# 

# 2023 GLOBAL TECH TRENDS SURVEY Innovation accelerates at pace as businesses look to the future

Exploring global digital leaders' views on the trends, challenges and opportunities shaping businesses around the world.



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# INTRODUCTION Executive summary

After several tumultuous years, business leaders are looking to their IT teams to protect their organization from threats, facilitate geographic and financial growth, and ensure innovation accelerates at pace.

The pressure on tech teams to enable future-proofed business strategies has never been greater. IT is now firmly on the board-level agenda. Yet, with corporate budgets under pressure amidst continued economic uncertainty, the need to deliver real return on investment in new technologies and digital strategies is paramount.

In its fifth iteration, our 2023 Global Tech Trends Survey gathers the opinions of 2,900 IT decision-makers from diverse enterprises across the Americas, Asia-Pacific and EMEA regions, on the challenges and opportunities they face implementing innovative technology strategies in this complex economic and geopolitical climate. The survey explores everything from benefits and barriers to adopting newer technology such as AI, to how fastevolving technology regulations facilitate or hinder expansion into new markets, to the stubborn skills gaps resulting in investment in team growth in juxtaposition to recent layoffs across geographies and sectors.

The dynamics of doing business around the world continue to shift and evolve, and digital leaders face new challenges every day. We hope the insights provided here can help inform and inspire tech leaders and their teams as they strive to ensure the continued success and survival of their businesses.

**Milind Wagle** Chief Information Officer, Equinix



# INTRODUCTION Background

The Equinix Global Tech Trends Survey explores global digital leaders' views on the trends, challenges and opportunities shaping businesses around the world.

The annual survey provides comparisons of IT strategies across regions and countries around key themes, including:

#### Accelerated pace of innovation

- Al
- Digital twins

#### **Businesses must be future-proof**

- Data sovereignty
- Expansion plans
- Layoffs/company restructuring/skills IT investment

Sustainability and social good

- Digital divide
- Environmental regulations
- Environmental sustainability
- The world is digital
- Evolution of tech strategies

The commentary and data points cited in this report relate specifically to the results of the Equinix 2023 Global Tech Trends Survey.



# INTRODUCTION Methodology



### 2,900 IT decision-makers in 29 markets

Surveyed from March 8, 2023–April 7, 2023



### **EMEA**

x17 (n=1,700)

Bulgaria, Finland, France, Germany, Ireland, Italy, Netherlands, Nigeria, Poland, Portugal, South Africa, Spain, Sweden, Switzerland, Türkiye, United Arab Emirates, United Kingdom



### **Asia-Pacific**

x6 (n=600)

Australia, Hong Kong, India, Japan, Korea, Singapore



# AMER

x6 (n=601)

Brazil, Canada, Chile, Colombia, Mexico, United States



# **Accelerated pace of innovation**

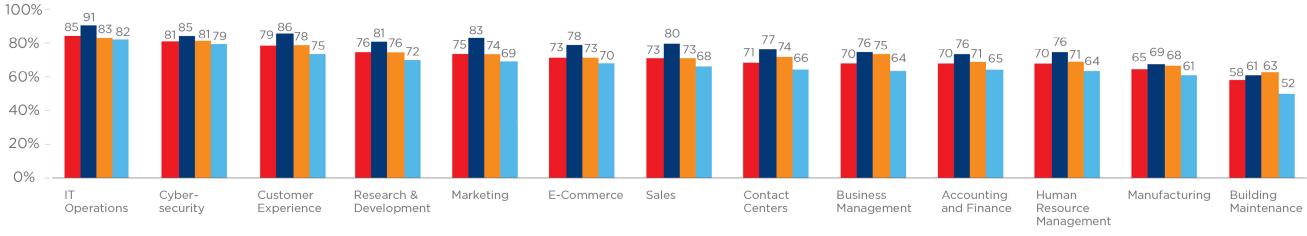
Today's technology advancements are brimming with potential and driving IT decision-makers to explore how best to harness anticipated benefits, promptly. Yet despite AI's promises, leaders have varying comfort levels with adopting it, along with other challenges affecting implementation. Other innovations, like digital twin technology, are also on the rise to optimize areas like performance and quality control. Respondents noted almost unanimously how digital twinning has provided greater productivity and cost savings, among several other advantages.



# ACCELERATED PACE OF INNOVATION **Al in business**

Following a year of significant artificial intelligence (AI) breakthroughs, IT decisionmakers around the world are planning to harness the power of AI across key business areas, from research and development, to customer experience.

IT operations (85%) and cybersecurity (81%) emerged as the top business functions for which companies across the globe use or plan to use AI in the quest to remain at the forefront of technology.



#### Do you currently use or plan to use AI in any of the following business functions?

Asia-Pacific EMEA

AMER

2023

Global



# ACCELERATED PACE OF INNOVATION AI comfort

Despite significant appetite to implement AI, 42% of IT leaders said they are not very comfortable their infrastructure is capable of accommodating AI, and 41% doubted their team's ability to implement the technology.

IT leaders in EMEA are the least confident in embracing AI, with 49% expressing at least some discomfort in their infrastructure and

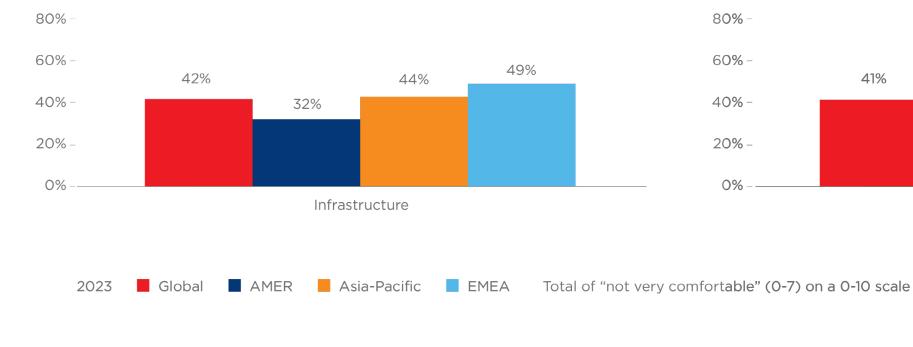
47% in their team's ability. Confidence is higher in AMER, where 32% have doubts over their infrastructure and 31% are not very comfortable with their team's ability in accommodating AI. Asia-Pacific respondents lean toward EMEA's caution, at 44% and 45%, respectively.

