

Building intelligence into your business

**The Digital Infrastructure
Report 2023**



Executive summary

Digital infrastructure is the bedrock of almost every business.

As investment grows in this key area, Colt's annual report shines a spotlight on the intentions of IT leaders when it comes to intelligent infrastructure.

Our survey of more than 750 senior IT decision-makers across Europe and Asia reveals strong interest in emerging capabilities that enterprises are turning to for growth.

Key findings:

92% of businesses have already invested, or intend to invest, in intelligent digital infrastructure

Barriers to better use of intelligent infrastructure remain. **More than 99% of IT leaders say they face problems driving the best outcomes** from their digital capability.

IT decision-makers believe in agile, reactive and on-demand networking: 43% of firms with intelligent infrastructure are using on-demand connectivity now and a further 46% plan to do so.

83% of IT leaders expect their infrastructure expenditure to grow during the next 12 months

Lack of visibility (36%), **internal skills** (36%) and **the diverse nature of technology** (34%) are the biggest obstacles.

To make the most of the opportunity, external expertise is required: **partners that can help businesses manage and optimise infrastructure for optimal outcomes.**

Only 8% have 'zero intention' of adopting any form of intelligence into their business's infrastructure.

Overall, **91% of businesses intend on adopting artificial intelligence** in some form.

Such support will be key to ensuring **return on investment** as we reach a defining moment for intelligent digital infrastructure.

Broadly, the market is split into two groups: pacesetters and pragmatists.

Pacesetters are made up of businesses that believe they have truly intelligent infrastructure across their entire user journey (34%)

Pragmatists make up more than half (58%) of those surveyed who are on or just about to embark on their intelligence journey

Introduction

To reflect emerging trends in technology, especially in artificial intelligence (AI), this year's annual report focuses on the growing market of digital infrastructure.

Digital infrastructure enables success, powers transformation and connects people around the world. Functionality includes connectivity, cloud, compute, security, storage, SaaS and PaaS applications, and more.

Senior IT decision-makers have much to say about what 'intelligence' means when it comes to their infrastructure. With AI taking all the headlines this year, is it making a real difference or simply distracting from features like edge computing, automation and self-healing networks?

It's clear organisations are at different stages of their journey in adopting these technologies. They will continue to closely consider what benefits they can bring, and where they will place their bets in the next few years to drive success from intelligent digital infrastructure.

Methodology

On behalf of Colt Technology Services, Censuwide surveyed 755 Senior IT Decision Makers, who are 18+ (including cloud decision-makers and C-suite) in a company with 5,000+ employees in the UK, France, Germany, Japan, Italy, Spain and Singapore via online surveys.

The research was conducted between the 13th and 24th of July 2023.

Censuwide abides by and employs members of the Market Research Society, which is based on the ESOMAR principles.



