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REPORT

UK and Ireland: A beacon of progress for generative AI
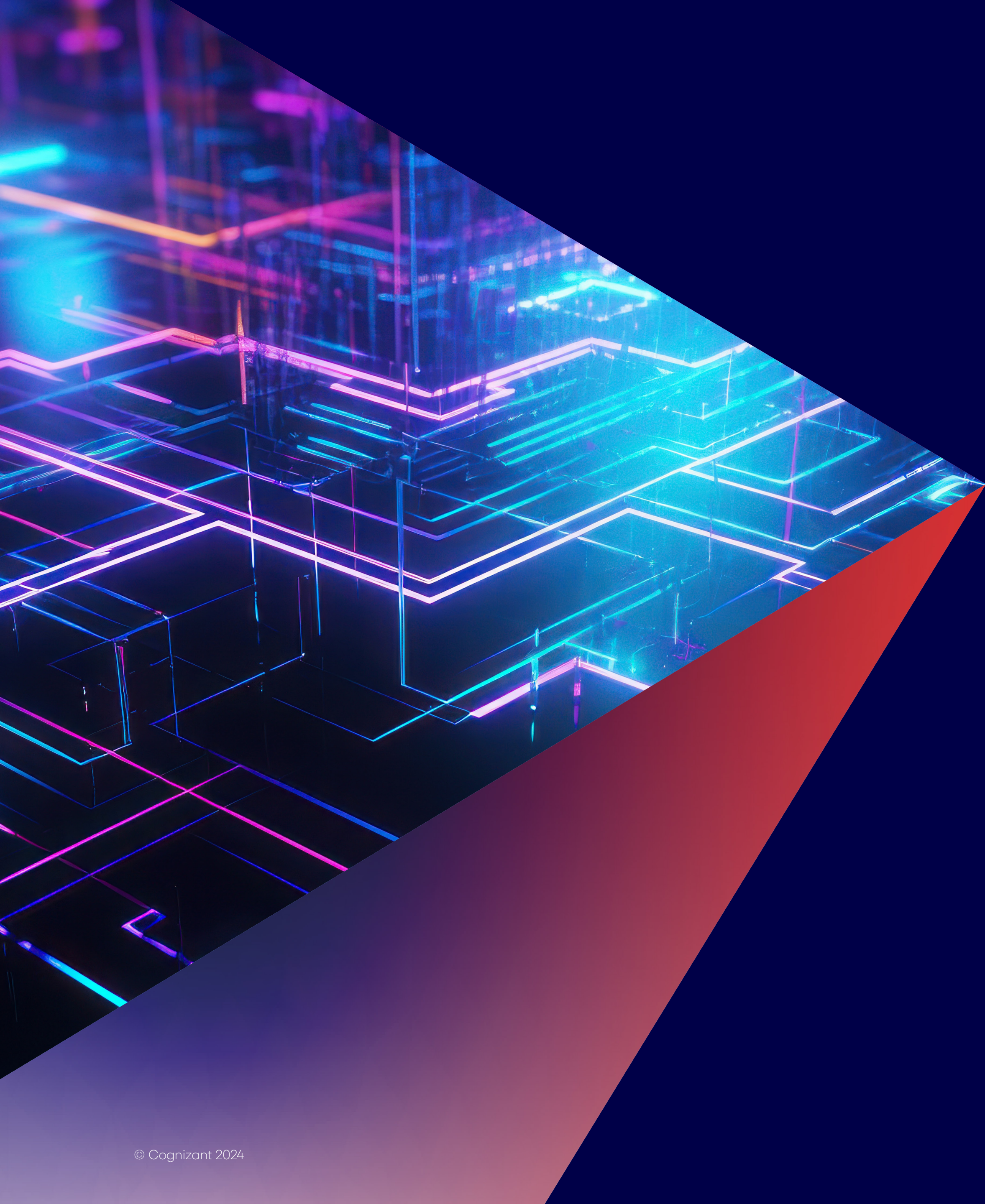
Contents

Overview

August 30, 2024

Our recent study reveals overall business confidence in the region's support for generative AI momentum. However, inhibitors like talent shortages, consumer perceptions and shaky tech infrastructures threaten to slow adoption.

Visit our Generative AI webpage ▷

Introduction

Introduction

Artificial intelligence has gained a strong foothold in the UK and Ireland. In our recent study, businesses said they will spend USD $57.6 million on generative AI in the current financial year, well above the USD $47.5 million global average.

This spending is happening amid a vibrant AI startup scene attracting billions in venture capital, strong government support for AI initiatives (albeit with a degree of uncertainty around the funding for major projects), and national investment in the networking and data centers needed to support AI.

Little wonder, then, that study respondents are more confident than the global average when it comes to what the region has to offer that could encourage generative AI momentum.

We conducted a study of 2,200 business leaders in 23 countries and 15 industries

To better understand what generative AI adoption will look like globally, we conducted a study of 2,200 business leaders in 23 countries and 15 industries, including 200 in the UK and Ireland. The study assessed a wide range of generative AI adoption trends, including investment levels, use cases, how critical gen AI strategies are to business success and organizational readiness to adopt the technology.

We also analyzed 18 regional and internal business factors that will either inhibit or accelerate business adoption of gen AI (see the end of the report for the full list of factors). Respondents evaluated each factor's potential impact on their generative AI strategy, rating it as either positive or negative on a scale of high to low impact.

From the results, we calculated a "momentum score" for each country or region. The momentum score represents the level of confidence business leaders have about being able to roll out their generative AI strategy based on internal business factors and the prevailing local conditions of their country or region.

For all the regions covered, inhibitors to adoption outranked accelerators, meaning that all momentum scores skewed negative. In effect, businesses globally feel constrained by their operating environment. But to understand how different regions varied relative to each other, we averaged the ratings to establish a baseline global momentum score.

This approach enabled us to identify regions that are more optimistic about their ability to adopt the technology compared with a global average.

Based on this analysis, the UKI's momentum score is 5.6% higher than the global average.