31%

Team Ability

# On a scale of 0-10, how comfortable are you with your organization's infrastructure or team's ability to accommodate AI's growing use?

45%



47%

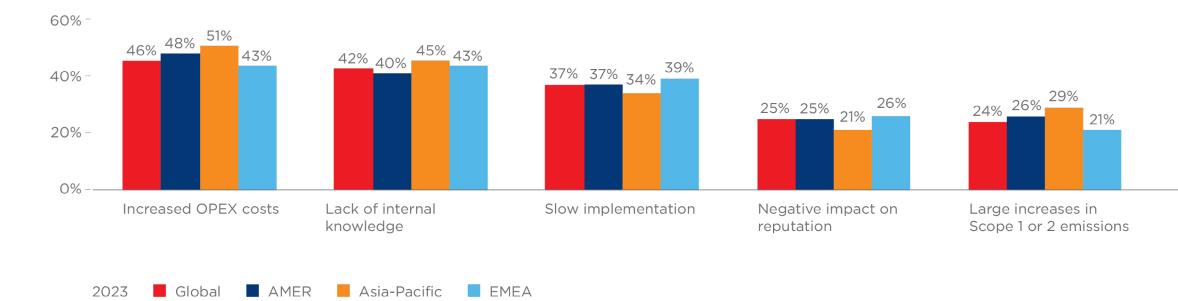


# ACCELERATED PACE OF INNOVATION New tech deterrents

As the world of digital continues to evolve at pace, IT leaders named several factors that would deter them from adopting a newer technology, such as AI. An increase in OPEX costs was cited as the biggest issue (46%), followed by a lack of internal knowledge (42%), slow implementation (37%), and a negative impact on reputation (25%).

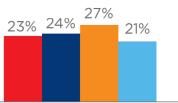
Across regions, perspectives on deterrents to technology adoption are similar. The exception is in EMEA, where fewer IT leaders report concerns around large increases in Scope 1 or 2 emissions.

#### Which of the following would deter your company from adopting a newer technology (like AI)?





Large increases in Scope 3 emissions

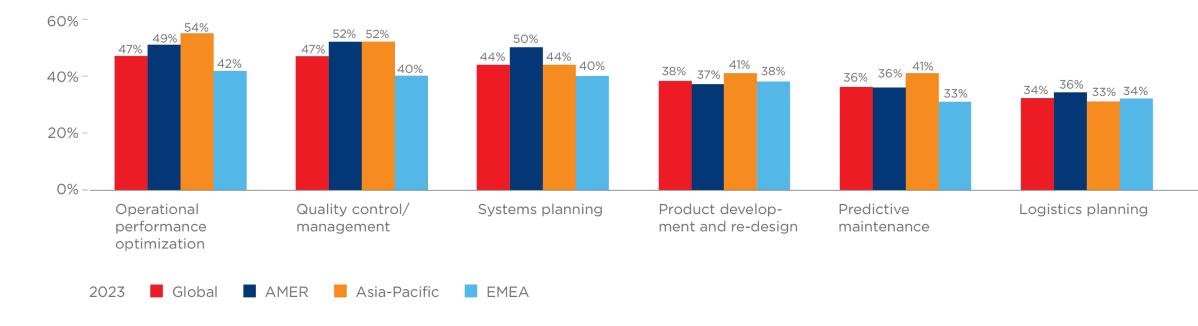


# ACCELERATED PACE OF INNOVATION Digital twin implementation

In the last decade or so, technological advancements in big data, high-speed networks and supercomputing power have caused digital twins to pick up significant momentum. Today, they're being more widely adopted, with nine in 10 IT decision-makers across the globe reporting their organization has used or soon plans to use digital twin technology.

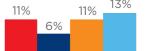
Digital twinning is most often used for operational performance optimization and quality control/ management (by almost half), with use for systems planning not far behind (44%).

#### What aspects of your business have you/do you plan (in the next 24 months) to have digitally twinned?





We do not have, nor plan to use, digital twinning

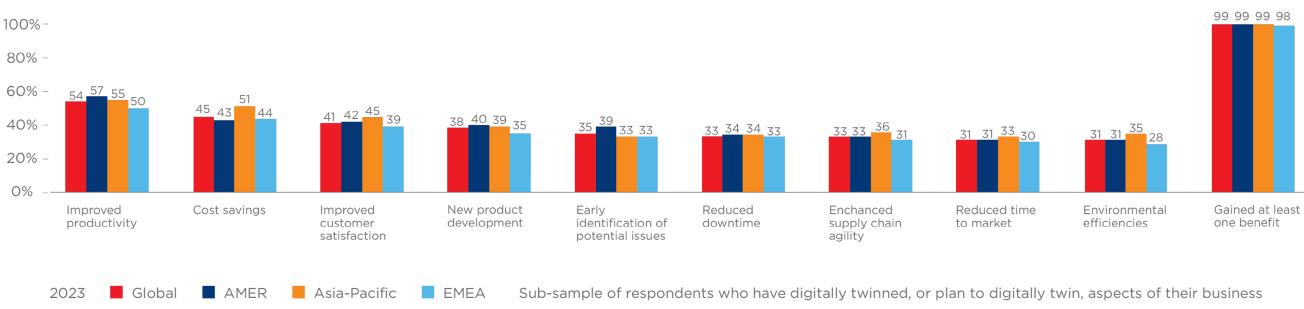


# **ACCELERATED PACE OF INNOVATION Digital twin benefits**

Companies are always looking to optimize their operations, better serve customers and predict trends, in order to detect potential threats or opportunities. Digital twins can be a powerful tool to tackle these aspects. Respondents who have digitally twinned aspects of their businesses, or plan to, almost unanimously agree it has benefited their organization (99%).

