

How Next-Generation Technologies Are Powering Digital Transformation

Top Challenges in 2023 and How Technology Is Solving Them



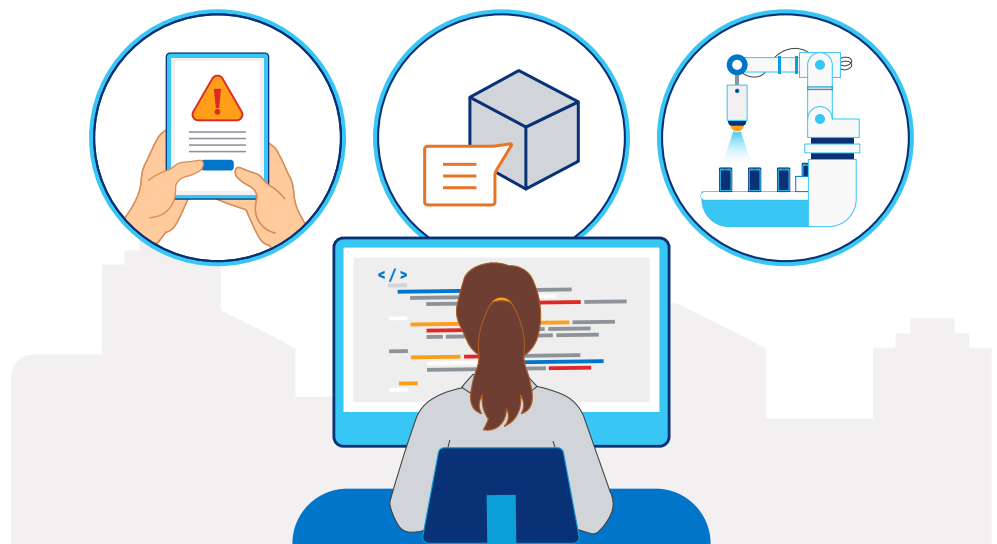
Table of Contents

Executive Summary	3
Top technology trends	5
Then vs. now: What changed since our last survey	12
Enabling next-gen opportunities with an all-in-one platform	13
Lumen: The fastest, most secure platform for next-gen apps and data	15
Next steps: Becoming a digital-first enterprise	16
Survey methodology	17
Lumen: The platform for amazing things	17
Appendix	18

Executive Summary

In June 2020, we conducted our first global research study on the impact of technology trends across industries to learn how enterprise businesses were responding to these challenges and opportunities.

Technology and the world have transformed radically since that initial survey, so in September 2022 we launched an updated survey to see how perceptions and real-world applications of technologies have evolved, polling 900 IT decision-makers (ITDMs) from North America, Europe, Asia Pacific and Latin America. The individuals polled represent companies in a range of industries and sizes ranging from 100 to 500+ employees.





What we learned

In 2023, three trends characterize the IT landscape:

- Using next-gen technologies to create high revenue-generating innovations
- Securing and scaling critical applications
- Efficiently supporting hybrid environments

Digital transformation remains a driving force for organizations worldwide. Enterprises are racing to take advantage of new opportunities to differentiate themselves and grow revenue made possible by artificial intelligence (AI), machine learning (ML), virtual and augmented reality (VR/AR) and the Internet of Things (IoT).

The IT leaders polled revealed that their businesses require new models—including networking, edge computing and Secure Access Service Edge (SASE)—to gain the agility needed to stay competitive, accommodate the widescale shifts in technology occurring today and adapt seamlessly to future disruptions.

Network modernization emerged as a key theme as it relates to connecting hybrid and distributed enterprises. A lack of modern infrastructure and applications can make it difficult (if not impossible) to keep remote employees productive, offer satisfying customer experiences and realize the true value of emerging applications and technologies.

What organizations require is a platform that delivers networking, security and edge capabilities as an integrated, consumption-based experience—enabling businesses to create and grow revenue and adopt new technologies quickly and with confidence.

The decision-makers we surveyed almost unanimously agree that application platforms are necessary to drive their next-gen apps and critical growth initiatives. But platform providers must offer managed services and global network resources, along with simple, easily integrated solutions available through digital marketplaces.

Overall, this poll illuminates how business objectives, transformational technologies and evolving societal factors intersect. Some findings, such as the more widespread adoption of edge and application platforms, indicate progress. Others, like the continued inability of IT infrastructures to handle growing data workloads and low-latency apps, indicate that there is still work to do. However, the findings suggest that businesses realize the value of—and are taking steps to modernize—their IT infrastructures, with the ultimate goal of continuously improving business outcomes.



Top technology trends in 2023

Over the past two years, the adoption of digital technologies and their strategic importance accelerated dramatically. Now businesses, and even entire industries, have an opportunity to reimagine and revitalize themselves by using cutting-edge tools to boost performance, shape new business models and drive growth.

Three core trends emerged from our latest research, underscoring the tremendous impact of emerging technologies on enterprises around the world.

Trend 1: Innovations driven by next-gen technologies are producing the biggest revenue gains

It is easy to see why so many enterprise innovation and growth initiatives now integrate AI, ML, AR/VR and other emerging technologies. These advances are empowering companies to scale processes on demand, improve resiliency, minimize infrastructure investments and deploy solutions rapidly, securely and cost-effectively—outcomes that are driving the bulk of many organizations' trending revenue.

These tools help organizations scale processes on demand, improve resiliency, minimize infrastructure investments and deploy solutions rapidly and securely—improvements that can drive revenue and enable companies to outperform the competition.

Advanced technologies can also transform customer experiences. Today's customers desire fast, connected, personalized experiences wherever they go. And thanks to the shift from brick-and-mortar to digital interactions brought on by the global pandemic, companies that can't provide a simple, seamless, on-demand experience will lose business to competitors that can.

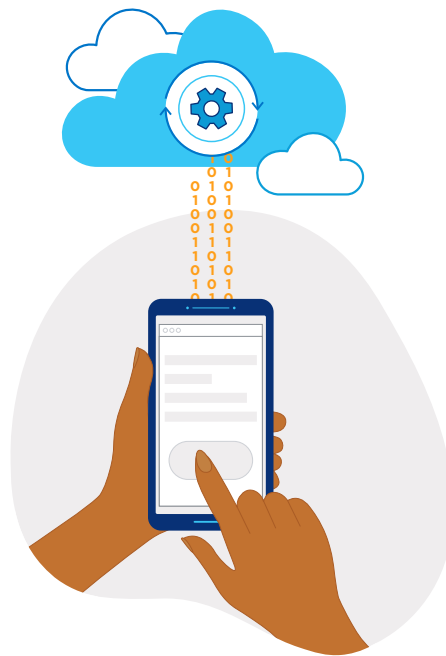
As emerging tech becomes more available and accessible, enterprises are applying it to nearly every aspect of their business, from the supply chain to marketing. Use cases include embedding advanced technologies into legacy products and services to boost performance while developing proprietary revenue-generating offerings aimed at attracting and retaining customers.

So, what are the next steps to creating these transformative experiences?

