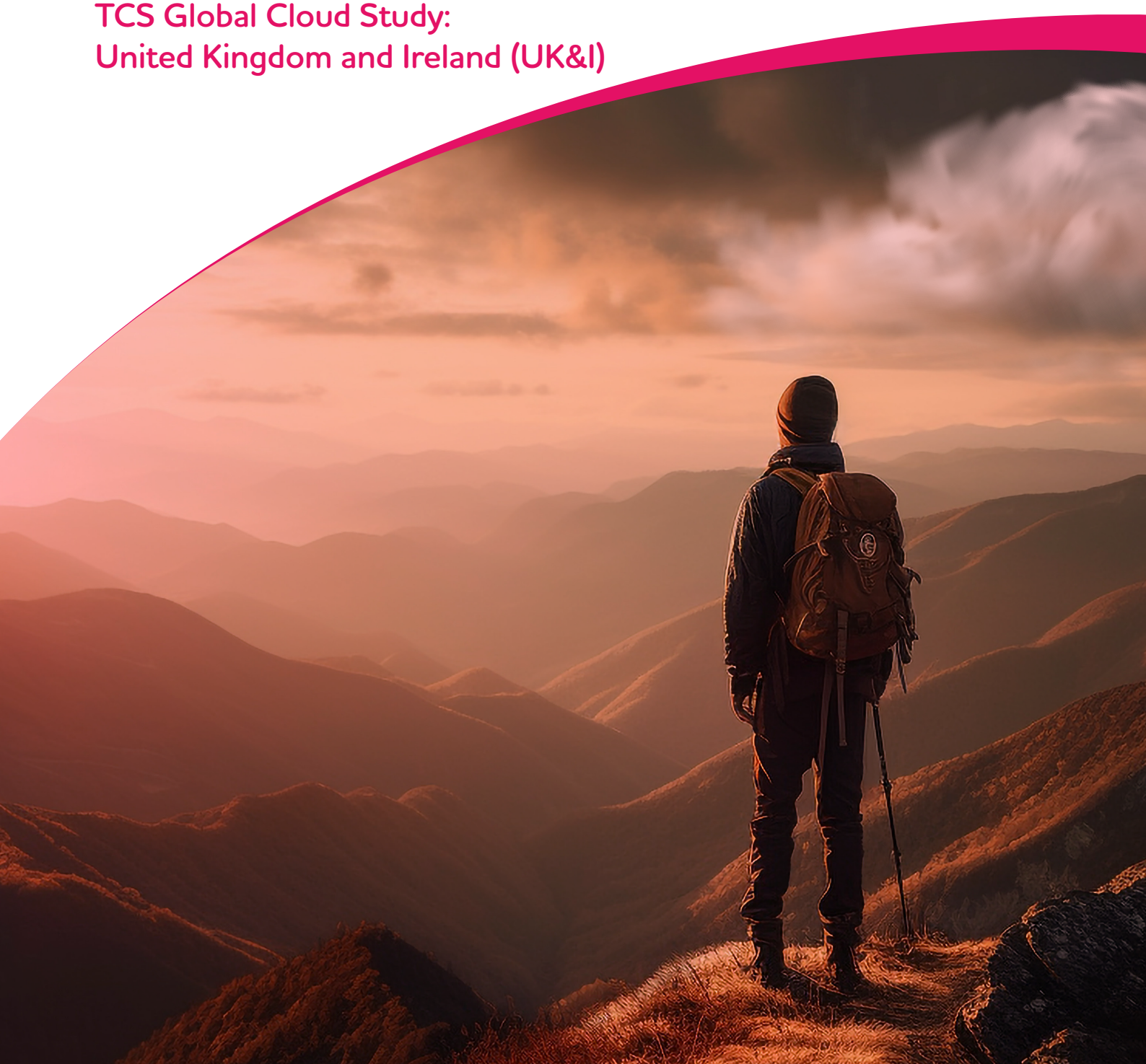
TATA CONSULTANCY SERVICES

Building on belief

Connected future: How cloud drives business innovation

TCS Global Cloud Study: United Kingdom and Ireland (UK&I)



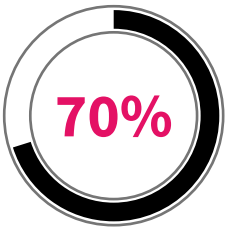
Once viewed primarily as a one-dimensional IT infrastructure, cloud has become both a strategy for business transformation and a catalyst for innovation. It provides the unifying digital fabric that forms the foundation for a connected future – one that continues to unfold with each technological advancement.