The factors contributing to this score vary, but the most impactful are the comparatively more optimistic views of the market demand for generative AI, alongside a rosier view of the quality of output and employee perceptions. Pulling the score back, however, reveals relative pessimism toward the availability of gen AI technologies and data privacy and security concerns.
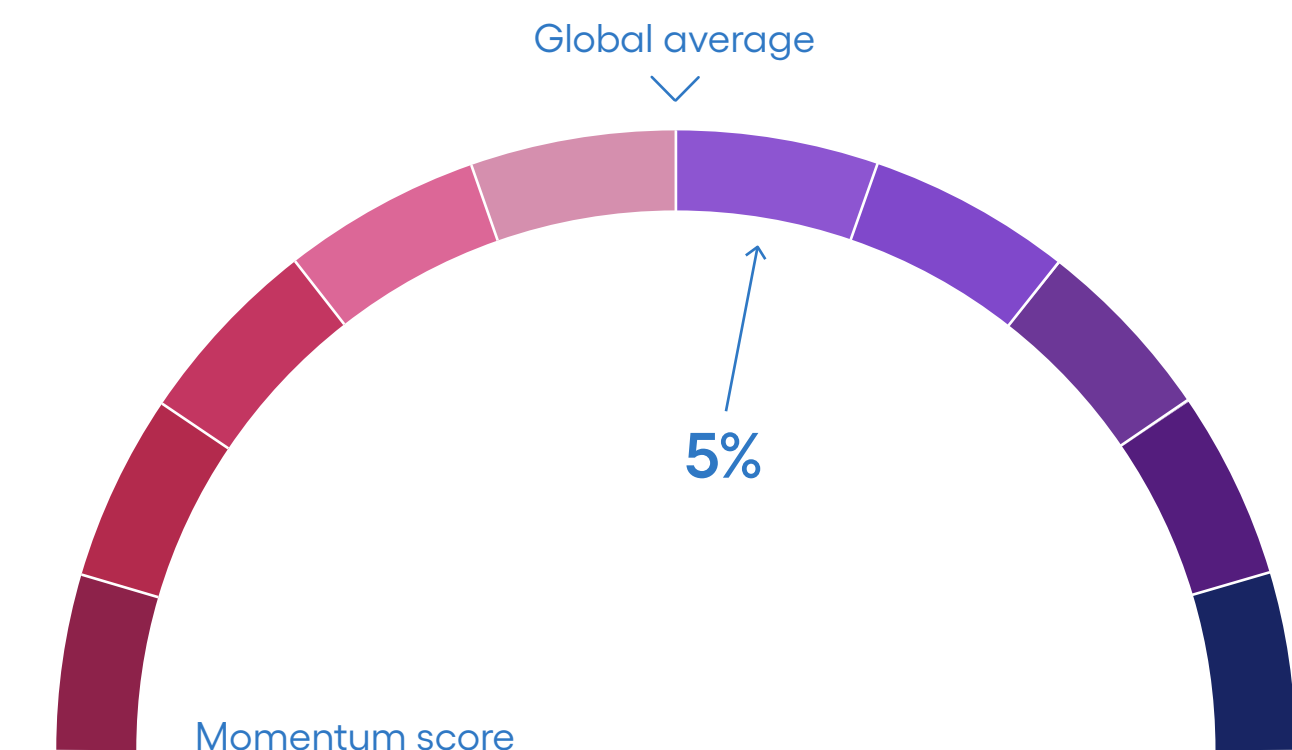
UKI gen AI scorecard

Meantime to impact:

4.5 years

Success criticality:

Important

Expected impact:

Moderate

Average investment:

$57.6m

Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 1

Global average

5%

Momentum score

As for where their generative AI investments will be aimed in the near term, we looked at two distinct uses of the technology:

Productivity, such as helping people work more quickly and get more done, and disrupt-the-business innovations, which involves more sweeping change to business and operating models.
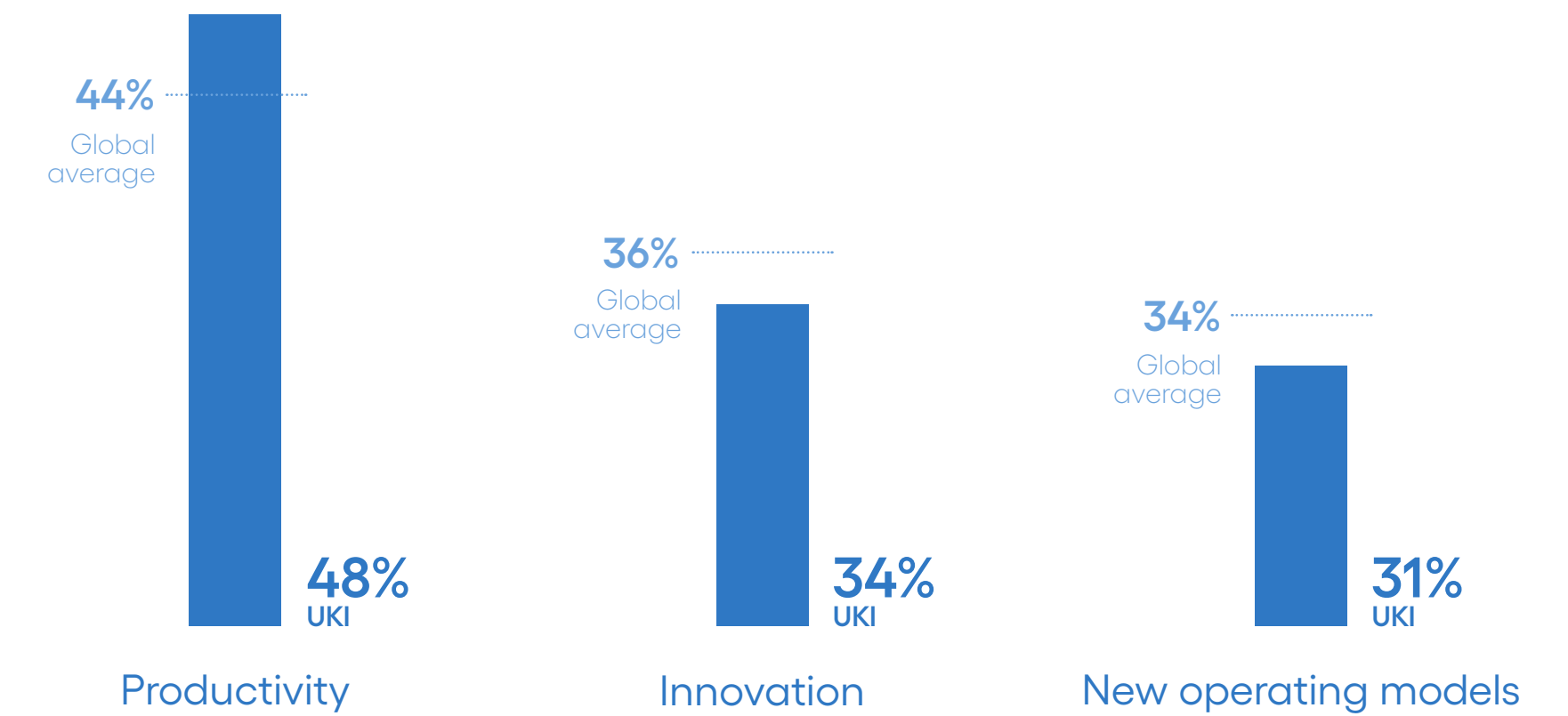
Overall, UKI mirrors the global trend: Over the next two years, more respondents expect to use generative AI to boost productivity than drive innovation (see Figure 2).