Behind the trend: Edge-first architecture

In just over two years, the edge has gone from an exciting concept to a must-have reality. Organizations that want to develop, deploy and take advantage of next-generation technologies such as AI, AR/VR and the IoT need access to low-latency computing. And this demand is driving them to adopt edge-first architectures to support their latency-sensitive, high-bandwidth apps.

Nearly 9 in 10 (89%) Global ITDMs say edge solutions are critical to the future growth of their organizations (Figure 1).



By processing data where people and devices interact, companies can gain real-time market insights, transform operations and products, speed innovation and accelerate the delivery of products, services and applications to market.

Businesses that succeed in these areas will enjoy a significant competitive advantage, as evidenced by the **87% of organizations that plan to adopt edge solutions within the next three years (Figure 1).**

And when it comes to latency, less is more. Applications like robotics or autonomous vehicles don't have time to travel to the public cloud. That's why **significantly more Global ITDMs (71%) require a latency time of 10ms or less today versus two years ago, with 25% requiring ≤5 milliseconds (Figure 2).**

But addressing latency needs is only one piece of the puzzle.

Trend 2: Securing and scaling key applications remains a challenge

Businesses thrive on their ability to differentiate themselves in the marketplace and connect to their customers, partners, suppliers and stakeholders anywhere in the world faster than the competition. As companies acquire information, create actionable insights and deliver improved products, services and experiences, managing the data and applications that make this possible continues to be one of their biggest obstacles.

9 in 10 Global ITDMs cited application and data security as their number one IT concern (Figure 3).

This challenge is compounded by the fact that data volumes continue to grow exponentially. Half of the global ITDMs surveyed have seen **data workloads double in the last two years; 2 in 5 have seen workloads quadruple or greater (Figure 4).**

While many businesses have invested heavily in next-gen technologies and **4 in 5 Global ITDMs say the nature of their applications is a key differentiator for their service and customer interactions, a substantial number are still not ready to support increases in users, data volumes and application performance needs (Figure 5).**



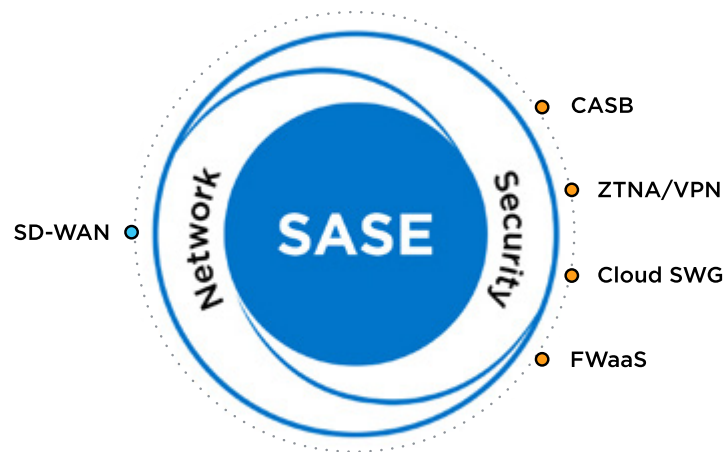
Meanwhile, ensuring the privacy and security of massive amounts of customer data generated by apps is top of mind for half of Global and C-Level IT leaders, who recognize application security as the top priority for their hosting platforms, eclipsing application performance and availability in nearly every region surveyed.

The need to integrate infrastructure and applications while protecting customer data demands a new solution model that addresses networking and security holistically.

Behind the trend: Unified network access, security and management

Our world is increasingly made up of distributed enterprises with multiple branches and remote workers, powered by cloud-based applications and services that can be accessed from virtually anywhere, at any time. Most home or branch offices, retail stores and manufacturing sites lack the security and compliance required by modern organizations. This calls for a completely new approach to enterprise network architecture: the combination of networking and security into a single service controlled and managed in the cloud.

This convergence of technologies is known as SASE, short for Secure Access Service Edge. Comprised of five core networking and security technologies delivered as a service, the SASE framework is ultimately better suited to meet the challenges of modern enterprises than a patchwork of solutions. When all these components work together, they help deliver efficient application performance and secure access for any user from any device located virtually anywhere.



The SASE network and security framework converges SD-WAN and security solutions into a unified, cloud-delivered platform that securely connects users, locations and devices to apps and resources.

85% of Global ITDMs agree that implementing SASE is critical to their organization's long-term growth (Figure 6).

More than half of Global ITDMs believe SASE will benefit their organization and keep it more secure, with most **(55%)** saying they have either already implemented SASE solutions or plan to within the next 12 months (Figure 6).

Increasingly, business leaders demand a network and security framework that supports a mix of deployment types: **94% of C-Level IT executives say any credible application platform must offer a variety of cloud-to-edge-to-premise delivery capabilities (Figure 7).**

SASE is critical to how companies and their people work today. This new normal, defined by workforce flexibility and distributed apps and data, calls for a new way of thinking about networking and security.

Trend 3: Network modernization is vital to efficiently support hybrid enterprises

In the early days of the COVID-19 pandemic, many organizations rushed into remote work, prioritizing speed over efficiency or even user experience. But as the world emerged from the pandemic and companies realized their distributed and hybrid workforces could boost productivity and efficiency, among other benefits, creating a better hybrid model has become a top priority.

High-performance network capabilities are also essential for enterprises to realize the true business value of emerging applications and technologies. As businesses move closer to their customers, the need to effectively connect employees and systems to real-time information is vital, but many businesses lack the network capacity.

More than 4 in 5 (85%) of Global ITDMs agree today's application demands require something different than a centralized cloud model (Figure 8).

A true distributed enterprise—one that can include headquarters, branch locations, edge and IoT devices, multiple clouds and on-premises data centers, plus a remote workforce—is only as strong as the network it runs on. **2 in 3 Global ITDMs state that their network must accommodate dynamic events such as backups, application deployment and application migration (Figure 9).**

Many businesses are starting to recognize their networks as business enablers that can improve the experiences of employees and customers alike while maximizing the value of their investments in cloud, edge and IoT. Legacy networks lack the agility and intelligence to meet the demands of digital business, and organizations are making network modernization a priority.

Here are four technologies behind the trend that can deliver the flexibility, connectivity, power and performance businesses need today—with the ability to scale easily for future needs.

Unified collaboration tools to keep workforces connected

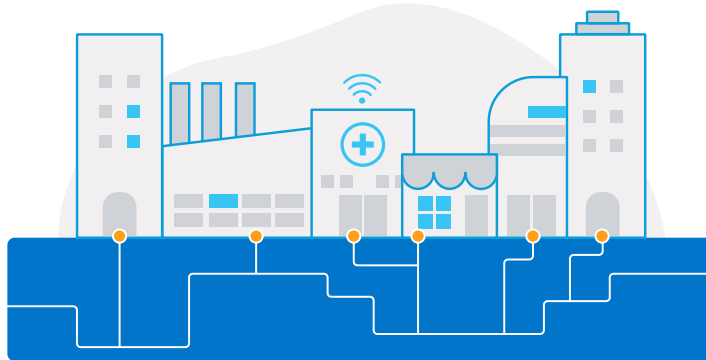
With the widespread shift to hybrid work, unified communications and collaboration (UCC) tools are vital to drive business growth and support effective internal employee and external customer experiences.

