomes

Lumen logo: ©2021 S&P Global Market Intelligence | WWW.451RESEARCH.COM

The content of this artifact is for educational purposes only. S&P Global Market Intelligence does not endorse any companies, technologies, products, services, or solutions. Permission to reprint or distribute any content from this artifact requires the prior written approval of S&P Global Market Intelligence.


Lumen is a technology company that enables organizations to benefit from emerging applications that power the 4th Industrial Revolution. Lumen and VMware are working together to relentlessly unleash the potential of data – leading to more capable and efficient edge computing and pervasive technologies.

Visit Lumen at Lumen.com/edge
Visit VMware at VMware.com

©2021 S&P Global Market Intelligence | WWW.451RESEARCH.COM

Drive by industry- and application-specific requirements, we expect 53% of all IoT workloads to be executed in an edge/near-edge venue by 2022.

58% of organizations are building-edge compute capabilities in 2021

5% of core supporting infrastructure is used at the edge (ie, outside of core data centers)

92% say that location has a “major impact” on IoT success

51% of IoT workloads are executed in an edge environment

34% say that location has a “major impact” on IoT success

Manufacturing and logistics
Financial services/retail banking
Healthcare
Retail
Media and entertainment
Gaming
Technology

Driven by industry- and application-specific requirements, we expect 53% of all IoT workloads to be executed in an edge/near-edge venue by 2022.

As a critical component of an enterprise hybrid IT architecture, an edge private cloud can support key industry use cases to deliver unique advantages, including:

- Rapid time-to-deploy
- Distributed business process operations
- Greater operational control
- Mission-critical app/use case performance
- Achievement of business-critical digital outcomes

80% of organizations have or plan to have hybrid IT architecture in place in 2021

But not every edge is the same:

- On-prem edge
- Managed, but requires on-site IT
- Public cloud 'pretending' to be an edge
- An edge private cloud

Technical
- Security, secure, modern and IT-managed
- Orchestrated with other enterprise/ hybrid on-prem and cloud infrastructure
- Delivered and priced on-demand as a service

Business
- Secure, secure, modern and IT-managed
- Orchestrated with other enterprise/ hybrid on-prem and cloud infrastructure
- Delivered and priced on-demand as a service
- Remote data management
- Cloud-native, secure, modern and IT-managed
- Orchestrated with other enterprise/ hybrid on-prem and cloud infrastructure
- Delivered and priced on-demand as a service

Lumen is a technology company that enables organizations to benefit from emerging applications that power the 4th Industrial Revolution. Lumen and VMware are working together to relentlessly unleash the potential of data – leading to more capable and efficient edge computing and pervasive technologies.

Visit Lumen at Lumen.com/edge
Visit VMware at VMware.com

©2021 S&P Global Market Intelligence | WWW.451RESEARCH.COM

The content of this artifact is for educational purposes only. S&P Global Market Intelligence does not endorse any companies, technologies, products, services, or solutions. Permission to reprint or distribute any content from this artifact requires the prior written approval of S&P Global Market Intelligence.