The power of intelligent infrastructure

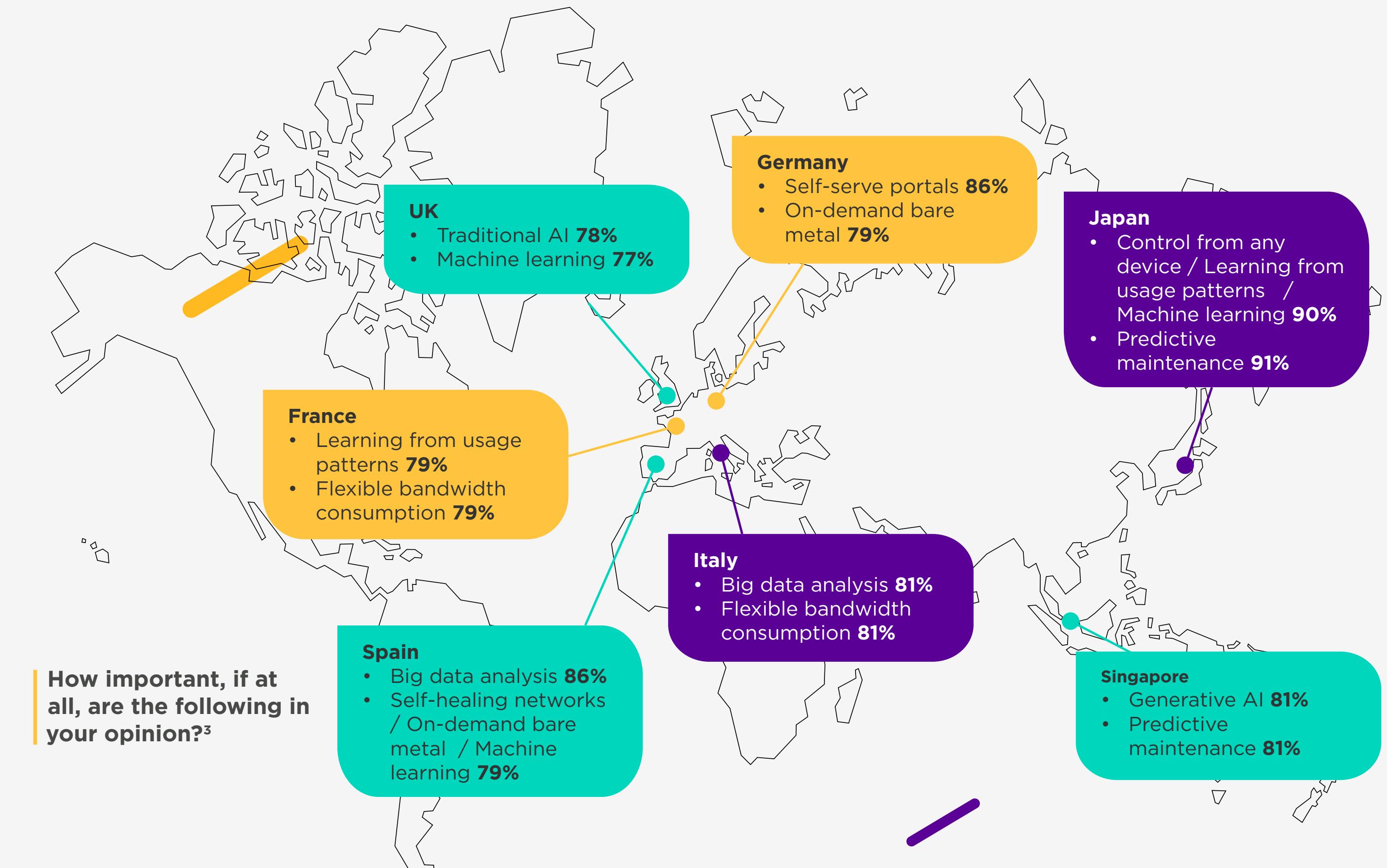
92%¹ of businesses say they have already invested, or intend to invest, in intelligent digital infrastructure.

On a scale from one to 10, with one being the least, on average², businesses score themselves a 6 when estimating how much potential they utilise from their infrastructure.

In Japan, this rises to eight and in the UK it drops to five. In addition, only around one in 10 (12%) in all markets feel they're reaching their full potential.

However, there's a widespread understanding among decision-makers of the importance of intelligent IT. Between 75% and 78% of respondents rate all 15 abilities important to some extent.

It's crucial to recognise that the assets of intelligent infrastructure provide the best outcomes when employed together rather than taking an 'either-or' approach.



1. 'We have truly intelligent digital infrastructure, end to end and across the user journey', 'We have intelligence across some parts of our digital infrastructure but not end to end', 'We have intelligence across some parts of our digital infrastructure but not across the user journey', and 'We don't have any aspect of intelligent digital infrastructure but plan to in the next 24 months' answers combined.

2. Mean: (Usage)

3 Very important' and 'Absolutely essential' answers combined.

Two-paced growth: the pacesetters and the pragmatists

Corporate IT buyers can be split into two main camps: one group leads the race for intelligent infrastructure, while the other observes before betting big.