2 in 3 Global IT executives say their businesses maintained or boosted productivity during the peak of the pandemic by leveraging collaboration solutions (Figure 10)—and about **3 in 4 Global ITDMs** see robust collaboration solutions as vital to their productivity and business operations (Figure 11).

Collaboration solutions have also become a critical component of next-generation technology platforms, thanks to their ability to scale to meet workforce demands and integrate seamlessly with other critical technology solutions such as office productivity suites and CRM tools.

Fiber internet—the backbone of modern business

As work environments adapt and the adoption of cloud and SaaS applications continues to grow in the wake of the pandemic, many companies are looking for ways to empower employees wherever they are—and fiber internet is the answer. **9 in 10 Global C-Level leaders say fiber infrastructure is essential to connect to a distributed cloud network (Figure 12).**

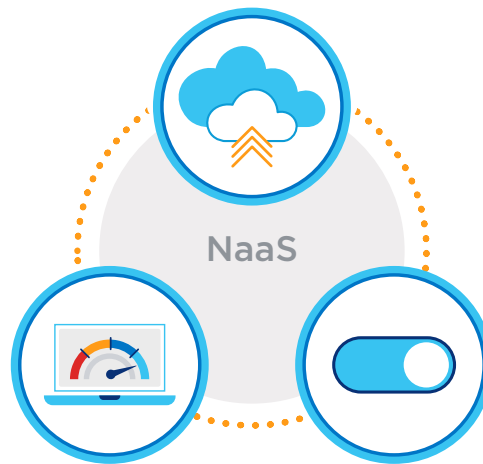


Offering fast, symmetrical speeds and high reliability, fiber-optic connections can bolster productivity and improve end-user experiences, especially for businesses looking to accommodate an evolving workforce. With collaboration-ready fiber internet, high-bandwidth services such as videoconferencing can exist alongside tools such as instant messaging, VoIP and other services on the same network, providing remote workers with the same access to tools as their on-premises colleagues.

But fiber is more than just a high-speed connection. As companies modernize their networks to accommodate new bandwidth-intensive use cases, security is paramount. Fiber-optic connections are innately more secure than broadband because fiber cables are tougher for hackers to tamper with, and light pulses are more secure than electrical signals.

Dedicated Internet Access (DIA) takes fiber's reliability and security even further. An internet connection that goes directly to a business and is never shared with neighboring buildings or users, DIA delivers a consistently secure, high-performing symmetrical connection to public cloud applications, remote offices, data centers and more.





Digitization with Network-as-a-Service (NaaS)

Network-as-a-Service (NaaS) is a flexible way to consume enterprise network infrastructure that enables organizations to keep pace with innovation, meet rapidly changing business needs and optimize network performance and user experiences through a cloud-like subscription model.

NaaS providers already have the infrastructure and expertise behind their solutions, so getting a digital strategy off the ground with this model does not require a large capital investment—resulting in lower upfront costs, faster ramp-up and greater flexibility and agility.

Network providers as strategy partners

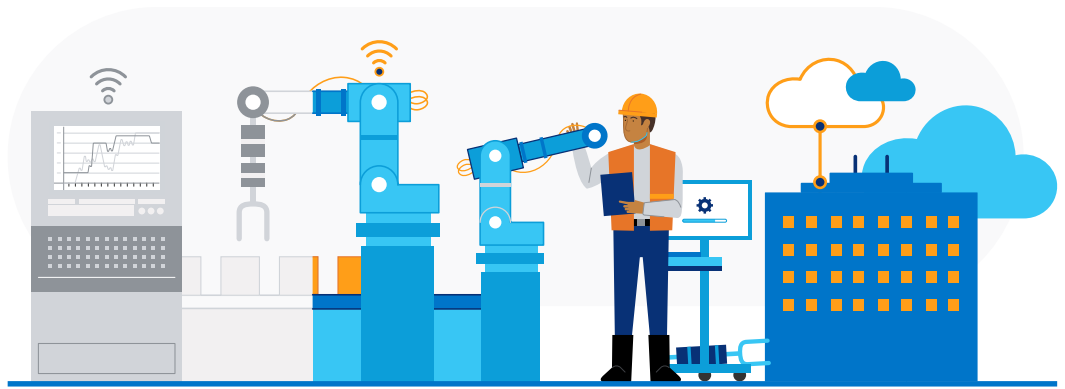
In a progressively digitized world, the benefits of a digital business are clear. But choosing the right physical infrastructure, migrating apps to the cloud, switching internet service providers, and buying and managing software to run it all can seem daunting. When it comes to implementing a digital-first strategy, enterprises are turning to network providers as strategic technology partners.

Network providers can supply a readiness roadmap that includes integration of edge-to-cloud operations, facilitating the development of low-latency use cases—with integrated security across the whole stack to keep the process safer.

Working with a comprehensive network provider over multiple individual solution providers can offer many advantages, including:

- Real-time visibility into network events as the first line of defense against intrusion and other potential cyber threats
- Simplified management of multi-cloud and geographically distributed networks
- Managed services designed to reduce costs and personnel resources
- Best-in-class partners offering the most advanced technology without vendor lock-in

These trends have evolved because of the intense focus on digital transformation over the last several years.



Then vs. now: What changed since our last survey

Most respondents in our 2020 survey said technological advancement would have a substantial impact on both society and the future of business, and **90% believed that a business's ability to quickly acquire, analyze and act on data would be a key factor in determining if they will be a technology leader in the future.**

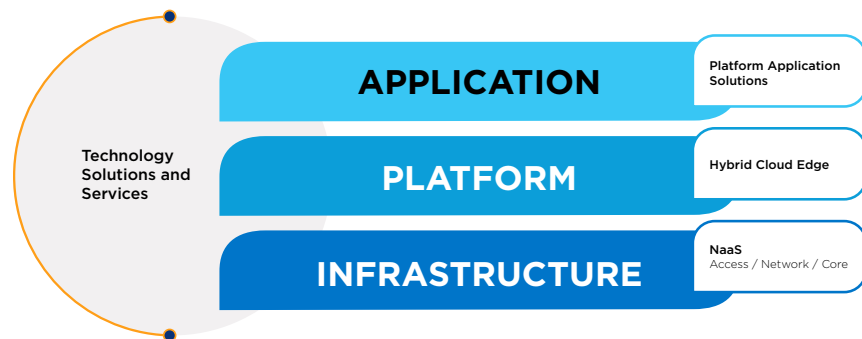
We recently conducted our second survey to find out how these perceptions have changed since 2020. Here is how key findings from the current survey compare to those in our previous poll.