However, our study also reveals a change in what productivity means when pursued with generative AI. The end goal is not efficiency and cost-cutting as has been the case with previous automation endeavors. Instead, the goal is to redirect productivity gains into funding endeavors that fuel growth. This new dynamic requires fresh thinking around understanding business use cases of generative AI, which we'll address later in this report.

This report identifies the regional and business factors that could either inhibit or accelerate generative AI momentum in the UKI region. It also provides an industry-specific look at how generative AI will be used, a regional focus on business readiness and strategies to successfully implement generative AI in UKI.

Greater focus on productivity than innovation

Q: Which of the following best describes the role generative AI will play in your organization's business strategy in the next two years? (Percent of respondents naming each as a top-3 choice)

44% Global average

48% UKI

Productivity

36% Global average

34% UKI

Innovation

34% Global average

31% UKI

New operating models

Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 2

Inhibitors and accelerators: The forces driving AI momentum

Inhibitors and accelerators: The forces driving AI momentum

To dig deeper into these mechanics, rather than comparing to a global average, we'll now examine how business leaders rate inhibitors and accelerators within their region. By doing so, our study provides a detailed temperature check on what respondents view as the main inhibitors and accelerators to generative AI in their region. With this assessment, leaders can take advantage of what's working well in their local environment, while strategizing on overcoming challenges.

Accelerators

A key reason for UKI businesses' higher-than-average momentum score is their assessment of **market demand** for generative AI. The appetite for AI is high in UKI, with British AI startups attracting a staggering £3.5 billion in venture capital in 2023 and the UK ranking as the third-largest global destination for AI investment.
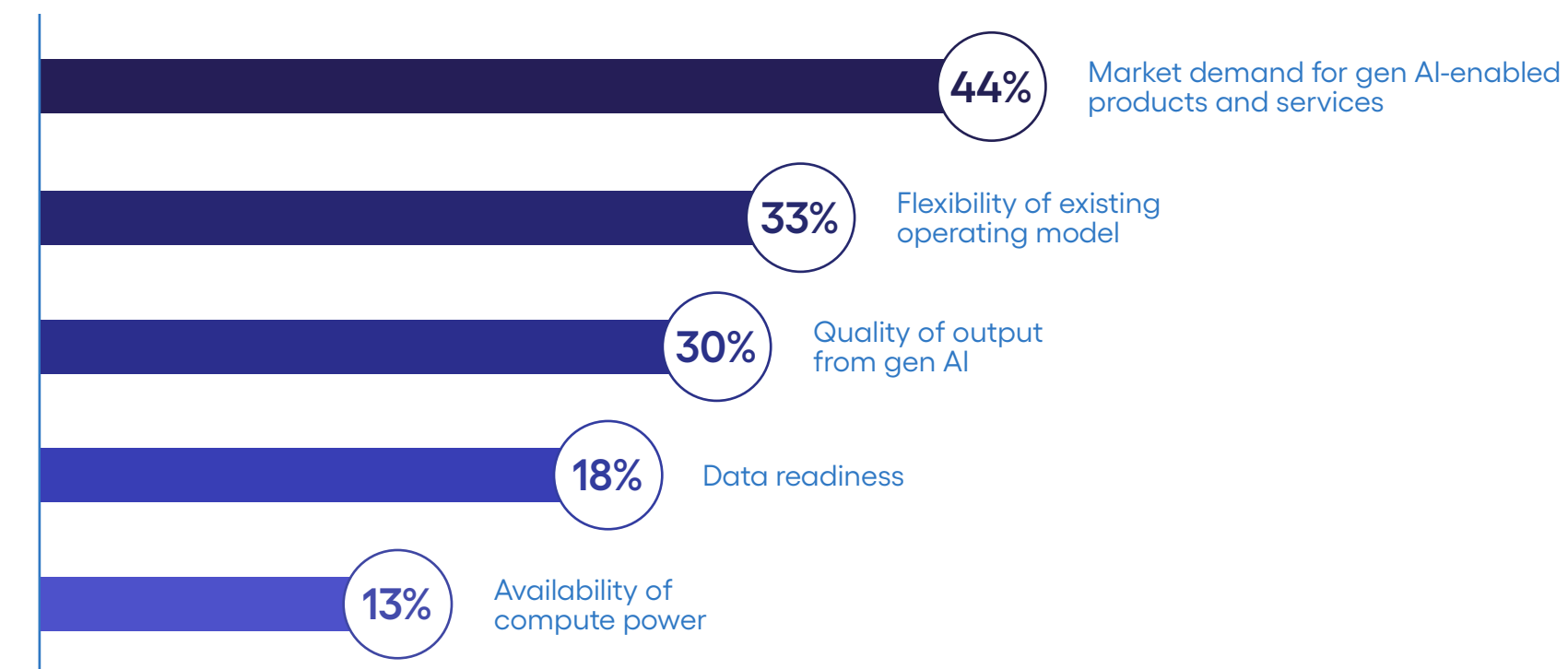
Businesses in the region recognize that the market has spoken, making it essential to embed the technology into their operations or product and service offerings.

The UK's commitment to AI from a national standpoint is clear. Its National AI Strategy includes a £1 billion investment in AI research and development, aimed at driving economic growth and improving public services. The government has also invested in 5G technology and cutting-edge data centers to bolster its AI goals.

Another accelerator is the **flexibility of their operating models**. UK businesses believe the agility across their operating structures will allow them to quickly adapt to changing market conditions and integrate innovative solutions into their workflows with comfort.

When looking at AI activity across the UK, businesses seem familiar with the territory. A study by Amazon Web Services (AWS) reveals a substantial surge in AI adoption among UK businesses, predicted to contribute as much as £520 billion to the UK economy by 2030.

The **output quality** of existing generative AI solutions is another adoption accelerator for UK businesses. This can be seen in the increasing number of companies willing to insert generative AI-driven capabilities into their consumer-facing offerings. Retailer Matalan, for instance, is integrating generative AI into its product marketing, using the technology to read product imagery and select details to inform product descriptions for items listed on its website. Matalan expects a 4X increase in productivity, even with copywriters continuing to oversee descriptions.

44% Market demand for gen AI-enabled products and services

33% Flexibility of existing operating model

30% Quality of output from gen AI

18% Data readiness

13% Availability of compute power

Respondents were asked which factors inhibit or accelerate their organization's adoption of generative AI.

Score represents a percentage point difference to the country's momentum score compared to the global baseline.

Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 3

Inhibitors

Chief among the factors inhibiting adoption is **consumer perceptions** of the technology. In a recent Forrester survey, UK consumers voiced cautious skepticism about generative AI, citing concerns around ethics, transparency, bias and data privacy. Similarly, the recent Dublin Tech Summit noted a mixture of excitement and concern among consumers about the potential impact of the technology.

Another clear inhibitor is **the cost and availability of talent**.

A recent study revealed a staggering 54% of the UK workforce were unable to perform 20 tasks that industry and government agree are vital for today's digital economy. While 53% of respondents in our study plan to implement training programs to upskill employees in specific roles, 37% plan to look externally for specialized generative AI talent.

However, it's unclear where that talent will come from and whether they can attract people with these skills in a tight labor market, especially as the challenge is further compounded in the region by Brexit.

UKI is working to increase the region's technology talent pool.

37% plan to look externally for specialized generative AI talent

Ireland was the first country in the world to develop an industry-driven nationwide postgraduate MSc in AI, and the country has seen rapid increases in the quantity of AI-trained talent—some sources cite a 500% increase in the share of AI talent between 2016 and 2022.

Businesses in Ireland are somewhat more optimistic about upskilling their current talent base, with 70% of businesses there expressing confidence they can find existing roles in their organizations for displaced employees, compared with only 49% in the UK.

Another key inhibitor for UK businesses is the **flexibility of their existing business models**. As AI technologies and their use cases advance, so does the complicated nature of integrating the technology into already long-established processes and systems tailored to specific niche markets or customer segments.

To accomplish this, UK businesses need to prioritize incremental adoption of gen AI, through low-risk applications, fostering a culture of experimentation, and investing in data quality and accessibility.

Technology infrastructure is another notable inhibitor, with just 31% of respondents believing their existing tech infrastructure is AI-ready. The resounding sentiment among leaders is that they lack the controls needed to ensure the technology is used safely.

Businesses also face a degree of regional uncertainty in the UK. The £1.3 billion in government funding promised for technology and AI was recently canceled—albeit now liberating the UK from a controversial plan to build their own "BritGPT."
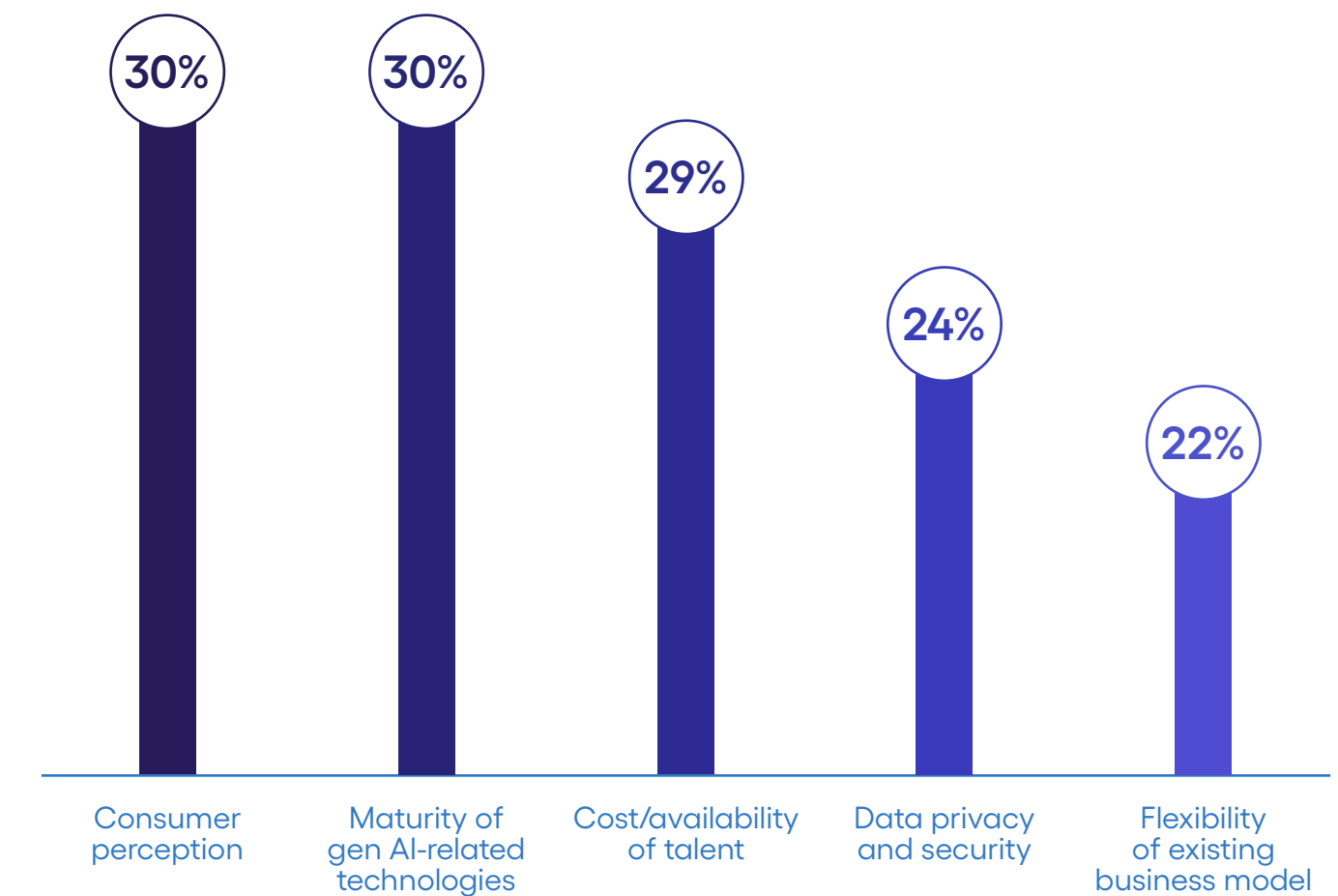
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Figure 4