The pacesetters

Pacesetters have already taken strides and utilised intelligent infrastructure.

They are made up of more than one in three businesses (34%) that have true end-to-end intelligence across the user journey. Embracing the potential that intelligence can lend to an infrastructure, the pacesetters already have a slight edge on the competition.

Regarding features they are using in their IT operations, they are utilising:

- Self-healing networks **47%**
- Traditional AI **47%**
- On-demand, virtualised network functions **46%**
- Self-serve portals **46%**
- Machine learning **46%**
- Automatic reporting **46%**
- Adaptive to user demand **45%**
- Generative AI **45%**
- Flexible bandwidth consumption **44%**
- Control from any device **44%**
- Learning from usage patterns **44%**
- Big data analysis **44%**
- On-demand bare metal **43%**
- On-demand connectivity **43%**
- Predictive maintenance **42%**

The pragmatists

Pragmatists are typified by the businesses which plan to implement some aspect of intelligent infrastructure in the next two years, making up over half of the IT decision-makers we spoke to (58%).

IT decision-makers in this group are not yet fully bought in but recognise the benefits. As we'll see later, a combination of skills, budget and perceived complexity is delaying these companies from investing heavily.

So what's holding them back?

Barriers to better infrastructure

More than 99% of IT leaders say they face problems driving the best outcomes from their digital capability.

The complexity of integration (22%), a perceived inability to extract end-to-end benefits (20%) and siloed working (20%) top the list of obstacles.

In our survey, 8% have zero intention of incorporating any form of intelligence into their infrastructure. Are the barriers outweighing the benefits?

Integration complexity is a particular issue in Italy (27%), while the same share of IT decision-makers in Japan (27%) cite budget as a barrier. IT leaders in Spain reveal they struggle most with legacy technology (26%), while in Germany the same proportion (26%) face tough regulatory issues.

With multiple barriers to the goal of fully intelligent, end-to-end digital infrastructure, and growing complexity, it's clear that companies can't go it alone.

What barriers are there to easy management of all your digital infrastructure?





Focus on on-demand

IT decision-makers believe intelligent infrastructure should be facilitated by agile, reactive and on-demand networking.

Almost all businesses have it on their roadmap: 43% of firms with intelligent infrastructure are using on-demand connectivity today, and a further 46% plan to do so in the future. And that's because they appreciate its importance.

76%, climbing to 89% in Japan, feel having on-demand, virtualised network functions is important.

Agile, on-demand digital infrastructure enables rapid access to a global fibre network, cloud providers and cutting-edge applications. It also offers network visibility and control from any device as a key benefit.

On-demand networking comprises multiple features that could be considered intelligent. Without it, businesses lack the bedrock to build intelligence across their end-to-end user journey. The pacesetters, by contrast, are one step ahead because they've already embraced the potential of on-demand networking.

On-demand users choose how to connect, wherever and however they want, with full flexibility through a portal, APIs or an extension of the firm's existing network. The result is end-to-end connectivity with the user in full control.

43%
of firms with intelligent infrastructure are using on-demand connectivity today, and a further

46%
plan to do so in the future.

The power of partnerships

To boost their resource, knowledge and capability of intelligent infrastructure and key aspects including AI, IT leaders turn to a range of partner support. Businesses have done so on their cloud journey - such as for remote work - and the trend continues for AI.

Companies are turning to multiple partners to get the answers and support they need. However, nearly one in five (19%) respondents say relationships with external partners are their biggest obstacle. This rises to 26% in France. A further fifth (20%) find managing multiple vendors tricky, with an additional 16% naming integrating infrastructure from different third parties a key issue.

Fewer than three in 10 (28%) IT decision-makers claim to have clear interoperability across vendors and the user journey. Slightly more (29%) say they have some integration but lack end-to-end functionality. Meanwhile, 26% experience clear silos between vendor partners. Around one in six (17%) say there is limited or no integration available from their vendors.

