



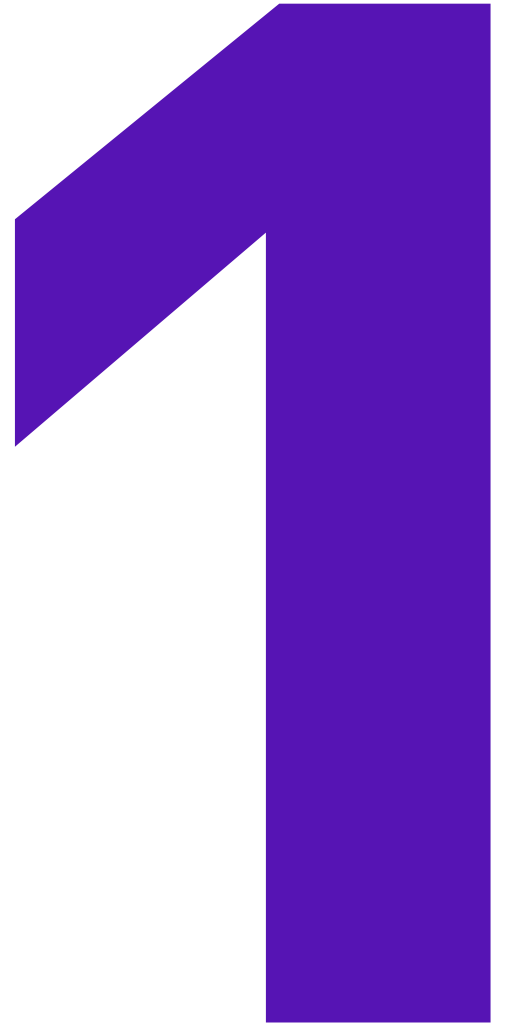
The Future in 2020

Large businesses

The UK's largest companies lead the way
on emerging tech – but could go even further

Research conducted by **YouGov**

Introduction



New technologies will transform businesses of all shapes and sizes. Right now in the UK, large businesses are leading the way.

We worked with YouGov to survey 1,006 business leaders from across the country.

Specifically we asked about 14 innovative technologies (see full list on page 19) that can change the way businesses operate. Which of these do they use? Which might they use? And how will they decide?

The largest companies (1,000+ employees) are more aware of these technologies and most likely to be using them. This brings clear commercial advantages as emerging tech helps them pursue their main objectives, from increasing revenue and reducing costs to boosting productivity and creating new customer experiences.

But our survey also flags up a few warnings. Large businesses are struggling to recognise the full benefits of emerging technology. There are big variations between different industries. And large companies still need convincing how some of these technologies can contribute to their goals.