Improved productivity (54%), cost savings (45%) and improved customer satisfaction (41%) are cited as the top benefits gained from digital twinning by IT decision-makers globally.

#### Which of the following benefits have you gained from using digital twins?





# **Businesses must be future-proof**

Being future-ready means being in the right places with the right people to support growth and tackle business obstacles such as shifting regulatory demands. To get there, businesses are still expanding into new regions, despite regulatory change, but noted how changing data sovereignty needs might impact their expansion plans. Additionally, leaders saw areas that challenged their preparedness for data sovereignty changes. And, while most leaders said they are continuing to build their IT teams, issues like the rapid pace of tech transformation, talent retention, lack of available talent and changing workforce expectations are all competing against landing the best talent at the right time.



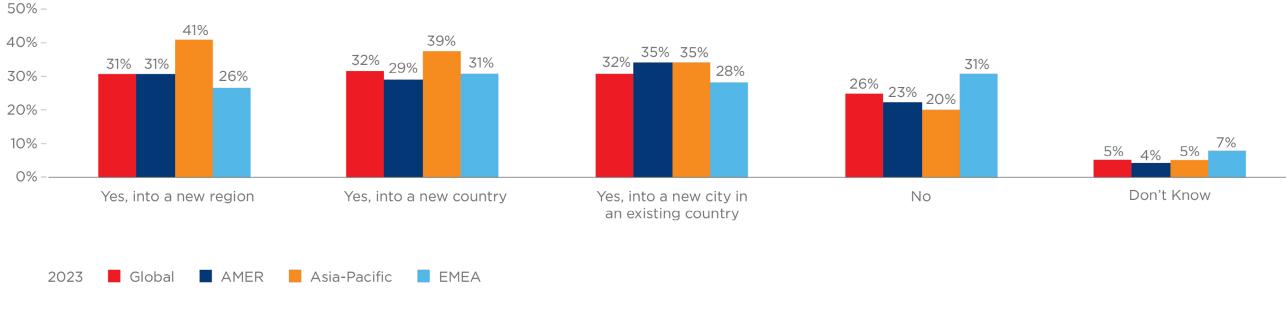
### **BUSINESSES MUST BE FUTURE-PROOF Expanding across geographies**

With continued political headwinds and changing regulatory environments, it may be assumed companies will hesitate to expand into new markets. Despite so much complexity at stake, 69% of IT leaders report their organization plans to expand in the next year.

Globally, a similar number report expanding to new regions, countries or cities-about three in 10. Asia-Pacific is most likely to expand internationally, and EMEA is most conservative in its expansion plans.

Expansion overall holds steady at the global level since 2022, but fewer IT leaders report expansion into new regions this year than last.

Is your organization planning on expanding geographically in the next 12 months?



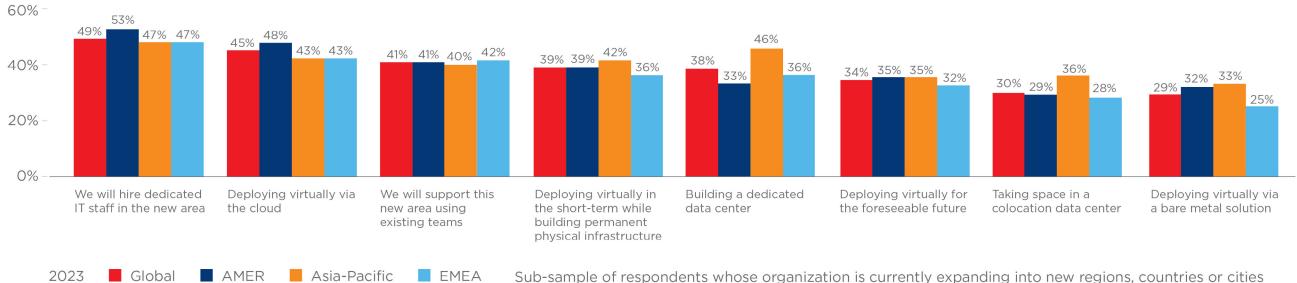


# **BUSINESSES MUST BE FUTURE-PROOF Planning for digital expansions**

To fulfill expansion ambitions, the plurality of tech leads plan to hire dedicated IT staff in each new location (49%). However, deploying virtually via the cloud (45%) follows closely behind.

Proposed IT support solutions for planned expansions are generally similar to last year, except for more reliance on building dedicated data centers (5% increase since 2022).

#### How do you plan on supporting this expansion from an IT perspective?

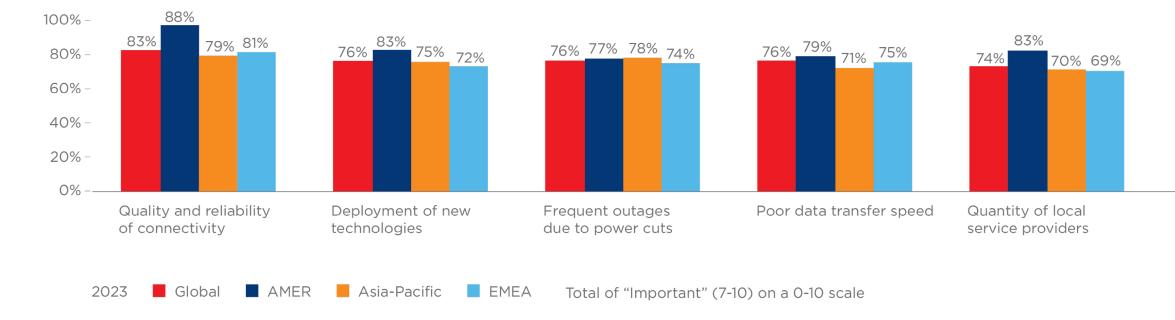


# EQUINIX

## BUSINESSES MUST BE FUTURE-PROOF Expansion considerations

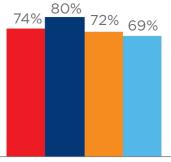
IT teams are now critical to the success of business expansion, with many factors to balance. The quality and reliability of connectivity, as well as the deployment of new technologies, are top considerations globally when determining the feasibility of market expansion. This is especially true for those in the Americas. This region is also significantly more likely to say they consider the quantity of local service providers and the number and location of grey internet areas as important.