The global cloud study from TCS reveals that United Kingdom & Ireland (UK&I) companies are making great strides toward cloud-enabled innovation.

They not only recognize the role cloud can play toward new ways of connecting data, people, and knowledge, but they are actively embracing its promise.

A future-oriented mindset

While respondents across all regions acknowledge cloud's role in innovation strategies, UK&I companies surveyed indicate a greater level of confidence in its potential.



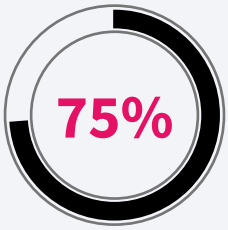
of the UK&I respondents we surveyed say they have faith in cloud's potential as a catalyst for innovation, compared with 65% in North America (NA), 54% in Continental Europe, and 50% in Asia-Pacific APAC.

Putting innovation front and center

The UK has long prioritized global scientific and technological advancement. The newly created Department for Science, Innovation and Technology (DSIT) underscores its commitment to these areas and their importance in boosting productivity and economic growth. Similarly, the Irish government's Impact 2030 prioritizes research and innovation, and its role in addressing social, economic and environmental challenges.

UK&I respondents also take a broad view of cloud-driven innovation: They see it as a way to build sustainable, inclusive futures for all.

All four regions — NA, Continental Europe, APAC, and UK&I — selected *"new ways of aligning purpose with business strategies (e.g., sustainability efforts)"* as one of the top goals for cloud-enabled innovation. And in the UK&I region, respondents particularly cite cloud's success in helping them achieve sustainability goals.



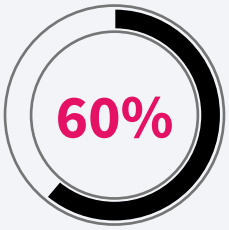
of UK&I respondents say cloud technologies have helped their organizations achieve sustainability goals, compared with 73% in NA, 66% in APAC and 58% in Continental Europe.

Collectively, environmental, social and governance – or ESG – metrics have risen in importance for many organizations. While requirements and standards are still evolving, cloud has a growing role in the transition to greater transparency. However, some areas of ESG tracking are more easily translated to cloud-based recording and analysis, and the survey results largely reflect this. When asked to identify which types of ESG metrics they're supporting through cloud, the percentages were much higher in the more regulated areas such as air and water quality management. Within the research, the UK&I leads in multiple tracked areas compared to other regions.

		Total	NA	UK&I	Continental Europe	APAC
Environmental	Air and water quality management	**60%**	**60%**	**62%**	**58%**	**63%**
	Recycling & wastewater mgt	**48%**	**53%**	**58%**	**41%**	**45%**
	Carbon footprint / emissions / greenhouse gas	**39%**	**44%**	**34%**	**35%**	**38%**
Social	Employee engagement and wellbeing	**54%**	**59%**	**54%**	**53%**	**50%**
	Labor & human rights practices	**53%**	**52%**	**54%**	**49%**	**58%**
	Employee diversity and inclusion	**30%**	**30%**	**32%**	**29%**	**31%**
	Community involvement	**16%**	**15%**	**17%**	**15%**	**17%**
Governance	Compensation/insider trading practices	**49%**	**52%**	**51%**	**42%**	**48%**
	Board leadership policies	**47%**	**48%**	**56%**	**43%**	**44%**
	Data privacy and collection	**35%**	**35%**	**36%**	**29%**	**39%**
	Climate risk & compliance	**34%**	**31%**	**43%**	**33%**	**34%**

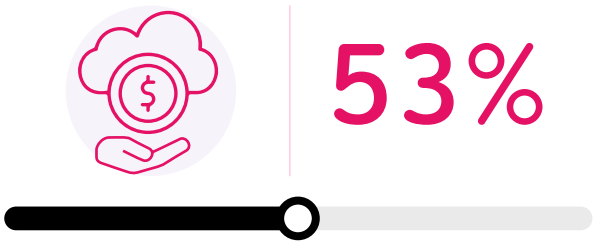
Percentage of respondents who used cloud-enabled data analysis and reporting to support the following types of information in the last 12 months