Large
businesses
have adopted
more new
tech

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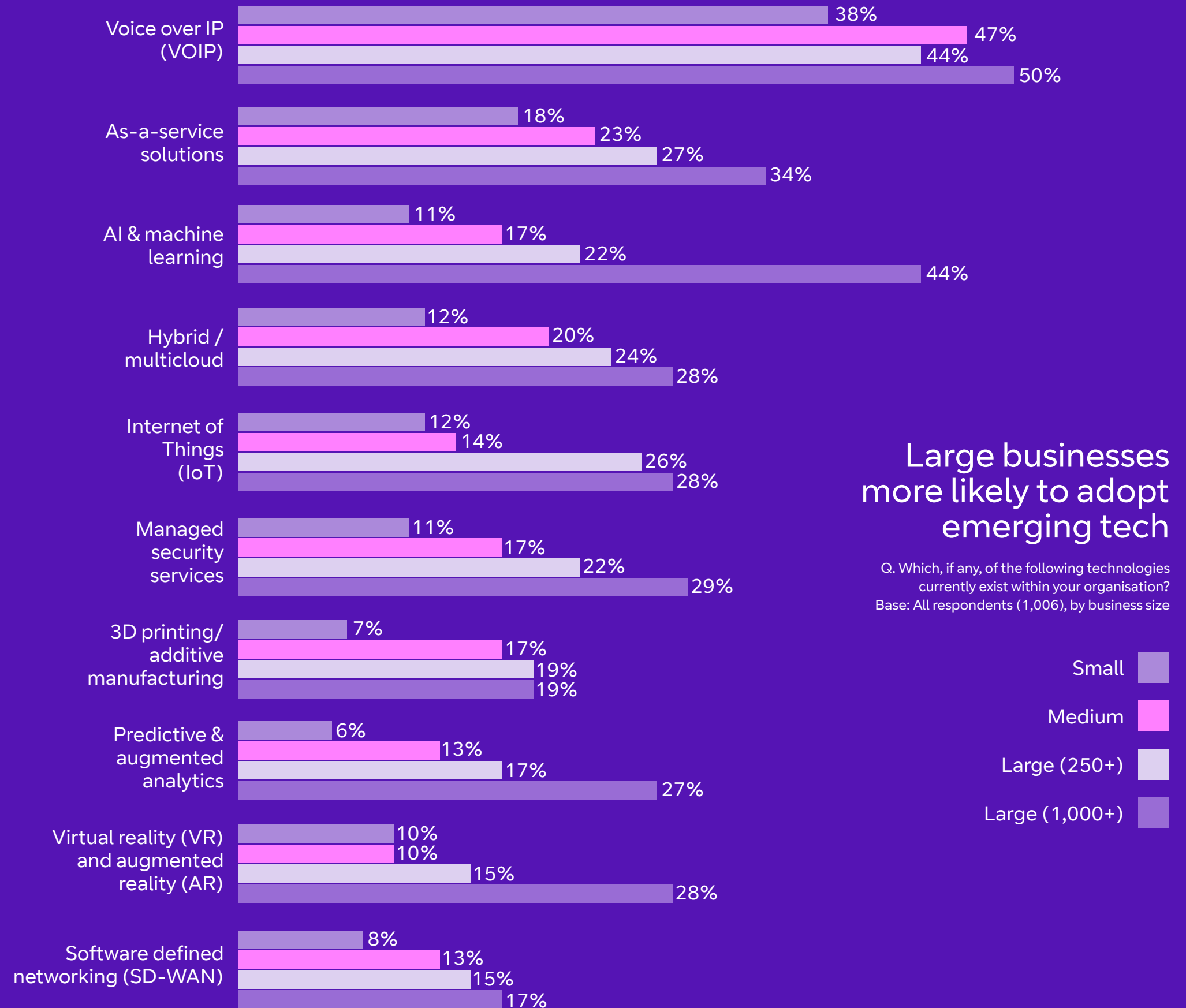
We found that across the board, uptake of emerging technologies is patchy.

44% of businesses we surveyed had adopted VOIP (using the internet for voice communications rather than a phone line). But below that uptake peaks at 25%. Excluding VOIP, almost a third of businesses aren't using any emerging technologies.

Among large companies, the picture is more encouraging – only 20% said they weren't using any of these technologies. At times, the divide between large and small companies is significant. 27% of large businesses are using predictive and augmented analytics and 44% of them are using AI, while the figures for SMEs are just 6% and 11%.

There is a lot of room for growth in areas like 5G. Its rollout has been hampered by coronavirus, and at the moment, only 13% of large companies are using it. 5G will help businesses make the most of other emerging tools like Internet of Things (IoT) and VR/AR. Nokia predicts it will add \$8 trillion to global GDP by 2030.

When we asked companies how well they're using the tech they have adopted, large companies fared worse. 12% said they weren't using any of their new tech to its full potential. Only 6% of small businesses said the same. Higher investments bring increased pressures. Clearly large businesses are not always convinced they're getting the right return on these investments.



Not everyone
sees a bright
future in
new tech



Large businesses take their digital strategies seriously.

Nearly half of large companies, 47%, said digital transformation is part of their existing tech strategy. And 39% regularly evaluate new technologies – only 1 in 4 small companies said the same.

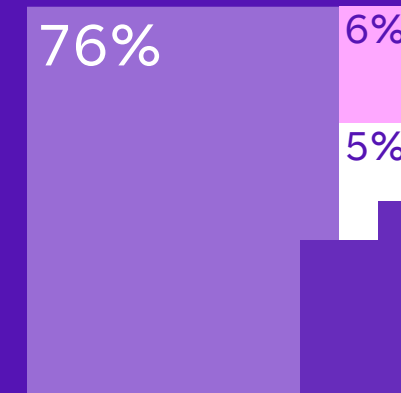
Large companies said their main priorities are increasing revenue, reducing operational costs and boosting productivity.

The good news is that transformational technology can contribute to all of these goals. But this message is not always getting through. Predictive analytics, for example, can help businesses spot new opportunities and anticipate their customers' needs. AI can analyse how a business operates and suggest savings.