# When considering expansions into new markets, which of the following does your organization consider from an IT perspective?





### Number and location of grey internet areas

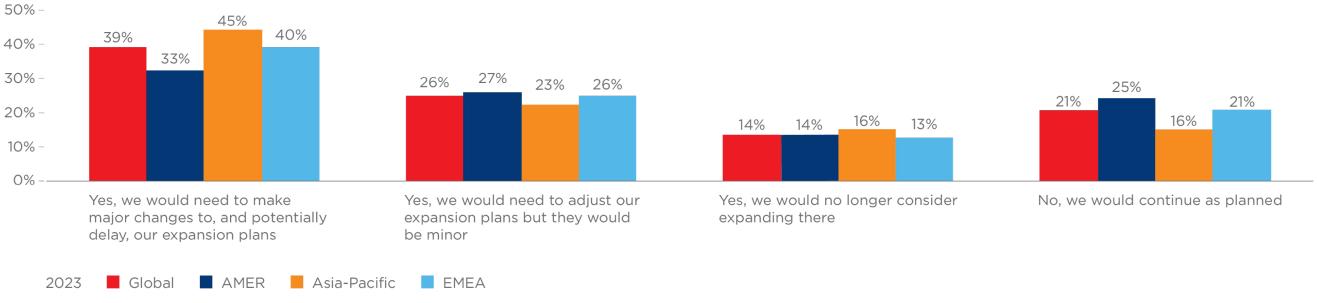


### **BUSINESSES MUST BE FUTURE-PROOF Expansion versus data sovereignty needs**

Governments throughout the world are beginning to see digital infrastructure as being just as important as physical infrastructure. With this development comes geopolitical competition to control that digital infrastructure. This potentially poses a challenge for IT leaders as they work to ensure compliance with complex and evolving data sovereignty regulations.

Over three-quarters (79%) of IT decision-makers globally report their expansion plans would be impacted by strict data sovereignty laws. More than half say it would require major changes, potential delays or even the abandonment of expansion plans.

If a country or region implemented strict data sovereignty laws, would it impact your expansion plans?

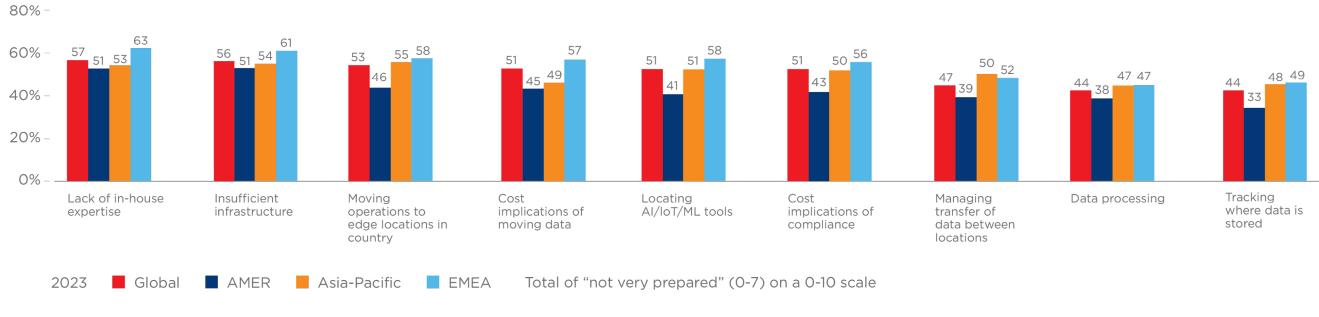




# **BUSINESSES MUST BE FUTURE-PROOF Evolving data sovereignty regulations**

Digital leaders recognize the need for an overarching digital sovereignty strategy, but it's still unclear exactly what that strategy might look like. More than half of IT leaders say they are not very prepared to meet the challenges of compliance with data sovereignty regulations. Lack of in-house expertise, insufficient infrastructure, and moving operations to edge locations in-country are the areas in which IT decision-makers most frequently report being not very prepared for.

#### How prepared are you in each of the following areas to deal with the challenges of complying with incoming or more strict data sovereignty regulations?





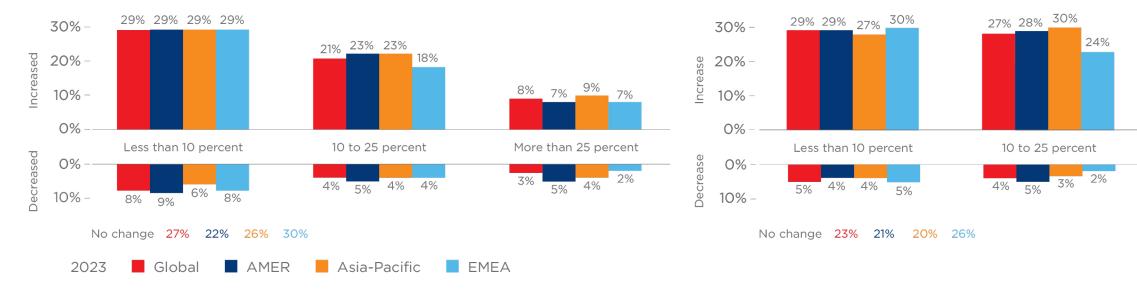
# **BUSINESSES MUST BE FUTURE-PROOF Changing IT teams**

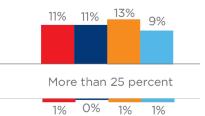
Despite economic uncertainties, and in the midst of global news stories on tech layoffs, most IT decision-makers report growing their IT teams. Indeed, 57% say their teams grew over the last two years.

How has your IT team size changed in the last 24 months?

Further good news for those skilled in tech: 66% of IT leaders around the world expect their team to grow in the next year.

What changes are planned in the next 12 months?







# BUSINESSES MUST BE FUTURE-PROOF

With tech and associated business needs continuing to advance at such a pace, it is no surprise there is a breadth of IT skills required to future-proof the teams at the helm of this progress. Talents in cloud computing and AI/machine learning are notably in demand, with hardware engineering and data analysis roles most likely to be cut from IT teams.