- **Technology is having a more significant impact on society.** IoT, fiber infrastructure and edge cloud services are among many technologies to make double-digit jumps in impact since 2020.
- **Global is essential.** ITDMs are more likely to say global network capabilities are crucial now compared to two years ago.
- **Centralized clouds are no longer sufficient.** 85% of ITDMs agree that today's application demands require something different than a centralized cloud model, compared to only 28% in 2020.
- **Low latency is in high(er) demand.** Today, 71% of Global ITDMs require a latency time of 10 milliseconds or under and 25% require 5 milliseconds or less for their applications compared to 60% and 20% respectively in 2020.
- **Security is top of mind today.** As the global threat landscape continues to adapt, evolve and grow, more Global and C-Level ITDMs identify the challenge of securing their organizations' data as the most challenging task in 2022 than in 2020 (Figure 13).
- **Cyberthreats are a risk to long-term growth.** A majority of Global ITDMs have seen more than a 200% increase in data theft attempts in the past two years, with nearly 25% reporting triple the number of attempts or greater (Figure 14).

Now it's time to find out how you can capitalize on emerging applications and the data powering modern business.

Enable next-gen opportunities with an all-in-one platform

Businesses today have virtually unlimited ways to innovate and grow thanks to the emergence of new technologies. And their ability to harness the power of these advancements is dependent on modern IT systems designed to securely deliver and orchestrate distributed applications and data. Yet many current IT infrastructures are not prepared to support coming increases in users, data volumes and application performance needs—and **8 in 10 Global ITDMs say the bulk of their resources is dedicated to securing distributed applications in response to increases in remote work and latency-sensitive technologies (Figure 15).**



Platforms play a vital role in modern IT environments and are vital for businesses that want to leverage all the advancements made possible by emerging technologies. Virtually every application today depends on a platform to connect it to people and systems, as well as management and orchestration—and **almost all Global ITDMs (89%) have already adopted or soon plan to adopt a platform to drive their next-gen apps and critical growth initiatives (Figure 16).**

But achieving differentiation and competitive advantage takes more than simply adopting a platform. The IT professionals we polled also demand a platform that delivers:

- **Simple solutions designed to meet the bulk of enterprise needs**
Many of these needs can be fulfilled through robust digital marketplaces, which have become a core expectation among IT leaders. 9 in 10 Global ITDMs say the capabilities and solution availability on a platform provider's digital marketplace impact their purchasing decision, as does clear upfront pricing (Figure 17), with 2 in 3 preferring self-service solutions rather than traditional sales from a point-of-contact (Figure 18).
- **Managed support for the successful deployment of advanced applications**
Not every business has the IT staff or expertise to support networking, edge or security services and many want their technical teams to focus on more strategic work. More than 90% of Global C-Level IT executives say they require some level of managed support from their platform providers in the event they don't have the internal resources to support a service (Figure 19), and most won't even consider a platform provider without strong managed services.

- **A global network to support anywhere business**

Respondents almost unanimously agree (96%) that working with a technology provider with global network capabilities is crucial to their future success (Figure 20). In a digital economy, reliable, consistent, worldwide network connectivity is a must-have to reach offices, data centers and stakeholders (employees, partners suppliers and customers) in a variety of locations—including locations outside of major metro areas—as well as anywhere cloud providers have points of presence (PoPs).

- **Seamless integration for high performance**

Businesses running next-gen technologies are characterized by a plethora of intricately connected processes. Seamless integration of all these processes, and the applications powering them, helps eliminate silos, drive overall operational efficiency and optimize IT resources.

In addition to these critical requirements, IT leaders named network protection and edge computing services among the most in-demand capabilities they look for when choosing a platform provider (Figure 21).

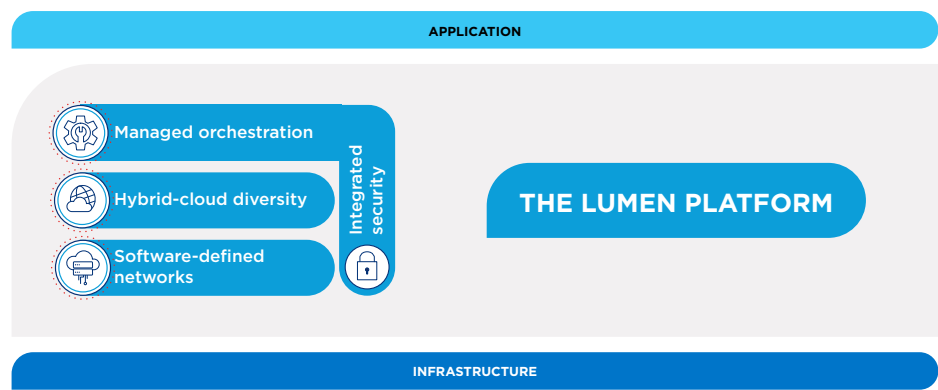


Lumen: The fastest, most secure platform for next-gen apps and data

Today, businesses must find a better way to effectively manage high-performance, low-latency applications and maximize real-time engagement.

This demands a new kind of platform architecture—one that is inherently equipped with four unified IT layers of next-generation technology:

- Software-defined networks
- Hybrid cloud diversity
- Managed orchestration
- Integrated security



But just having all four layers separately isn't enough. To deploy the right apps and services to the right places quickly and securely, all four must be rooted in a strong, physical infrastructure.

The Lumen Platform runs on the Lumen Network, the #1 peered global network.¹ This establishes a foundation for each layer to operate simultaneously, creating a single, unified application delivery solution that:

- Delivers real-time app performance on a growing network of 60+ global edge compute nodes
- Enables dynamic connections to more than 2,200 public and private data centers
- Is powered by ~400,000 global route miles of low-latency fiber connectivity

This is how Lumen supports and simplifies the management of next-gen technologies on one of the largest, most connected fiber networks in the world—by allowing apps to live across a variety of environments and bringing compute services closer to where they're needed, when they're needed.

Built on a strong, physical infrastructure that unifies core IT layers of next-gen innovation and backed by 30+ years of network management experience and expertise, the Lumen Platform is ready to support the needs of today and the promises of tomorrow.

Next steps: Becoming a digital-first enterprise

If your company wants to enjoy the competitive advantages offered by new and emerging technologies, you need a plan. One that involves not only technologies—but people, systems and processes from across the enterprise.

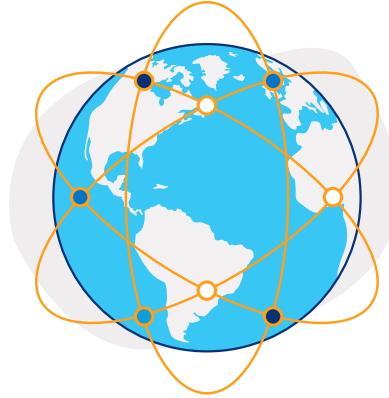
Here are six concrete steps to consider as you determine which technologies will have the greatest impact on your business. These recommendations are intended as a starting point and should be adapted to address the unique needs of your organization.

1. **Embolden your leadership** to make people the core of your transformation.
2. **Develop goals, measurable objectives and a plan** to formalize your aspirations.
 - Know your competition and pinpoint your technology competitiveness
 - Understand your capabilities, strengths, weaknesses and opportunities to improve
3. **Determine the flow of your business operation.** Make sure your employees are engaged in managing the flow to ensure that current processes, tools, systems and data are ready for the race.
4. **Educate the team on technologies that support your transformation plan.** Understand how technology can differentiate or disrupt the industry.
5. **Activate a five-year financial plan.** Your plan should include CAPEX projections, and alternative “what if” acquisition models of target technologies.
6. **Seek out “best fit” processes and technologies** for moving forward with emerging tech.