Efficient management of the digital estate falls into many operational cracks. IT leaders blame both internal and external factors. It's never been more important to find the right partners that are well-versed in working closely together to deliver on the most complex of projects.

Where, if anywhere, are you seeking the most support and knowledge on AI and intelligent infrastructure?



Tangible intelligence: how AI will change infrastructure

AI is seen as a game-changer for intelligent infrastructure.

In total, 39% of organisations already deploy traditional or generative AI: 87% of these firms who haven't already adopted intend to use the former in the future, and even more (91%) will adopt the latter. IBM's [CEO Decision-Making in the age of AI](#) states three-quarters of CEO respondents believe that competitive advantage will depend on who has the most advanced generative AI.

With the vast majority of organisations keen to deploy AI in their organisation, it's interesting to see what they aim to achieve with it.

Succeeding with AI isn't as easy as flicking a switch. A Salesforce [study](#) revealed that 62% of workers say they lack the skills to use AI "accurately and safely", even though 38% of them are already operating generative AI in their role.

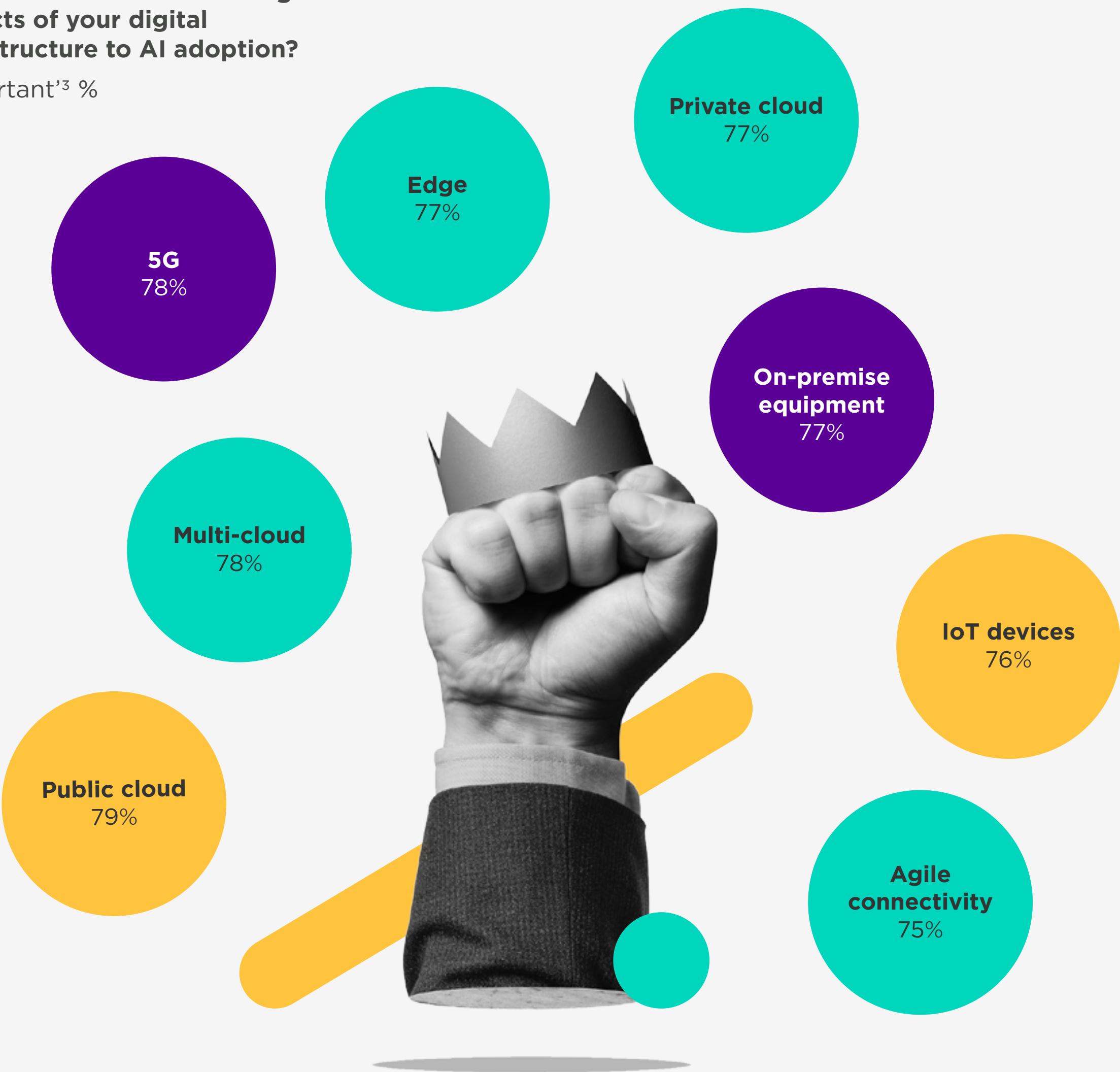
Intelligent infrastructure must be laid as the foundation first. Most IT decision-makers are keenly aware of this. Access to agile, on-demand connectivity is key.