Sector spotlight: Stark differences in industries' gen AI priorities
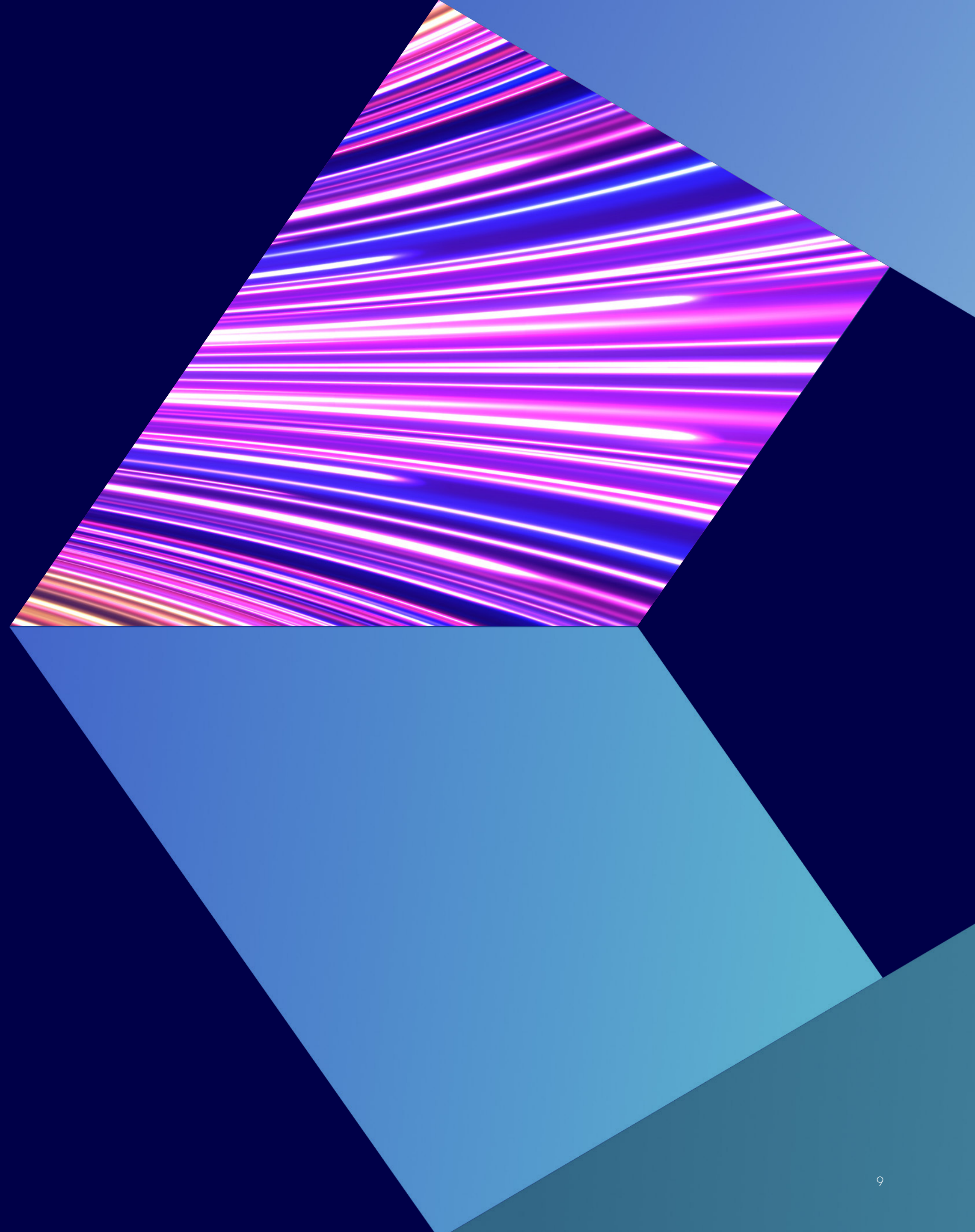
Sector spotlight:
Stark differences in industries' gen AI priorities

UKI businesses are currently more focused on gen AI as a driver of productivity than as a disruptive source of new business and operating models, at least when they contemplate the next two years.
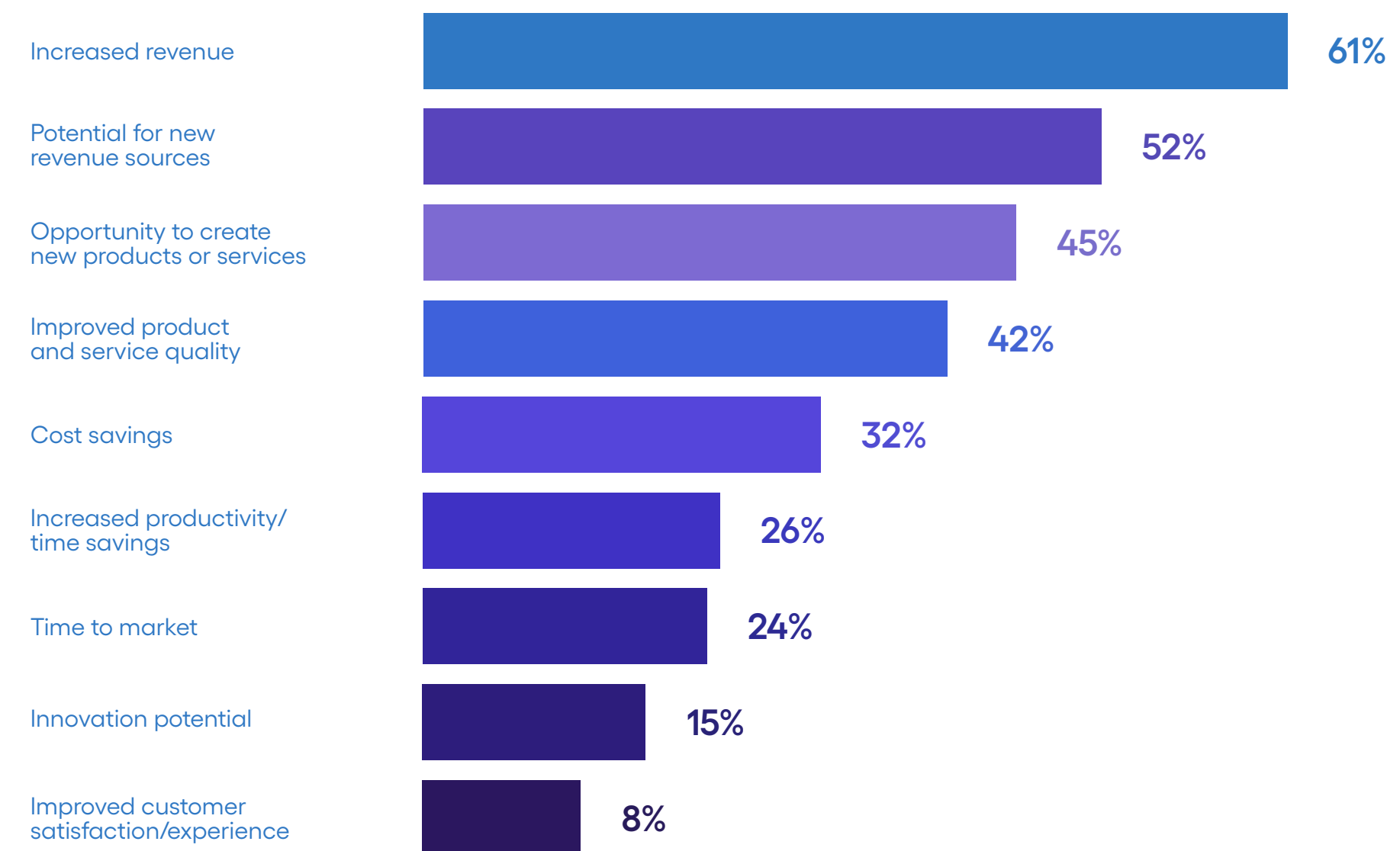
However, a look at what's driving their business cases sheds a new light on productivity from how it's been seen historically.