By forming a plan and engaging the right people, you will set the appropriate pace for your digital transformation, so you can be ready to seize new opportunities when they come along.

A partner who is well-versed in transformation will bring the tools, experience and expertise that next-gen technologies demand. Lumen can seamlessly harness the capabilities of cloud and edge computing to orchestrate apps, data and infrastructure, while also offering integrated security and collaboration opportunities, plus managed services to bring it all together for you.





Our survey methodology

Quadrant Strategies uses custom market research to help the world's most prominent companies build world-class brands and navigate their most pressing challenges.

In August and September 2022, Quadrant Strategies conducted an online quantitative survey with senior IT decision-makers (ITDMs) in 8 countries. These individuals have the title of Senior Manager or higher, sole or shared decision-making authority over purchasing decisions for at least a part of the business and work at an organization with at least 100 employees.

Approximately 25% of respondents were selected from companies with 100-499 employees, while roughly 75% work for companies with 500+ employees.

Lumen: The platform for amazing things

Our core purpose is to further human progress through technology and nowhere is this opportunity more apparent than the convergence of data, applications and technologies taking place today. We believe humanity is always at its best when it produces innovative technologies that advance the ways we live and work.

In support of this purpose, our mission is to digitally connect people, data and applications—quickly, securely and effortlessly.

Our philosophy of continuous improvement means we tirelessly pursue exceptional outcomes for our customers and partners. And we do all this while boldly embracing change with a daring spirit to excite and inspire our customers to imagine new possibilities.

Learn how your business can thrive in a world powered by emerging applications and data at lumen.com

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¹CAIDA, AS Rank, December 2022.

Appendix: Quadrant Strategies Poll Data

A September 2022 poll of 900 IT pros in 10 countries conducted by
Quadrant Strategies

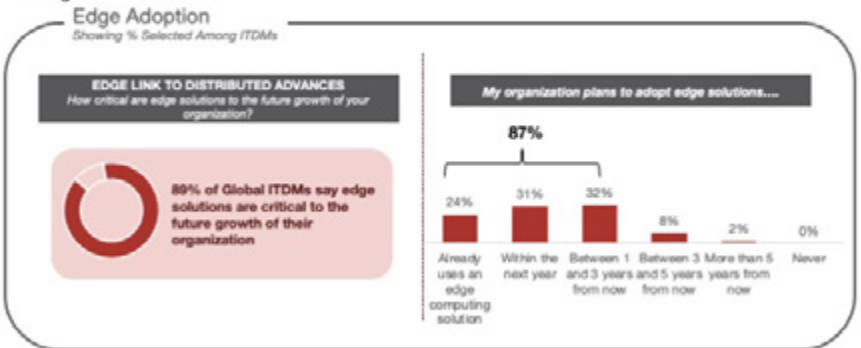
F1

Source: Quadrant Strategies, September 2022

Edge Computing - 4

Global ITDMs universally say edge solutions are essential for the future growth of their businesses

Almost 9 in 10 ITDMs plan to adopt edge solutions in the next three years as majority deem it critical to future growth



1

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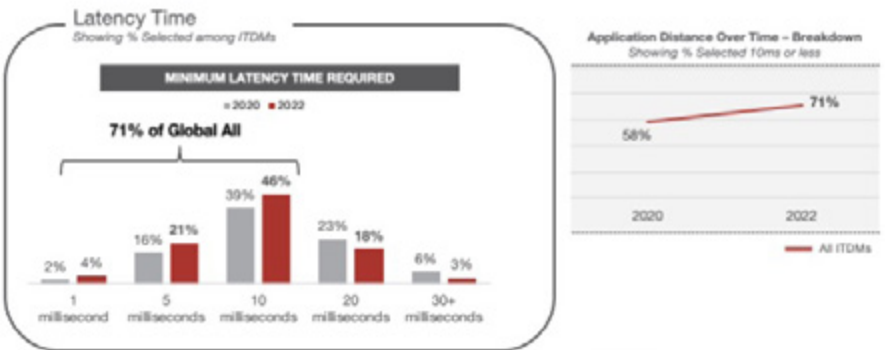
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Source: Quadrant Strategies, September 2022

Edge Computing - 3

71% of Global ITDMs require a latency time of 10 milliseconds or under for their applications

Necessity for lower latency has increased significantly since 2020



2

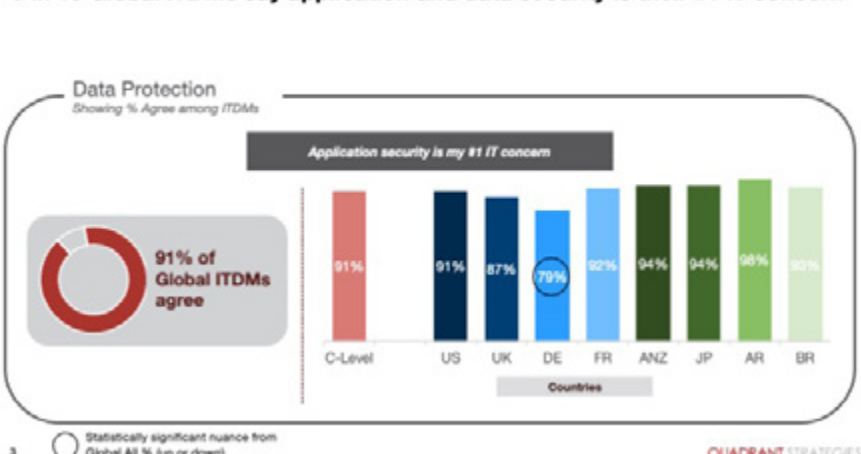
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Source: Quadrant Strategies, September 2022

Cybersecurity - 3

9 in 10 Global ITDMs say application and data security is their #1 IT concern



3

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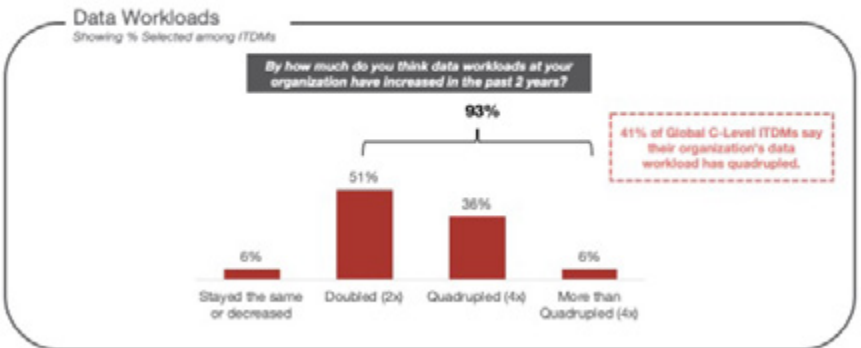
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Source: Quadrant Strategies, September 2022

Data & Application Trends - 2

Nearly all Global ITDMs say that their data workloads have at least doubled in the last two years

Half of Global ITDMs have seen workloads double; 2 in 5 ITDMs have seen workloads quadruple or greater