| Are you using or planning to use AI in your business in any of the following?

	Already using %	Plan to use %	No plans to use %
Digital infrastructure management	45	44	11
Using a custom AI platform	42	45	13
HR	45	42	12
Customer experience (CX)	42	46	12
Sales	43	45	12
Marketing	44	44	13
Operations	44	44	12
Security	44	42	15
Service/product delivery	43	43	14
R&D	44	43	13
Staff training	41	46	14
Risk management	44	45	11
Fraud detection	45	44	11
Data analysis	42	45	14

How crucial are the following aspects of your digital infrastructure to AI adoption?

'Important'³ %



The major use cases of AI, for any business, fit into three broad categories: using public AI tools that are hosted on the internet, building your own private cloud-based AI, and optimisation of user experience (UX).

All of the features listed fit into each bucket to some extent; it all depends on where decision-makers have decided to invest in the next stage of their intelligent infrastructure.

The home of intelligent digital infrastructure

Deploying intelligence will rely on the best architecture; get it wrong and the customer and user experience will suffer.

At present, there is a fairly even split in the way firms connect and host their infrastructure. This seems unlikely to change in the near term, showing the value in each approach for different use cases and applications. However, IT leaders expect an uptick in private hosting and private cloud, alongside a slight reduction in public cloud and edge computing.

Infrastructure split (All respondents)

Today (Average %)

17%
On-premise

16%
Private hosting

19%
Private cloud

19%
Public cloud

16%
Edge

13%
Other

Next 2 years (Average %)