Traditionally, businesses have equated automation productivity gains with cost-cutting: driving down the cost of output by reducing the number of people needed to get work done. While generative AI-driven automation will likely lower headcount to some degree, that is no longer the end goal. Instead, as seen through the metrics respondents will use to drive business cases, we see a shift toward redirecting productivity gains into funding endeavors that increase revenues or lead to entirely new revenue streams.

The metrics UKI businesses say will be most important for justifying generative AI expenditures include more ambitious goals, such as increasing revenues, creating new products and services and discovering new revenue sources, all of which were named as "most important" by at least 45% of respondents. Conversely, metrics like cost savings, time savings and customer experience were cited by 32% or fewer (see Figure 5). In other words, the concept of productivity no longer stops at cost-cutting—businesses appear to be redirecting productivity gains into initiatives aimed at growth.

Revenue is a top metric for justifying gen AI use cases

Q: Which of the following metrics are most important in terms of justifying your organization's generative AI business cases? (Percent of respondents naming each as a top-three choice)

Metric	Percent
Increased revenue	61%
Potential for new revenue sources	52%
Opportunity to create new products or services	45%
Improved product and service quality	42%
Cost savings	32%
Increased productivity/ time savings	26%
Time to market	24%
Innovation potential	15%
Improved customer satisfaction/experience	8%

Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 5

Using this more granular view of productivity goals and business drivers, we analyzed the differences in how industries intend to use the technology.

Rather than focusing on the distinction between productivity vs. innovation, we grouped the metrics into two high-level categories of business use cases:

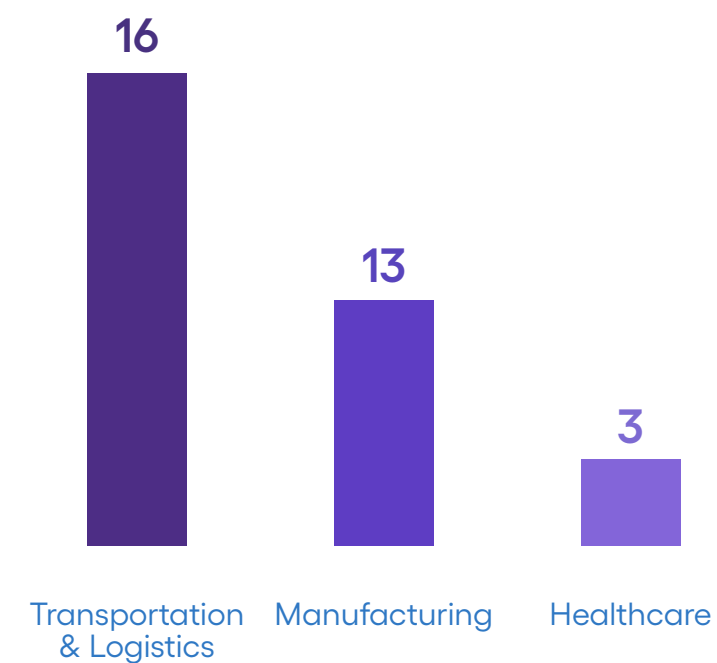Enhancing current business performance (revenue, cost savings, time-to-market, time savings)

Building something new (new revenue sources, new or improved products, innovation)

We then assigned each of the metrics a score to see the relative gap between a number-one-ranking metric and a number-three-ranking metric. By calculating the average score across industries, we could clearly see how each industry's responses deviated from the baseline.
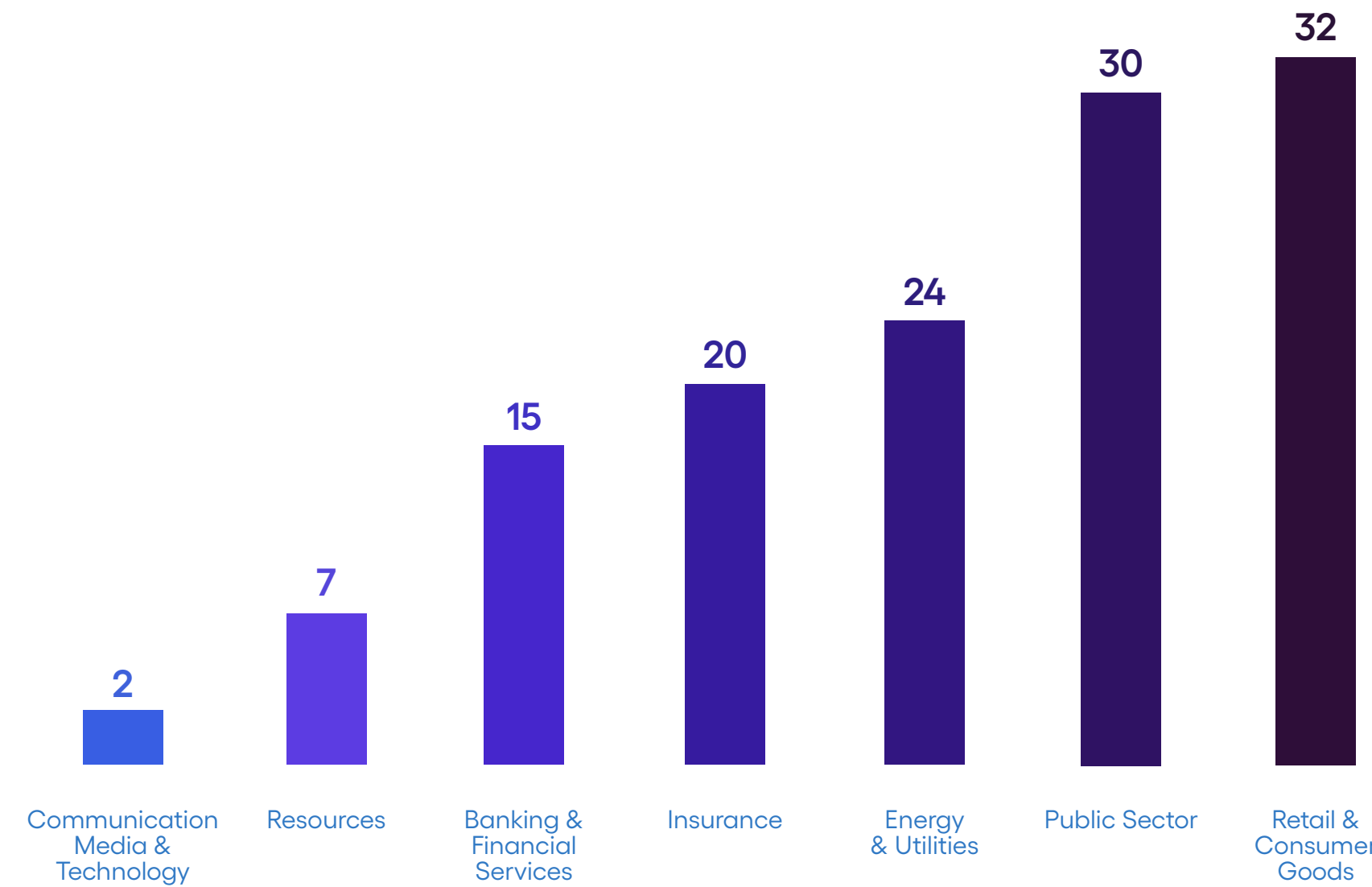
Our analysis reveals stark differences among UKI industries in terms of the business use cases they'll likely prioritize (see Figure 6).