4

QUADRANT STRATEGIES

F5

Source: Quadrant Strategies, September 2022

Data & Application Trends - 4

4 in 5 Global ITDMs say their applications are a key differentiator for their service and customer interactions



5

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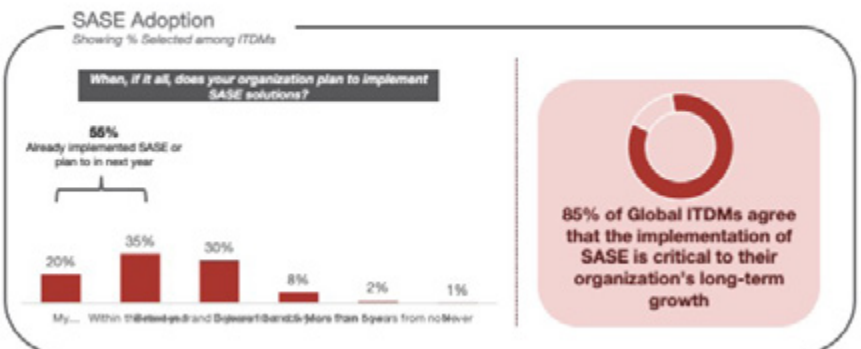
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Source: Quadrant Strategies, September 2022

SASE - 3

Most Global ITDMs say they have either already implemented SASE solutions or plan to within the next 12 months

Nearly all Global ITDMs say SASE solutions are critical to their organization's long-term growth



6

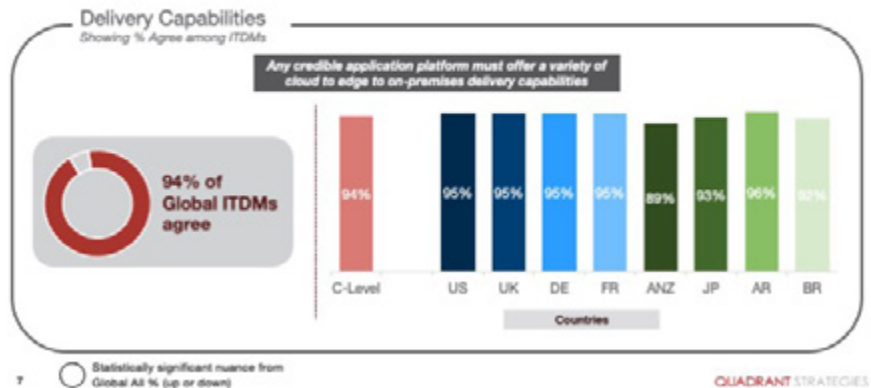
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Source: Quadrant Strategies, September 2022

SASE - 2

Global ITDMs universally agree that any credible application platform must offer a variety of cloud to edge to on-premises delivery capabilities

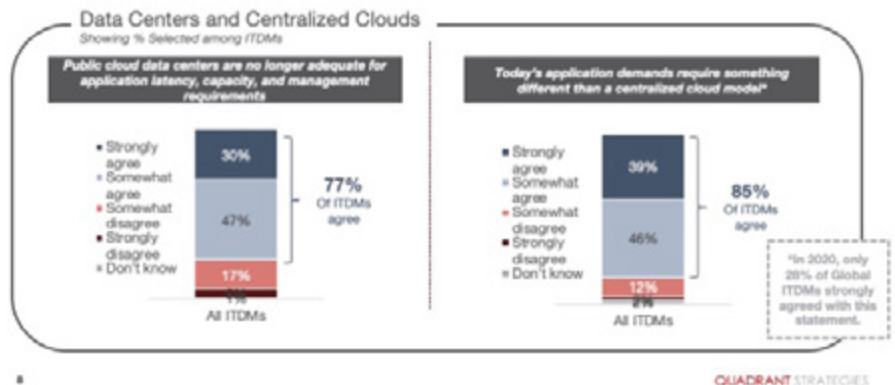


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Source: Quadrant Strategies, September 2022

Networking - 2

Global ITDMs overwhelmingly agree that data centers are no longer adequate for latency, capacity, and management requirements, and a new model is needed



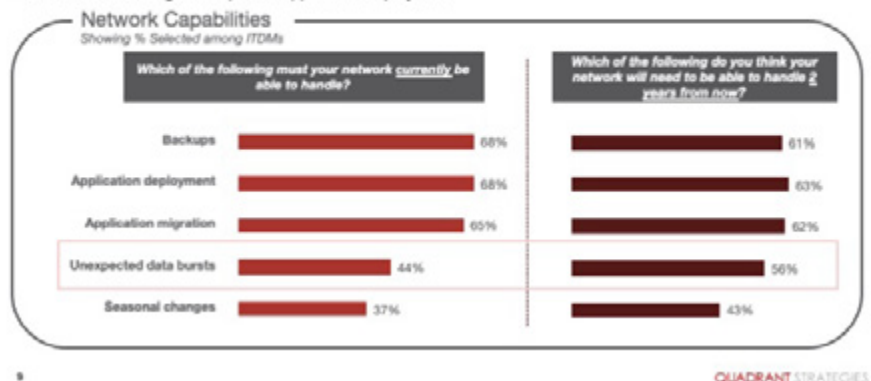
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Source: Quadrant Strategies, September 2022

Networking - 1

Global IT leaders say that their networks must be capable of handling multiple tasks including backups and app deployment and migration

Unexpected data bursts are seen as a much bigger problem for two years from now; ITDMs' current concern is centered on handling back-ups and application deployment



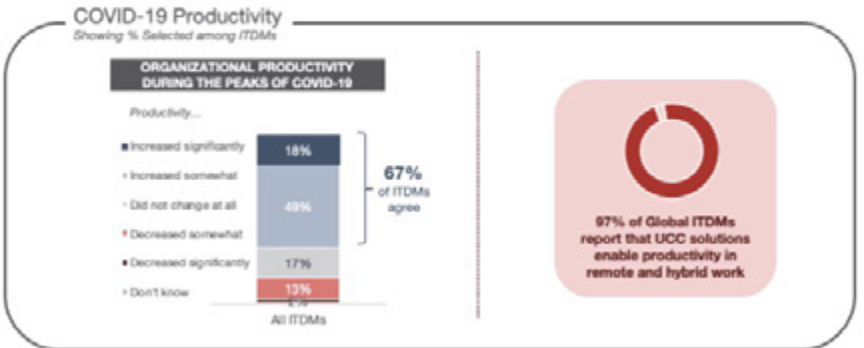
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Source: Quadrant Strategies,
September 2022

UCC - 1

Global business leaders agree that distributed work combined with collaboration tools has been successful

Global ITDMs also universally say UCC solutions enable productivity for remote and hybrid work



10

QUADRANT STRATEGIES

F11

Source: Quadrant Strategies,
September 2022

UCC - 4

Global ITDMs say strong collaboration tools are fundamental for their organization's productivity and business operations