17%
On-premise

18%
Private hosting

21%
Private cloud

18%
Public cloud

14%
Edge

9%
Other



Cost considerations

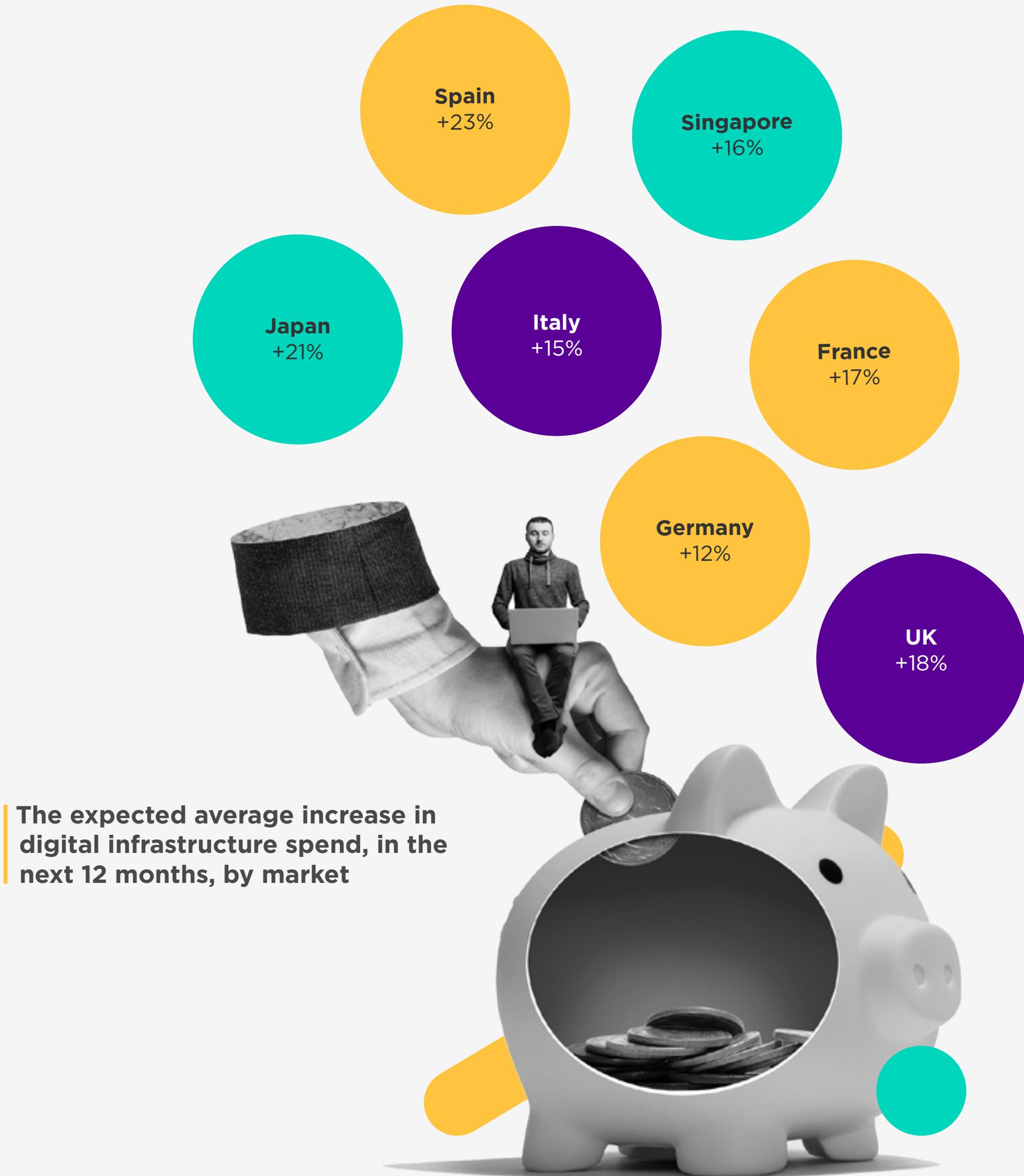
Embracing intelligent digital infrastructure requires significant investment. Even with the current global economic outlook, more than four in five (83%) IT leaders expect their infrastructure expenditure to grow during the next 12 months.

On average, spending looks set to rise by

17%

Budget looks set to be allocated to help organisations adopt a range of abilities.

Security remains business critical, with more than a fifth (21%) intending to spend the biggest on it during the next two years but AI will see the same level of support (21%), showing a level of commitment behind the hype. Meanwhile, 19% will throw budget behind consolidating IT partners in a bid to find more efficient and cost-effective ways to succeed. A further 17% are planning to consolidate their platforms.



A defining moment for intelligent digital infrastructure

IT leaders realise that driving the best outcomes from their digital estate means building an agile, available on-demand, adaptive infrastructure that benefits users across their journey, keeping employees and customers alike connected.

The majority of IT decision-makers agree intelligent infrastructure can deliver multiple benefits to corporations, colleagues and customers.

How much benefit, if at all, do you hope intelligent infrastructure will deliver when it comes to the following?