Investing for the future

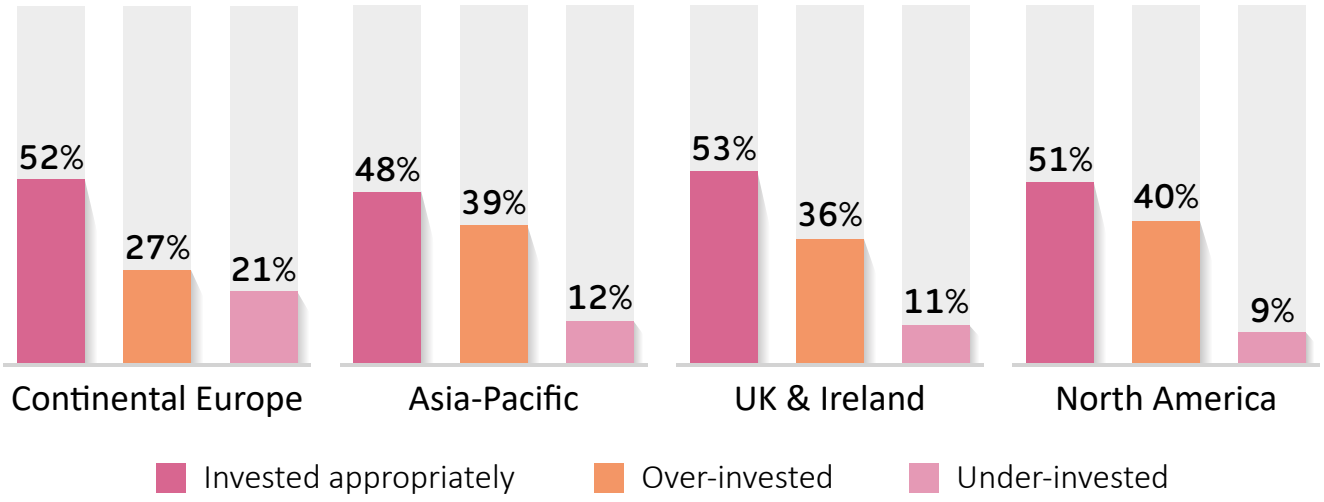


of UK&I respondents say cloud is a long-term investment and they intend to stay the course, compared with 78% in NA, 69% in APAC and 63% in Continental Europe.

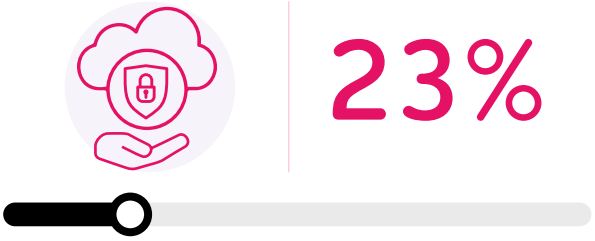
Despite trailing the other regions, the majority of UK&I respondents say their commitment to cloud remains strong and take the long view of cloud investments.



Over half of the respondents say that they have invested appropriately. Yet a sizable number of respondents see room for improvement when it comes to aligning their cloud investments with their requirements.



Further, budgets have become more vulnerable to ongoing economic and geopolitical uncertainties, including at UK&I companies.



Nearly a quarter of UK&I respondents say they have changed or are considering changing their cloud strategy due to insufficient return on investment.

Given how important it will be to invest in the right technologies, many respondents are prioritizing specific areas. Cloud has accelerated and advanced a wave of data-intensive technologies, and there is a clear appetite to take advantage of them. Indeed, artificial intelligence and data are key differentiators for enterprises today. Staying ahead of the competition lies in an organization's ability to invest in innovation, tapping into the intellectual capital within their business.

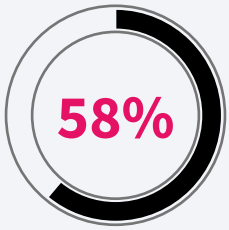
Investments for UK&I companies are already heavily slanted toward artificial intelligence (AI) and machine learning (ML) technologies — unsurprising, unsurprising given the backdrop of renewed urgency fueled by advances in generative AI.