11

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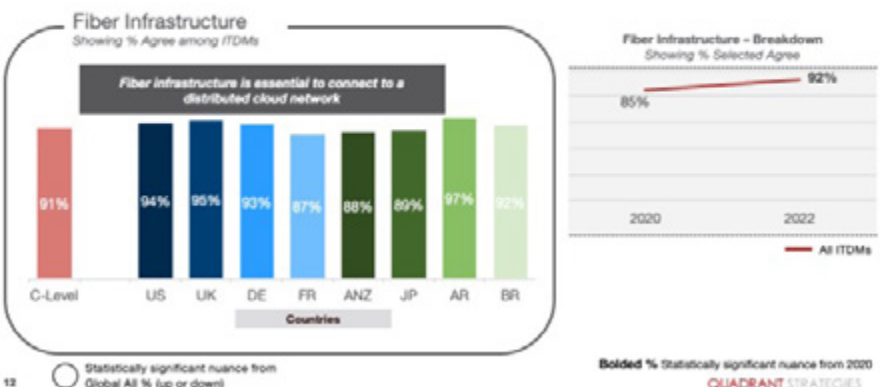
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Source: Quadrant Strategies,
September 2022

Networking - 3

9 in 10 Global ITDMs say Fiber infrastructure is essential for distributed cloud environments

The belief that Fiber Infrastructure is essential has increased significantly since 2020



12

QUADRANT STRATEGIES

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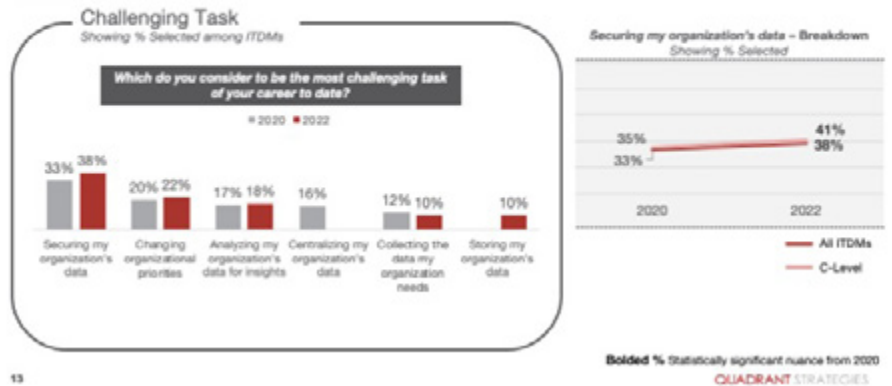
Source: Quadrant Strategies, September 2022

Cybersecurity - 4

Tracking

1 in 3 Global ITDMs say securing their organization's data is the most challenging task of their career

Significantly more Global and C-Level ITDMs identify the challenge of securing their organizations data in 2022 than in 2020



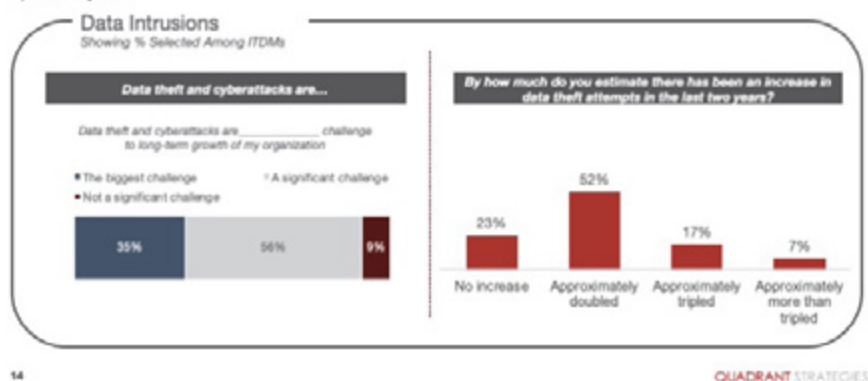
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Source: Quadrant Strategies, September 2022

Cybersecurity - 2

Over half of Global ITDMs say that cyberattacks and data theft have become a challenge to their long-term growth

A majority of Global ITDMs say they have seen more than a 200% increase in data theft attempts in the past two years



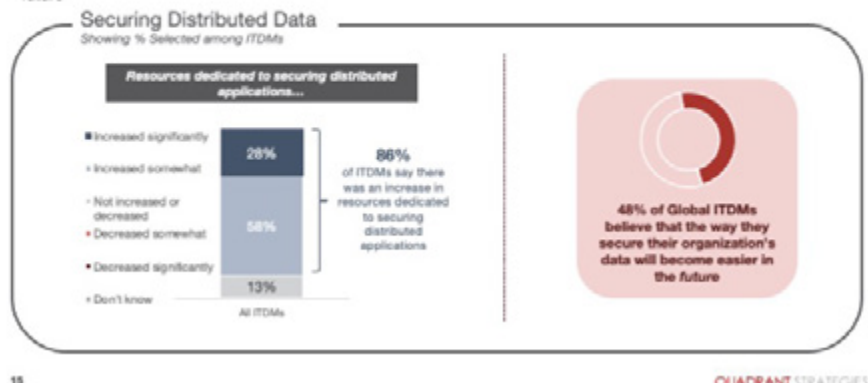
F15

Source: Quadrant Strategies, September 2022

Cybersecurity - 5

8 in 10 Global ITDMs say there was an increase in resources dedicated to securing distributed applications

Additionally, less than half believe they way they secure their organization's data will become easier in the future

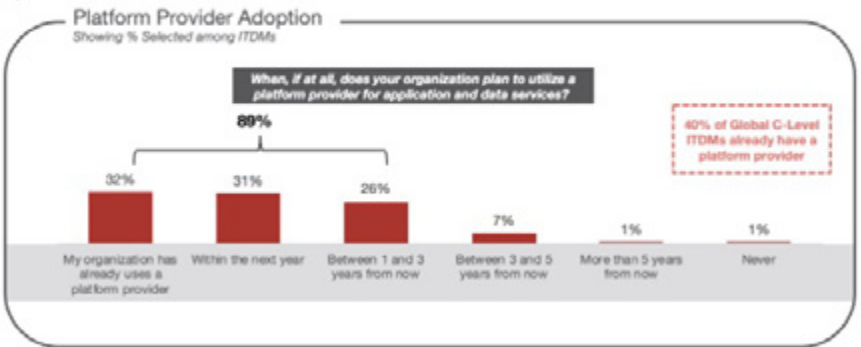


F16

Source: Quadrant Strategies, September 2022

Platform Providers - 3

Almost all global business leaders have already adopted or soon plan to adopt an application platform to drive their next-gen apps and critical growth initiatives



16

QUADRANT STRATEGIES

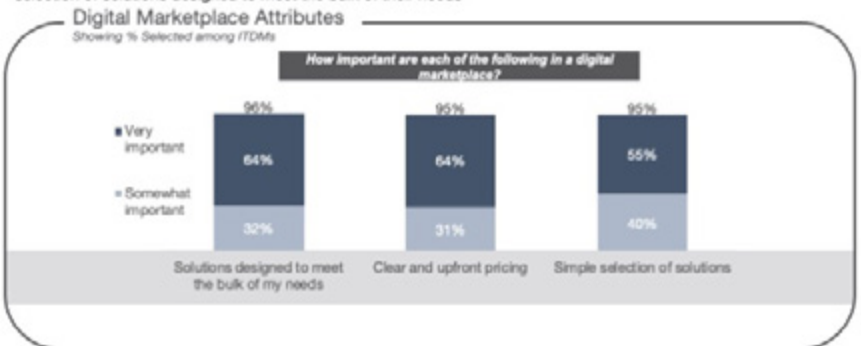
F17

Source: Quadrant Strategies, September 2022

Digital Marketplace - 3

ITDMs universally say it is important for a digital marketplace to offer solutions which will meet multiple needs