90%

Business efficiency

89%

Reduced downtime

89%

Employee retention

89%

Improved security

88%

Spend optimisation

88%

Market acceleration

88%

Operational efficiency

86%

ESG Goals

86%

Customer experience

This belief in the wide-ranging benefits of intelligent digital infrastructure shows we've reached a defining moment.

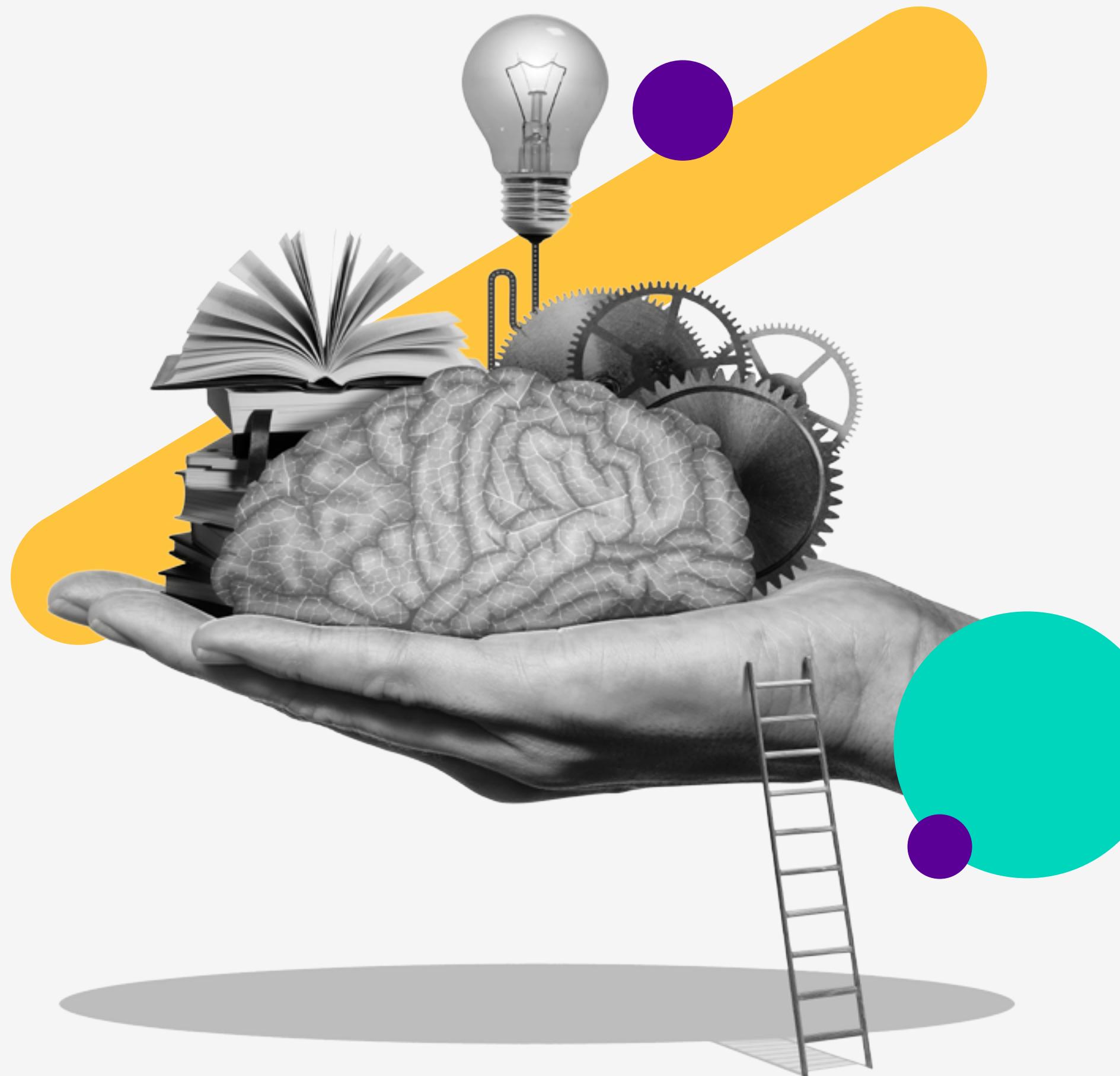
In some markets, IT leaders are even more positive. In both Japan and Singapore, every one of the outcomes above is named as a benefit by 90% or more of respondents. And even though the UK is the most sceptical market, with almost a quarter (24%) believing they'll witness no operational efficiency or market acceleration from intelligent infrastructure, the average expectation of the listed benefits is above 80%.