#### If the IT team grew, or is planning to grow, in what area(s)? If the IT team reduced, or is planning to reduce, in what area(s)?





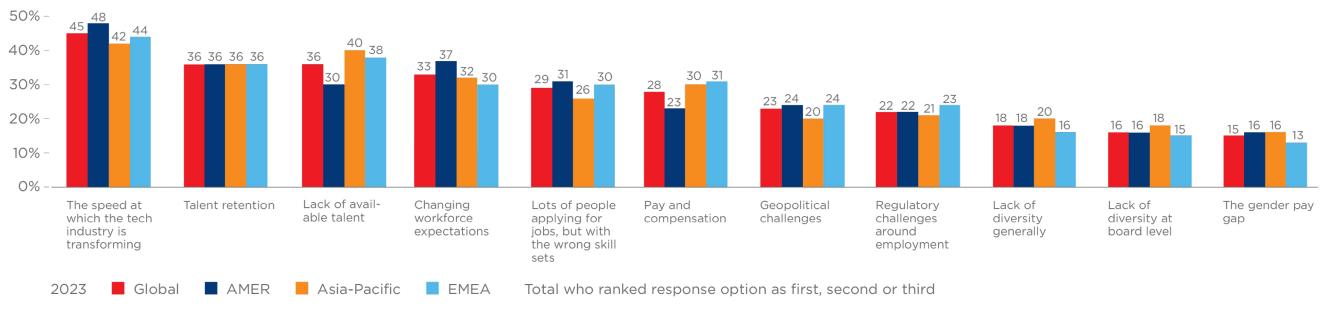


# **BUSINESSES MUST BE FUTURE-PROOF Skills challenges for tech**

Businesses are on the hunt for talent to ensure they are ready for what lies ahead. However, getting the right talent through the door in time is a challenge. The speed at which the tech industry is transforming is flagged as the biggest skills challenge facing the global tech sector as a whole.

There are some significant variations across regions, with a lack of available talent and compensation being seen as bigger challenges in Asia-Pacific and EMEA than in the Americas.

Of the following, what do you think is the biggest skills challenge facing the tech sector as a whole?





# Sustainability and social good

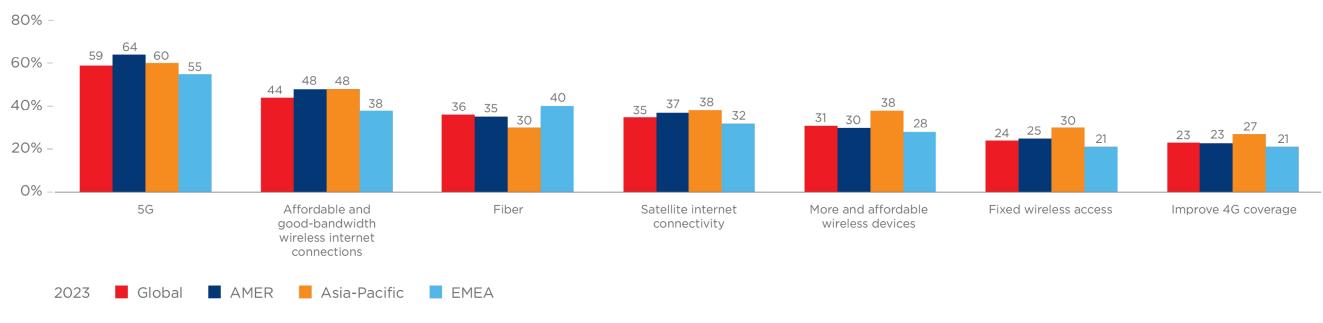
As companies work to deepen social and environmental impact efforts, several areas hold promise as solutions, along with bringing several challenges. Leaders see the greatest potential in technologies like 5G and affordable wireless internet connections as a faster fix for the world's current digital divide. In areas like sustainability practices, respondents named areas with the greatest environmental regulatory challenges and how they manage them. They also noted their confidence levels in satisfying customer demand for more sustainable practices and their thoughts on environmental impacts of their IT infrastructure.



# SUSTAINABILITY AND SOCIAL GOOD Searching for a fix to the digital divide

Digital connectivity has become a basic human right associated with access to education, employment opportunities, healthcare and other community resources. Over half (59%) of IT decision-makers globally believe 5G technology could more quickly solve the digital divide. What's more, affordable and good bandwidth wireless internet connections are seen by more than four in 10 decision-makers as a technology that could also more quickly solve one of today's key equality issues.

#### Do you believe there is a particular technology that could more quickly solve the digital divide?





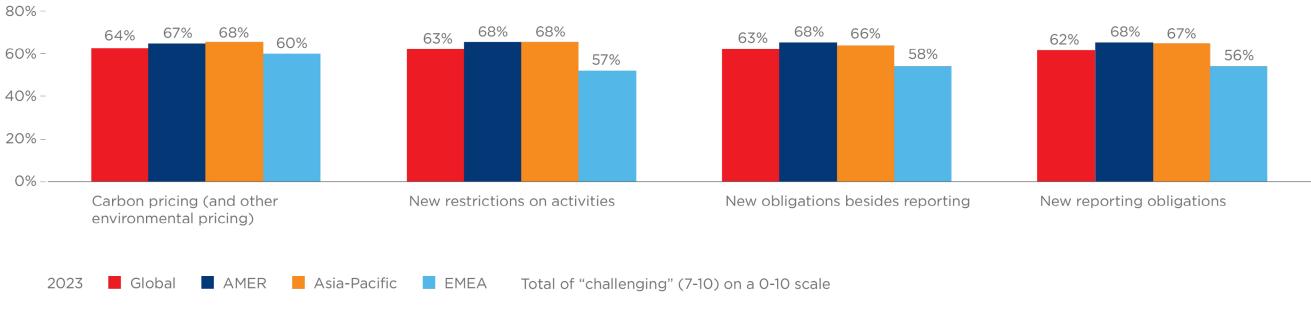
# SUSTAINABILITY AND SOCIAL GOOD **Challenged by environmental regulations**

As the race for technological advances continues, thoughts turn to how to achieve responsible and sustainable IT practices. Governments around the world are grappling with how to, and how far to, enforce this.