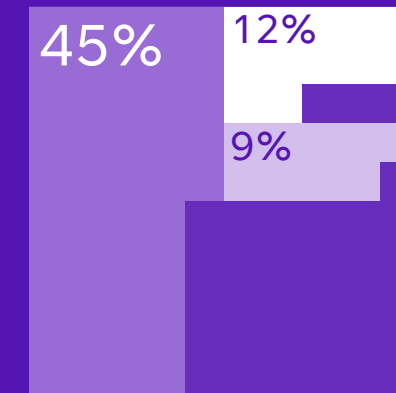
But among businesses looking to boost revenue, only 18% believe that predictive and augmented analytics might be able to help. Of the companies looking to reduce their operational costs, just 1 in 4 think AI and machine learning might be useful.

We asked businesses why they weren't going to invest in each of these key technologies. The most common response was that they simply weren't right or relevant for their business. For some technologies – 3D printing for example – this makes sense given its specific use cases. But for other technologies, it seems that businesses haven't yet grasped just how useful they can be.

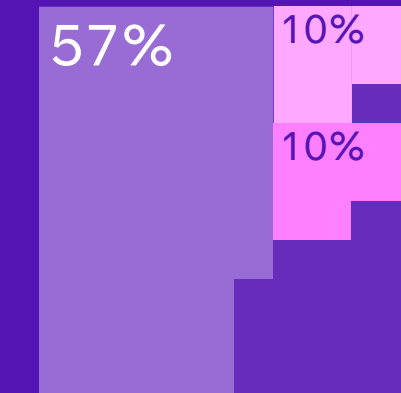
3D printing



5G



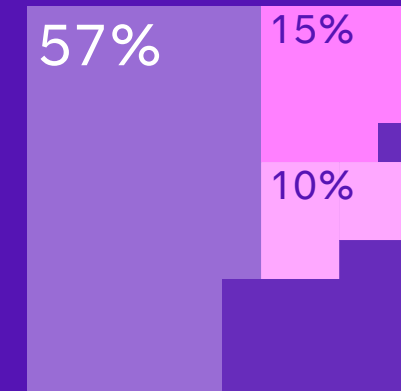
AI & machine learning



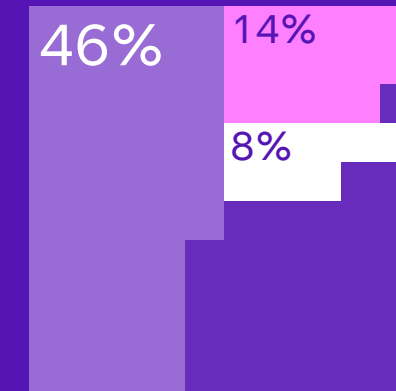
Why businesses don't plan to invest

Q. Which of the following reasons best explain why your business is not planning to invest in each of the following technologies in the next 5 years?
Base: 515 (Those NOT planning to invest in the technology)

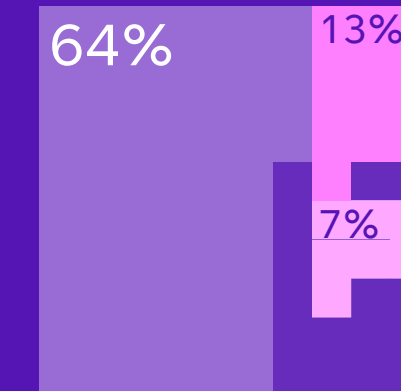
Blockchain



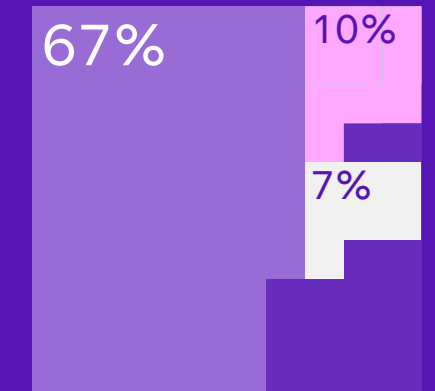
Edge computing



Internet of Things



VR & AR



Not right / relevant for my business

Limited integral potential

Lack of understanding

Too expensive

Current financial climate

Awareness
of new tech
is slow in
emerging

4

We asked respondents which of these emerging technologies they had heard of before taking the survey.

At the top end, as expected, the vast majority had heard of 5G, 3D printing, and virtual and augmented reality (VR and AR). But only 18% of those we spoke to had heard of hyperconverged infrastructure. More surprisingly, 4 in 10 didn't know about managed security services or as-a-service solutions – services hosted in the cloud and accessed via subscription. More than 50% of our panel said they had never heard of half of the technologies listed.