74%

of UK&I respondents say they increased investments in Artificial Intelligence/Machine Learning (AI/ML) in the past 1 – 2 years

78%

say they plan to invest in Artificial Intelligence/Machine Learning (AI/ML) in the next 1 – 2 years



Respondents in UK&I also reported plans for greater investment in 5G networks, with 58% saying they expect to increase investments in the next 12 to 24 months, compared to NA at 55%, Continental Europe at 49% and APAC at 48%.

Missed connections

As cloud adoptions have matured, stakeholders outside of the IT department have steadily acquired a deeper role. While there are many technology entry points to cloud, business priorities largely determine which technology to adopt, whether it's automation, edge computing or others. Connecting business and IT requirements for cloud – and the stakeholders of those – can lead to questions of decision-making and ownership.

UK&I organizations are struggling in some ways to integrate business and IT imperatives.

reported skills gaps with clearly defined cloud ownership (C-level, business, IT depts), compared to 38% for NA, 66% for Continental Europe, and 50% for APAC.

reported skills gaps with enterprise-wide cloud strategy based on business objectives, compared to 36% in NA, 47% in APAC and 56% in Continental Europe

Unsurprisingly, most respondents see areas that could benefit from changes in the current division of responsibility, decision-making and ownership for cloud transformation. The majority reported that cloud transformations at their organizations are led by IT only or mostly IT roles (Table 1). Yet when asked about who does and who should have the responsibility for cloud transformations, many respondents indicated a desire for greater business involvement.

	Roles who currently have the majority of the decision-making and ownership of cloud transformation	Roles that should have the majority of the decision-making and ownership of cloud transformation
IT only (including CIO, senior IT leaders)	**41%**	**19%**
Mostly IT, some business	**25%**	**38%**
50%-50% even split between business & IT leaders	**13%**	**32%**

Not shown: "Business only (including CEO, business unit heads)" and "Mostly business, some IT"

Shortfalls in critical skills and capabilities

When considering cloud transformation as a whole, organizations must first lay the foundation of a strong digital core, with cloud as the unifying digital fabric. With initial modernization efforts underway, organizations can begin unlocking innovation with business processes and models for greater insights and customer experiences. Eventually, organizations begin maturing into a cloud-native environment and participating in transformative partner ecosystems that truly maximize the value of cloud.

At each step, this journey requires deep skills and experience that are not easily won. So far, there are multiple areas with significant gaps.

in UK&I report proficiency challenges with skills and experience with FinOps, compared with 34% in NA, 50% for APAC, and 62% for Continental Europe.

for UK&I report proficiency challenges with skills and experience with DevOps, compared with 36% in NA, 44% for APAC, and 62% for Continental Europe.

These gaps are especially noticeable in areas that are particularly critical: cloud security and data governance.

40% for UK&I say they excel in cloud security and experience no issues

compared with

49% in NA

34% for APAC

30% for Continental Europe

27% in UK&I say they excel in data governance and experience no issues

compared with

44% in NA

29% in APAC

27% in Continental Europe

But when it comes to the full ecosystem participation indicative of later-stage cloud maturity, UK&I, like the other regions, is largely in the initial stages.

	Total	NA	UK&I	Continental Europe	APAC
No plans to participate in ecosystems	**15%**	**17%**	**17%**	**15%**	**13%**
Initial stage: Assessing requirements and planning participation in ecosystems	**47%**	**46%**	**43%**	**44%**	**53%**
Early stage: Implementing industry, customer or partner ecosystems	**19%**	**17%**	**28%**	**23%**	**16%**
Middle stage: Initial participation in industry, customer or partner ecosystems	**10%**	**12%**	**6%**	**9%**	**10%**
Late stage: Firmly entrenched and participating in industry, customer and partner ecosystems	**9%**	**9%**	**6%**	**9%**	**9%**

Realizing the true promise of cloud-enabled innovation

Our research suggests that many UK&I businesses have recognized the crucial role cloud can play in innovation. They have invested in a range of capabilities and technologies to support their organizations' push for cloud-enabled innovation and the connected future it will help bring to fruition. However, they must rapidly address lagging skills and capabilities that could compromise their ability to compete.