Industries diverge on business cases

Enhancing what they have

Building something new

16	13	3	2	7	15	20	24	30	32
Transportation & Logistics	Manufacturing	Healthcare	Communication Media & Technology	Resources	Banking & Financial Services	Insurance	Energy & Utilities	Public Sector	Retail & Consumer Goods

Note: This figure depicts each industry's relative deviation from a baseline of "zero", using a ranked scoring of the top-three metrics they cite as important for justifying their generative AI use cases. It reveals a weighted view of each industry's overall priorities for gen AI deployment.

Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 6

Transportation and logistics

Transportation and logistics businesses are directing a large portion of their generative AI investments toward enhancing their current business performance. This comes as no surprise, as spiralling fuel and energy costs, inflationary pressures and labor shortages have heavily impacted operating costs and margins across the sector.

This more cautious approach to investment is reflected in the UK Logistics Confidence Index 2023, where the sector's confidence score dropped to 47.3 from 50.4 the year before.

An example of how T&L businesses will use gen AI to enhance existing performance is Network Rail's robust AI strategy focused on finding and repairing faults before they impact journeys. The transportation giant is also looking at generative AI to create a chatbot interface for employees to more easily access information and data.

Manufacturers

Manufacturers are similarly focusing gen AI investments on improving current business performance, which is understandable given the supply chain disruptions and reduced demand. New figures from S&P's purchasing manager index revealed the UK manufacturing sector slipped back into contraction this year after disruption to shipments in the Red Sea continued to impact firms.

Airbus UK, for example, has identified hundreds of use cases that range from improving processes to optimizing the product, service and support activities. These include engineering assistants, contract analytics, recruitment tools, cyber threat and risk analysis, and procurement optimization.

Public sector

Public sector organizations, meanwhile, are dedicating their investments toward metrics in the "building something new" category. The UK government made additional financial commitments to AI across public services even after the deputy prime minister's recent announcement to spend £110M to improve the delivery of healthcare, education, crime prevention, immigration and public administration. This funding includes announced plans for a collaboration with the National Health Service, with AI pilots already taking place in areas such as diagnostics and tailoring medicine to individuals based on genetics.

Insurance companies

Insurance companies are on a similar path. To comply with the Financial Conduct Authority's Consumer Duty regulation, insurance companies must ensure its marketing materials meet standards for clarity and understandability. This involves regularly reviewing thousands of documents, a task that can be time-consuming for subject matter experts but ideal for an AI assistant to streamline.

Retail businesses

Retail businesses are similarly focused on developing new ways of working and leveraging generative AI to improve product and service quality. Health and beauty retailer Boots, for example, has announced plans to create a digital personal shopper, with a view to open and expand revenue streams online.

Life sciences

Life sciences organizations are also focused on deploying generative AI to create new products and services. For example, AstraZeneca recently announced a $247M partnership with AI biologics firm, Absci, to create a zero-shot generative AI model that would work on creating new antibody therapeutics for cancer.

Business constraints: Talent shortages and shaky tech foundations

Business constraints:
Talent shortages and
shaky tech foundations

A remaining question is whether businesses are
ready to drive real value from these business cases.

The answer, according to our research, is mixed. To better
understand how prepared executives believe their business is to
adopt generative AI, we asked them to rate their organization's
maturity on a scale of 1 to 4 by selecting a statement that best
described their organization in the following five areas, from
low maturity to high:

- Organizational agility
- Leadership commitment
- Skills and talent
- Strategy and approach
- Technology and infrastructure

The message from business leaders in UKI is evident:

Leadership commitment is high, and strategies are robust
(perhaps a testament to the multi-million-dollar investments
most respondents report). However, the fundamental
operational and technological building blocks necessary
to adopt the technology are lacking (see Figure 7).