Almost two-thirds of IT decision-makers (64%) consider carbon pricing to be a regulatory challenge, while a nearly equal number (63%) find new restrictions on activities and additional

obligations beyond reporting to be challenging. IT decision-makers in the EMEA region, however, express significantly lower levels of concern regarding these issues, compared to their counterparts in other regions.

#### How challenging do you find the following new and upcoming regulations?

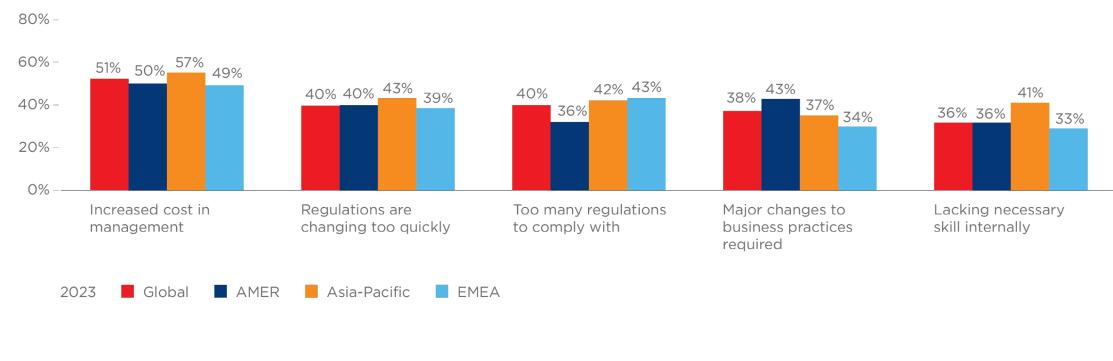




# SUSTAINABILITY AND SOCIAL GOOD Environmental regulation challenges

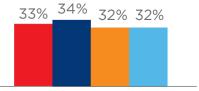
The complexity of evolving regulations is causing problems for tech leaders and their teams. Half of IT decision-makers report their organizations are challenged by the costs involved in managing new and upcoming regulations. The speed of regulation changes and the high volume of regulations are other top concerns.

#### What specific challenges are new and upcoming regulations presenting to your organization?





#### Uplift in reporting

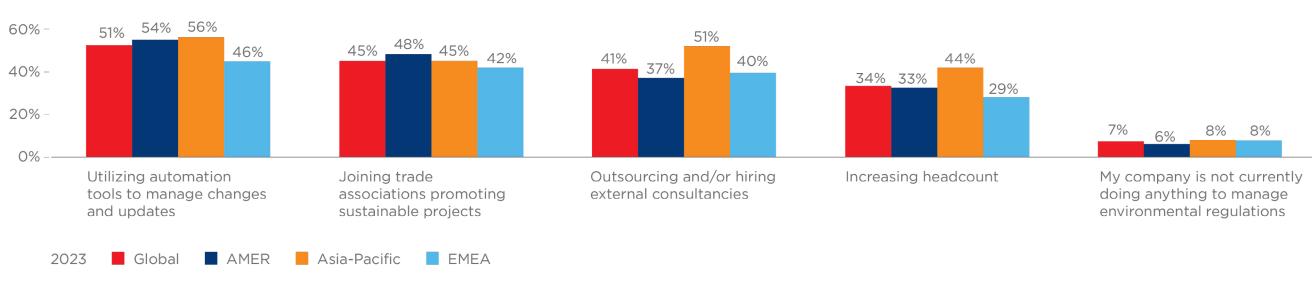


## SUSTAINABILITY AND SOCIAL GOOD **Managing environmental regulations**

In an effort to tackle environmental regulations, half of IT decision-makers utilize automation tools. 45% choose to join trade associations promoting sustainable projects, and 41% outsource or hire external consultancies to manage the process of meeting new requirements.

IT decision-makers in the Asia-Pacific region are significantly more likely to outsource or hire external consultancies and increase their headcount to manage environmental regulations as compared to those in other regions. Those in EMEA countries are significantly less likely to utilize automation tools.

### How is your company managing environmental regulations?



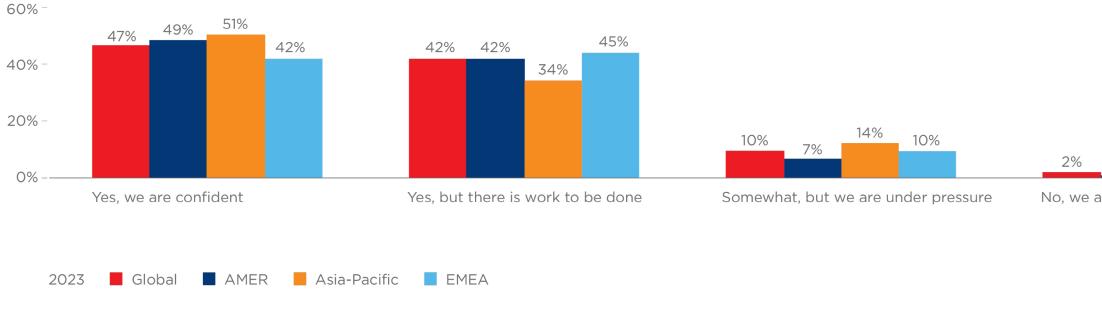
80%



### SUSTAINABILITY AND SOCIAL GOOD Confidence in sustainable practices

Sustainability continues to hold the spotlight on the global agenda, with business, governments and individuals alike turning their attention to how to improve impact. While nearly half of IT decisionmakers (47%) are confident their business can meet customer demand for more sustainable practices, 42% believe there is still work to be done. As focus on this area increases, 10% of IT decision-makers feel under pressure, while just 2% see a risk of losing business. Interestingly, decision-makers in the EMEA region are significantly less likely to say they feel confident their business can satisfy customer demand for more sustainable practices.