To continue moving forward, UK&I organizations must prioritize:

Aligning business and IT stakeholders

Ensure collaborative governance across both IT and business stakeholders for cloud-enabled innovation, with actions such as appointing a steering committee with representation. Schedule regular progress discussions, highlight risks and call out information needed. Define an acceptance process with criteria that includes required performance levels and functionality.

Investing in cloud-embedded technologies

Cloud technology can fuel the next level of edge computing, AI and the Internet of Things (IoT) for business innovation. The billions of everyday devices becoming connected need network capacity to scale. Machine-to-human and machine-to-machine communications open opportunities, yet they require reliability and ultra-low latency which enables applications to run faster and more smoothly.

Overcoming skills shortfalls

Cloud skills and experience fall short in critical areas, and closing these gaps will require a range of strategies. Low-Code No-Code (LCNC) platforms can put tools for developing innovative applications in the hands of non-IT professionals. Industry clouds, with baked-in subject matter expertise and best practices, are rapidly becoming another strategy. More than a third (38%) of UK&I organizations have already adopted industry cloud solutions or are currently doing so, and 41% say they are assessing requirements.

Evolving cloud-enabled sustainability

Look for new ways to assess the maturity of green IT ecosystems across cloud and on-premises infrastructures. Improve efficiencies for building green software across the development process, deployment, usage and maintenance.

Read the Key Findings report to learn how organizations are moving toward cloud-enabled innovation.

The Cloud 2.0 transformation

If cloud was earlier seen as a way of future-proofing enterprises' technology infrastructure, today it's a means of future-proofing the business itself.

In Cloud 2.0, technology is not something to adopt, but a strategy for business transformation and growth itself.

Three horizons to building a connected future

3

Transform and grow around purpose-led ecosystems

- Adopting ecosystems as an operating model; collaborating with competitors and partners
- Shifting from delivering point-products or solutions to meeting holistic purposes
- Catalyzing cross-domain innovation with platform play

2

Innovate business models

- Business model and process innovations
- Using technology to create connected and personalized customer experiences
- Integrating best practices across industries into business model

1

Build digital core

- Migrating workloads to the cloud for better elasticity, operational efficiencies, resilience, and scaling
- Modernizing infrastructure, applications, and data

About the study

Tata Consultancy Services (TCS) conducted a global cloud study from 6 January to 14 February 2023 on the theme of cloud-enabled innovation. TCS surveyed 972 C-suite and IT senior executives and decision makers from companies with +$1 billion in annual revenue, across UK & Ireland, Continental Europe, North America, and APAC (India, Japan, Australia, NZ). The 972 C-suite and IT senior executives and decision makers included 102 respondents based in the UK and Ireland.

About the Thought Leadership Institute

Since 2009, the TCS Thought Leadership Institute has initiated conversations by and for executives to advance the purpose-driven enterprise. Through primary research, we deliver forward-looking and practical insights around key business issues to help organizations achieve long-term, sustainable growth. For more information, visit tcs.com/insights/globalstudies

For the most up-to-date content and news, download the 'TCS Perspectives' app for your iOS and Android device.

Get more insights

If you would like to have more information on the TCS Global Cloud Study, please visit on.tcs.com/2023-global-cloud-study

For more information or any feedback, email the TCS Thought Leadership Institute at TL.Institute@tcs.com

About Tata Consultancy Services Ltd (TCS)

Tata Consultancy Services is an IT services, consulting and business solutions organization that has been partnering with many of the world's largest businesses in their transformation journeys for over 55 years. Its consulting-led, cognitive powered, portfolio of business, technology and engineering services and solutions is delivered through its unique Location Independent Agile™ delivery model, recognized as a benchmark of excellence in software development.

A part of the Tata group, India's largest multinational business group, TCS has over 614,000 of the world's best-trained consultants in 55 countries. The company generated consolidated revenues of US $27.9 billion in the fiscal year ended March 31, 2023 and is listed on the BSE and the NSE in India. TCS' proactive stance on climate change and award-winning work with communities across the world have earned it a place in leading sustainability indices such as the MSCI Global Sustainability Index and the FTSE4Good Emerging Index. For more information, visit www.tcs.com