There is no 'silver bullet' that businesses can embrace to tick the box of intelligence.

For those who are already on their journey to implement this, there is just a 6% variation across a broad range of functions that make up today's intelligent infrastructure. These decision-makers consider intelligent digital infrastructure to have multiple aspects and smart features.

IT leaders associate a plethora of positive outcomes with intelligent digital infrastructure.





Conclusion

IT decision-makers possess a wide range of views about adopting intelligent technologies and the benefits they can bring to organisations.

At present, the market is split between pacesetters and pragmatists: companies that have already adopted AI capabilities, and those who are about to embark on their transformation.

Broadly, enterprises expect intelligent networks to be the biggest benefactor of AI. Enterprises will focus on AI investment in networks and infrastructure during the next two years.

Those that choose not to invest risk being left on the starting grid by rivals that capitalise on AI's ability to realise the potential of intelligent infrastructure.

Meanwhile, enterprises believe that infrastructure must be agile, on-demand and reactive. IT leaders agree their infrastructure should adapt to their specific needs, in any scenario. They also understand that utilising appropriate intelligence can help their business remain relevant. Visibility of the business network and control from any device are deemed popular features by IT leaders. Both are defining pillars of on-demand digital infrastructure.

But for intelligent digital infrastructure to be viable, businesses require close partner relationships. They can solve the riddle of resources, skills and budget, helping the enterprise to navigate the complex technologies landscape and achieve growth.

Whether it's a digital infrastructure company, SaaS provider or hardware vendor, businesses are willing to look hard and find the perfect partner for their transformation projects.

The search for the right partner is now a critical component of digital operations: one that can tip the balance of power in favour of proactive businesses intent on fully embracing intelligent infrastructure.

Colt's role in the market

Wherever and however a business decides to invest in its infrastructure, from our research, one thing stands out: how crucial it is to have a valued, expert partner help navigate the potential technology now offers businesses.

As a global digital infrastructure company, Colt helps businesses succeed by creating extraordinary connections. Powered by amazing people, like-minded partners and innovative technology, Colt is driven by its purpose: to put the power of the digital universe in the hands of its customers – whenever, wherever and however they want.

When it comes to building intelligent digital infrastructure, there are three things to consider when choosing your partner.

Agile digital infrastructure

Colt On Demand puts you in control of your network. Being able to flex bandwidth as and when you need it, our on-demand network solution gives you the agility to scale connectivity in a matter of minutes.

To discover how On Demand can elevate your digital infrastructure, head to our dedicated [On Demand solution page](#).

Partners

We work with the biggest names in the industry, including Microsoft, AWS, Zscaler, Google Cloud, Equinix, IBM and many more. We collaborate with cloud service providers, system integrators and data centres, as well as working closely alongside technology, agent and referral partners.

You can find out more by visiting our [Partners page](#).

Intelligent customer experience

As businesses increasingly prioritise CX as a key differentiator, finding ways to better meet customers' evolving expectations has become crucial. Investing in improved digital infrastructure has emerged as one of the most effective solutions, enabling businesses to provide seamless and personalised experiences across multiple channels, without adding to workloads.

We have an entire content series dedicated to exploring effective CX. [Head to our website](#) to continue reading.

For more information, get in touch with us at
www.colt.net/contact-us