# Are you confident that your business can satisfy customer demand for more sustainable practices?



1% 1%

No, we are at risk of losing business

2%

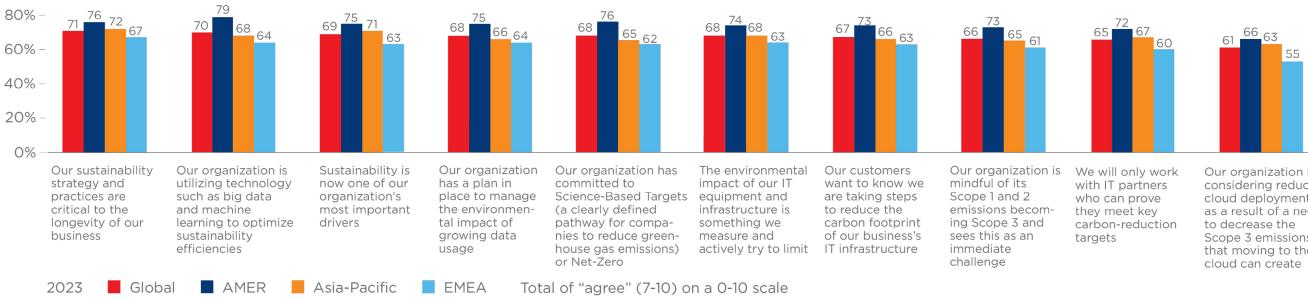


## SUSTAINABILITY AND SOCIAL GOOD **Considering the environmental impact of IT**

When looking to the environmental impact of their IT infrastructure. tech leaders most commonly agree sustainability strategy and practices are critical to the longevity of their business (71%), that they utilize technology to optimize sustainability efficiencies (70%), and that sustainability is one of their organization's most important drivers (69%). Interestingly, 65% of businesses globally will only

work with partners who can prove they meet key carbon-reduction targets—an increase of 3% since 2022.

Thinking now about the environmental impact of your IT infrastructure-to what extent do you agree or disagree with each of the following?



Our organization is considering reducing cloud deployments as a result of a need Scope 3 emissions that moving to the



# The world is digital

Digital leaders around the world are focusing on improving cybersecurity and customer experience, and managing data protection compliance, to ensure their IT models can keep pace with business needs. The threats they are most concerned with? Cyberattacks, security breaches and a shortage of IT talent.

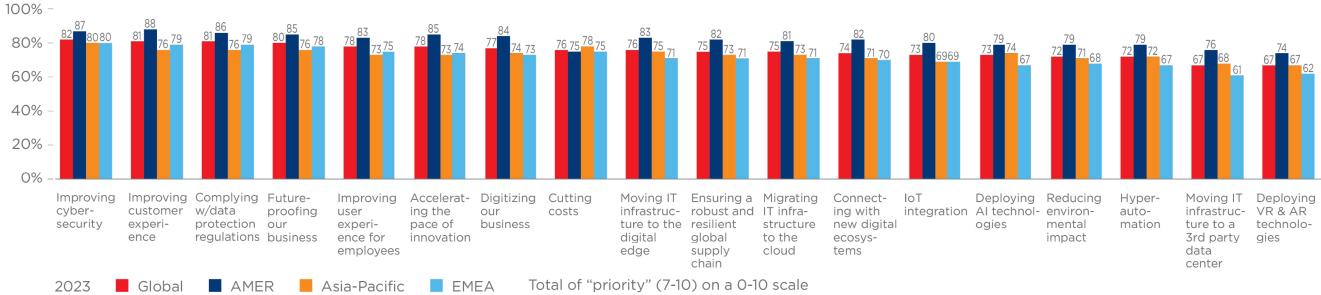
As they lean on today's best practices—like interconnection—to help them evolve, over one-third of IT leaders said network optimization improvement, boosting flexibility of connectivity and aiding digital transformation, were among its leading benefits. Over half reported a planned increase in interconnection spending in 2023.



# THE WORLD IS DIGITAL **Future-proofing priorities**

The overwhelming majority of IT decision-makers see improving cybersecurity, improving customer experience and complying with data protection regulations as top priorities for ensuring their organization's technology strategy can keep up with the needs of business today and tomorrow.

#### How much of a priority is each of the following for your organization's technology strategy?

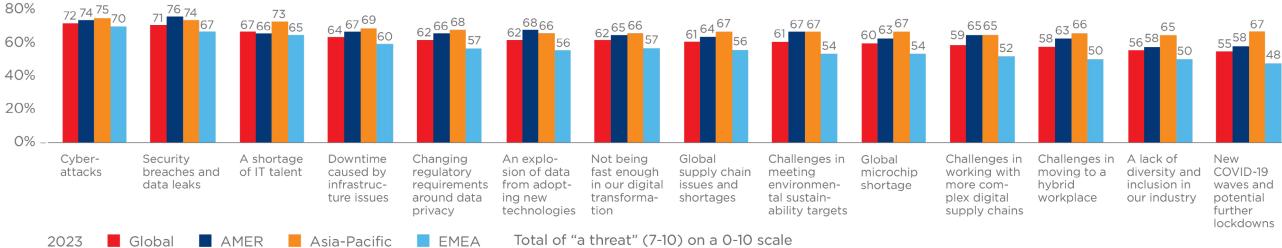




# THE WORLD IS DIGITAL Threats to business success

Digital leaders have many checks and balances to consider as technology takes the lead on business strategy and delivery. Cyberattacks, security breaches and data leaks, and a shortage of IT talent are the top threats keeping IT decision-makers up at night.