Leadership support is sound,
but fundamentals are lacking

Respondents were asked to rate the maturity of their organization's
operations in relation to generative AI. (Percent of respondents rating
each as a 3 or 4, with 4 representing the highest level of maturity).
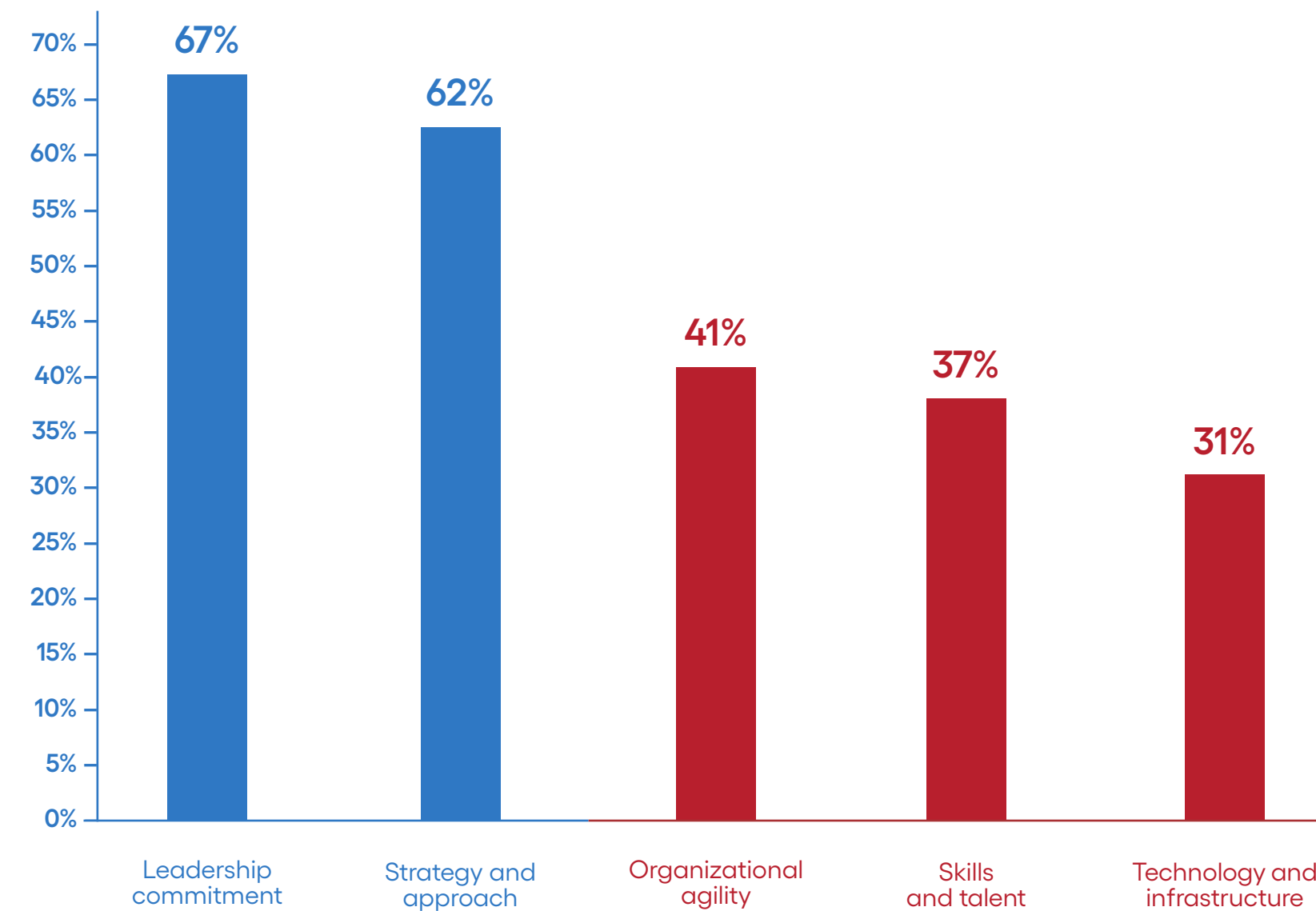
Base: 200 senior business leaders in UKI

Source: Cognizant and Oxford Economics

Figure 7

Unsurprisingly, given that talent shortages sit high on the list of the
biggest inhibitors impacting the region, respondents assign low ratings
to the maturity of their business's skills availability and talent strategy.

As noted earlier, businesses are particularly concerned with the state
of their technology infrastructure. While they rate data quality and
cloud compute power highly (57% and 48% rate these areas as good
or excellent, respectively), other foundational aspects score lower,
including compliance with company policies and customer privacy,
data security and data accessibility. Without seamless accessibility,
generative AI algorithms may encounter limitations in extracting
valuable information, resulting in inaccurate or incomplete outputs.

Path to success: Strategic recommendations for UKI businesses

Path to success:
Strategic recommendations for UKI businesses

UKI has much to offer when it comes to generative AI momentum.
But businesses here will still need to apply focused attention to take full
advantage of the accelerators of generative AI and overcome the inhibitors.

To navigate the road ahead, executives should prioritize the following actions:

Create clear pathways to develop skills and bridge AI talent gaps:

A well-prepared workforce will be key to harnessing the full potential of generative AI and propelling UKI forward in its drive to become an AI superpower. With the demand for AI skills more than tripling over the last decade in the UK alone, a workforce unequipped with the full suite of digital basics will cause growing challenges for businesses that leave the gap between supply and demand unaddressed.

Tapping into non-traditional pools of talent, on-the-job training and competency-based hiring practices are a few ways for businesses to develop the talent they need. Pathways into the AI workforce should also be examined. The number of entry-level AI roles is low, and for the roles that do exist, there is often a lack of awareness about how to break into the field.

In our study, 42% of businesses say direct funding from the government will be necessary to retrain and reskill employees, which may mean more initiatives similar to the UK's AI and data science conversion courses to ensure a steady supply of AI talent.

Prioritize consumer trust:

While the region's confidence in AI is clear from a national standpoint, the trustworthiness of generative AI is still being debated among the UKI population, with many fearing they are unprepared for this next wave of transformation as the AI skills gap widens.

Building and maintaining consumer trust in generative AI is paramount for its widespread adoption. Businesses need to find concrete, actionable ways to reassure consumers and build a more optimistic outlook toward the technology

By prioritizing transparency and providing clear explanations of how AI is being used and its impact on employment, businesses can win the hearts of consumers, not just because of how it does businesses, but also because of its innovative, transparent and responsible use of generative AI.

Leverage national AI expertise through start-up partnerships:

The UK is home to the highest numbers of generative AI startups compared with the rest of Europe, while Ireland boasts one of the most dynamic tech hubs on the planet. Amid low confidence in their existing tech infrastructures, businesses can start to explore solutions through a robust ecosystem of AI startup partners.

By tapping into the expertise around them, businesses can test and quickly bring to market generative AI solutions without large upfront development or ongoing maintenance costs. Startups allow businesses to explore a greater number of use cases through novel approaches and discover industry-specific solutions without feeling intimated by the nuances of the technology.

*The full list of regional factors we evaluated includes: the flexibility of the existing operating model, market demand for gen AI-enabled products and services, data readiness, quality of output from gen AI, availability of compute power, cost/availability of gen AI-related technologies, shareholder/investor sentiment, regulatory environment, sustainability, national infrastructure, cost/availability of capital, data privacy and security, existing technology infrastructure, current and prospective employee perceptions, flexibility of the existing business model, maturity of gen AI-related technologies, consumer perceptions and cost/availability of talent.

Learn about the impact of generative AI on jobs and the economy in our report New Work New World.

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Thank you

Authors

David Fearne
Global Head of generative AI

David leads Generative AI at Cognizant, pioneering enterprise cognitive architecture, research and innovation. He joined from PA Consulting in 2021, bringing a strong data background and extensive experience in the technology sector.

in **LinkedIn profile**

Ramona Balaratnam
Manager, Cognizant Research

Ramona Balaratnam is a Manager in Cognizant Research. With extensive experience in the Consulting industry, she delves into strategic research to uncover innovative market insights and analyze their impact across industries and businesses.

in **LinkedIn profile**