Over 9 in 10 ITDMs believe a digital marketplace is ineffective without clear up-front pricing and having a simple selection of solutions designed to meet the bulk of their needs



17

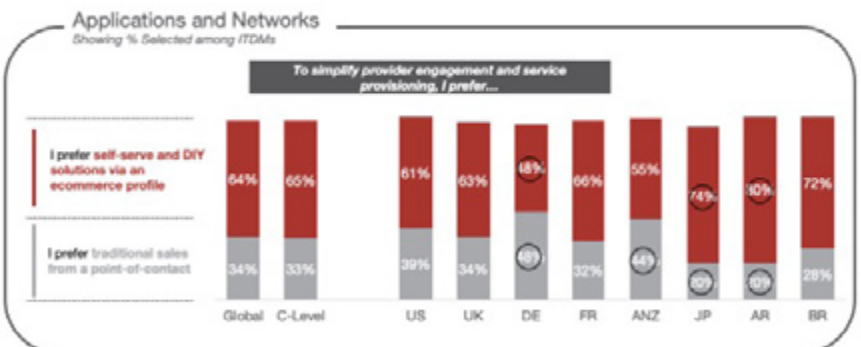
QUADRANT STRATEGIES

F18

Source: Quadrant Strategies, September 2022

Digital Marketplace - 2

2 in 3 ITDMs say they prefer self-service solutions rather than traditional sales from a point-of-contact



18

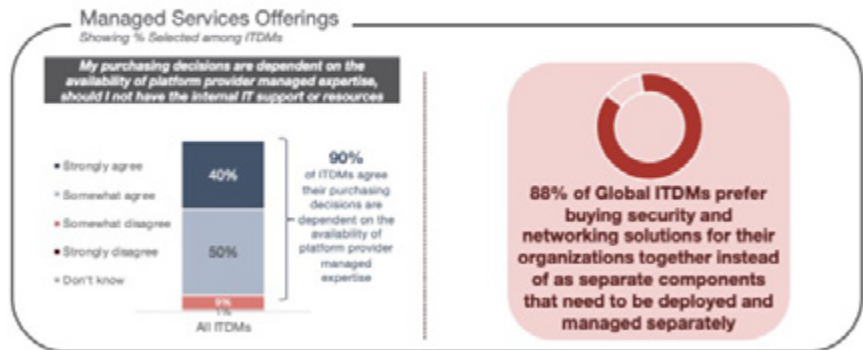
○ Statistically significant nuance from Global All % (up or down)

QUADRANT STRATEGIES

Source: Quadrant Strategies, September 2022

Managed Services - 2

9 in 10 IT leaders say their purchasing decisions depend on the expertise of platform providers offering managed services should they not have internal resources



90

QUADRANT STRATEGIES

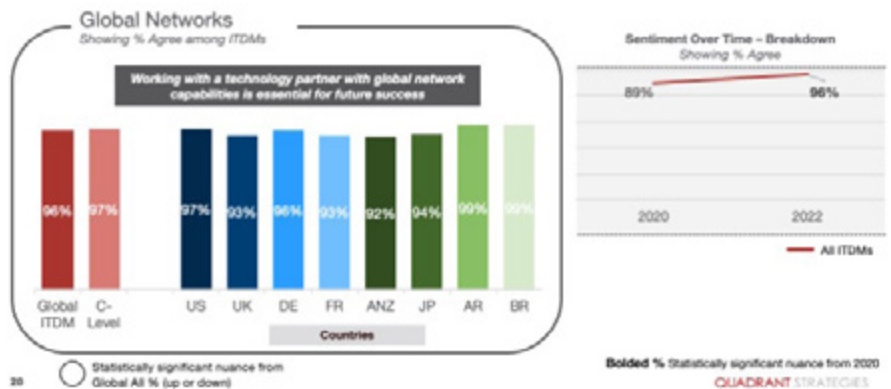
Source: Quadrant Strategies, September 2022

Platform Providers - 1

Tracking

Global ITDMs unanimously say working with a technology provider with global network capabilities is crucial to their success moving forward

ITDMs are more likely to say global network capabilities are crucial now compared to two years ago



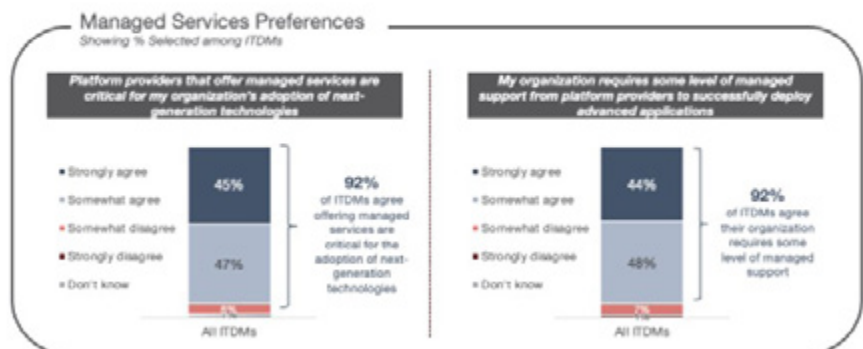
310

Bolded % Statistically significant nuance from 2020

Source: Quadrant Strategies,
September 2022

Managed Services = 1

Global ITDMs overwhelmingly say that their organizations require managed support and expertise to deploy advanced applications



31

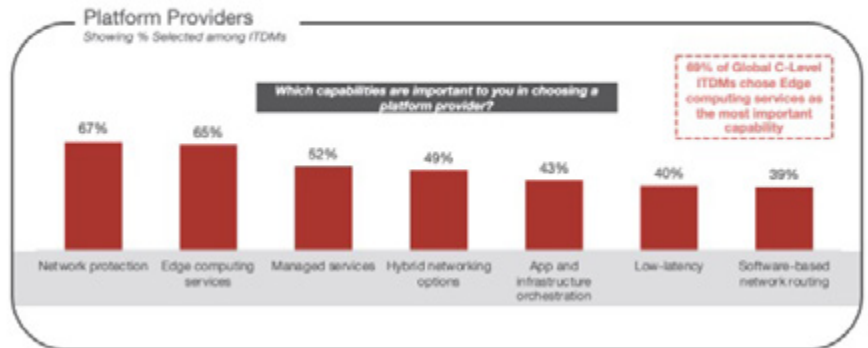
QUADRANT STRATEGIES

F22

Source: Quadrant
Strategies,
September 2022

Platform Providers - 2

Global ITDMs say network protection, edge computing services, and managed services are the most important capabilities when choosing a platform provider



22

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