#### How much of a threat do you consider each of the following to be to your organization?

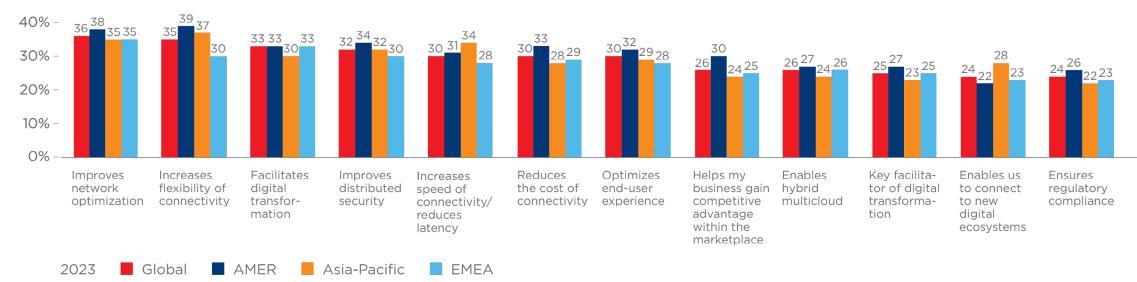




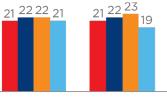
# THE WORLD IS DIGITAL A continued need for interconnection

According to the Global Interconnection Index 2023, global interconnection bandwidth is forecast to reach 27,762+ terabits per second (Tbps) by 2025, representing a five-year compound annual growth rate (CAGR) of 40%, equivalent to 110 zettabytes of data exchanged annually.

Over one-third of IT decision-makers consider improving network optimization, increasing flexibility of connectivity and facilitating digital transformation as top benefits interconnection brings to their organization.



#### What benefits does interconnection bring to your organization?



Enables us to Key to my deploy edge business's computing

survival

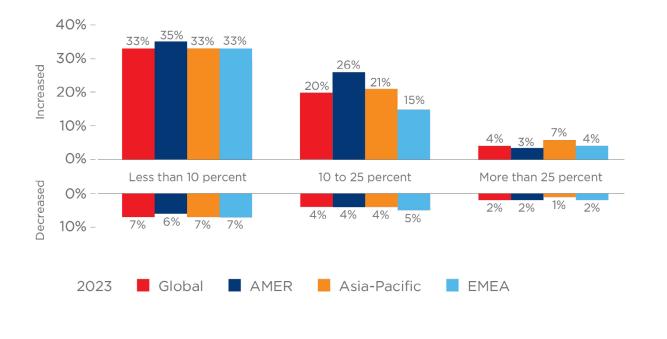


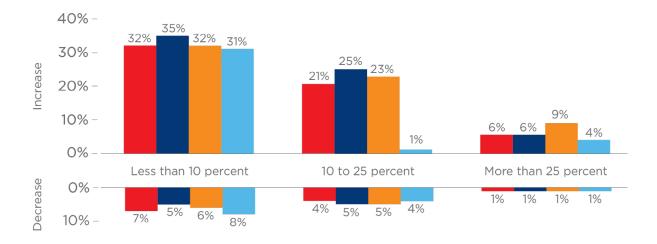
# THE WORLD IS DIGITAL **Change in spending: interconnection**

At a time when budgets around the world are getting tighter, over half of IT decision-makers report interconnection spending increased in 2022 relative to 2021. Over a guarter report no change, and 12% report a decrease.

Future-proofing IT infrastructure is all about deciding what good looks like-both in terms of adopted technology and enabled business capabilities. That is the moment to create a roadmap to help reach and evolve that future state. Over half of IT decision-makers report their organizations plan to increase interconnection spending in 2023. Over a guarter report no change, and 12% report a decrease.

#### What changes to spending are planned in the next 12 months?





#### How did spending on interconnection change from 2021 to 2022?



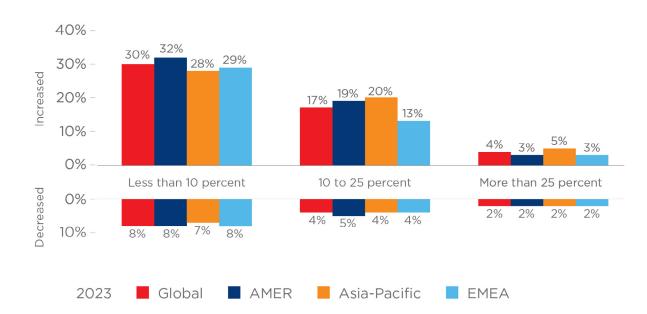
# THE WORLD IS DIGITAL **Change in spending: carrier-neutral colocation**

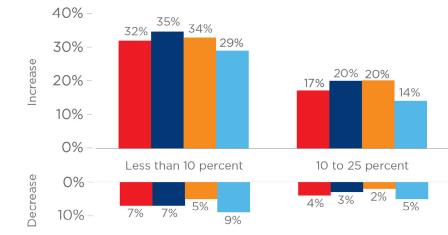
Hybrid IT infrastructures are commonly spread across on-premises, colocation and cloud environments. Half of IT decision-makers report carrier-neutral colocation spending increased in 2022 relative to 2021. This is up seven percentage points since 2021.

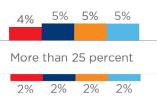
Moreover, over half of IT decision-makers report their organization plans to increase carrier-neutral colocation spending in 2023, an increase of five percentage points since 2022.

#### What changes to spending are planned in the next 12 months?

#### How did spending on carrier-neutral colocation change from 2021 to 2022?









# **Discover more insights**

# Forrester: Total Economic Impact<sup>™</sup> of Equinix Digital Services

Equinix.com/resources/analyst-reports/ forrester-total-economic-impactequinix-digital-services

### Hybrid future: Adapt fast to digital demands with a hybrid infrastructure strategy

Equinix.com/lp/hybrid-infrastructure

### The Global Interconnection Index (GXI)

Equinix.com/gxi-report





# **Questions?**

We hope you find these discoveries and insights as illuminating as we do, and we welcome the chance to discuss them with you.

### **Equinix Media Relations**

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The independent study, commissioned by Equinix, surveyed more than 2,900 IT decision-makers in diverse enterprises across the Americas (Brazil, Canada, Chile, Colombia, Mexico, U.S.), Asia-Pacific (Australia, Hong Kong, India, Japan, Singapore, South Africa) and EMEA (Bulgaria, Finland, France, Germany, Ireland, Italy, Netherlands, Nigeria, Poland, Portugal, South Africa, Spain, Sweden, Switzerland, Türkiye, UAE, UK.). Respondents were selected for participation from Dynata's online panel. The survey was conducted online between 08 March and 07 April 2023.

EQUINIX