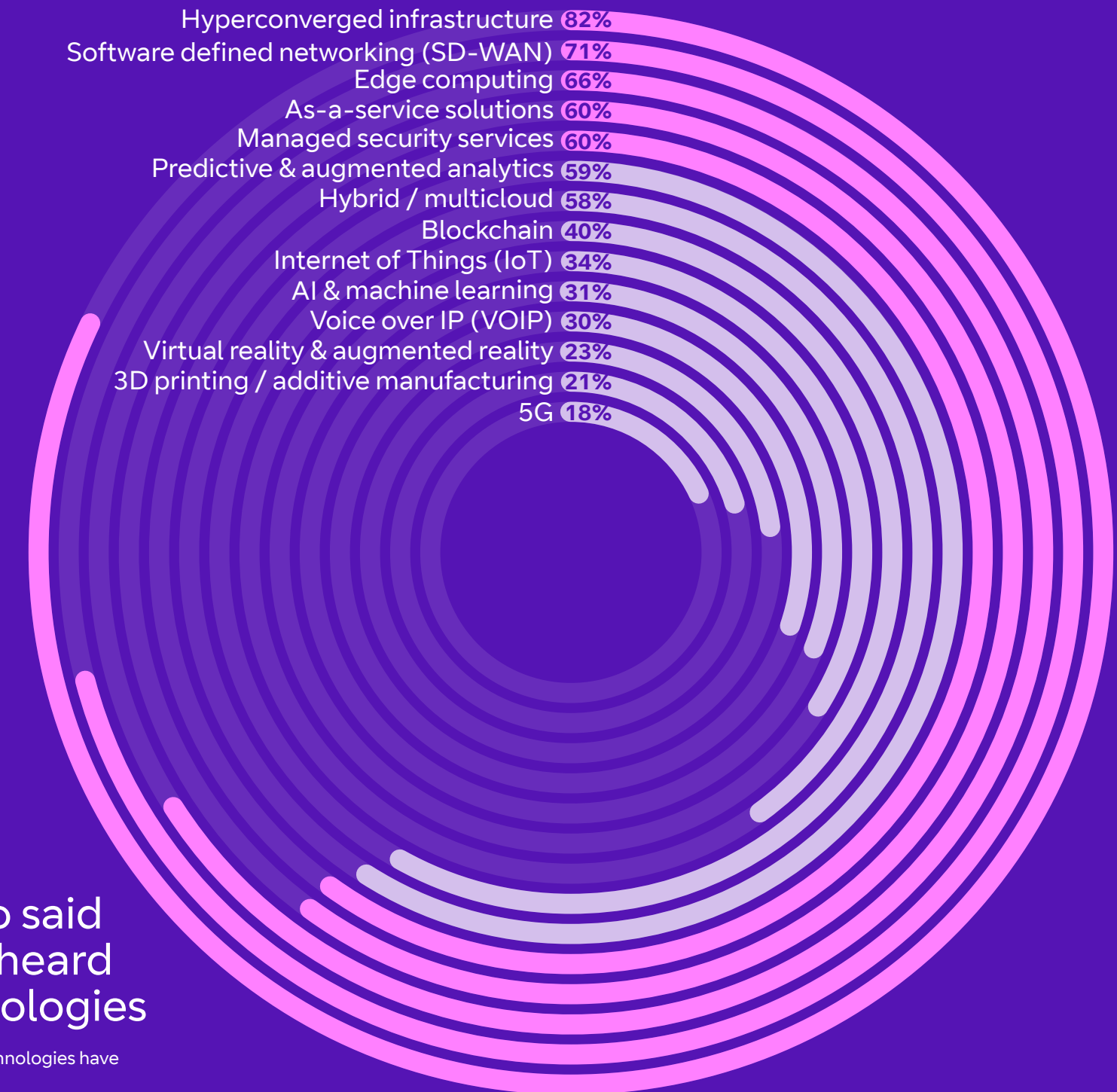
We also looked at how awareness differed between C-Suite leaders like CIOs and 'at-the-coalface' business heads. A significant majority of both groups were unaware of half of the technologies in the survey; 71% of both business heads and C-Suiters had never heard of SD-WAN, for example.

Sometimes the gap between the two groups was significant. 24% of C-Suite leaders hadn't heard of 5G, while only 11% of business heads said the same.

If businesses are to make use of this emerging technology, they need to understand what it is and what it can do. This should start at the top, with C-Suite leaders thinking about tech as part of their overall strategy.

Leaders who said they hadn't heard of the technologies

Q. Which of the following technologies have you heard of before today?
Base: All respondents (1,006)



Large
businesses
more likely
to see tech
as 'critical'

5

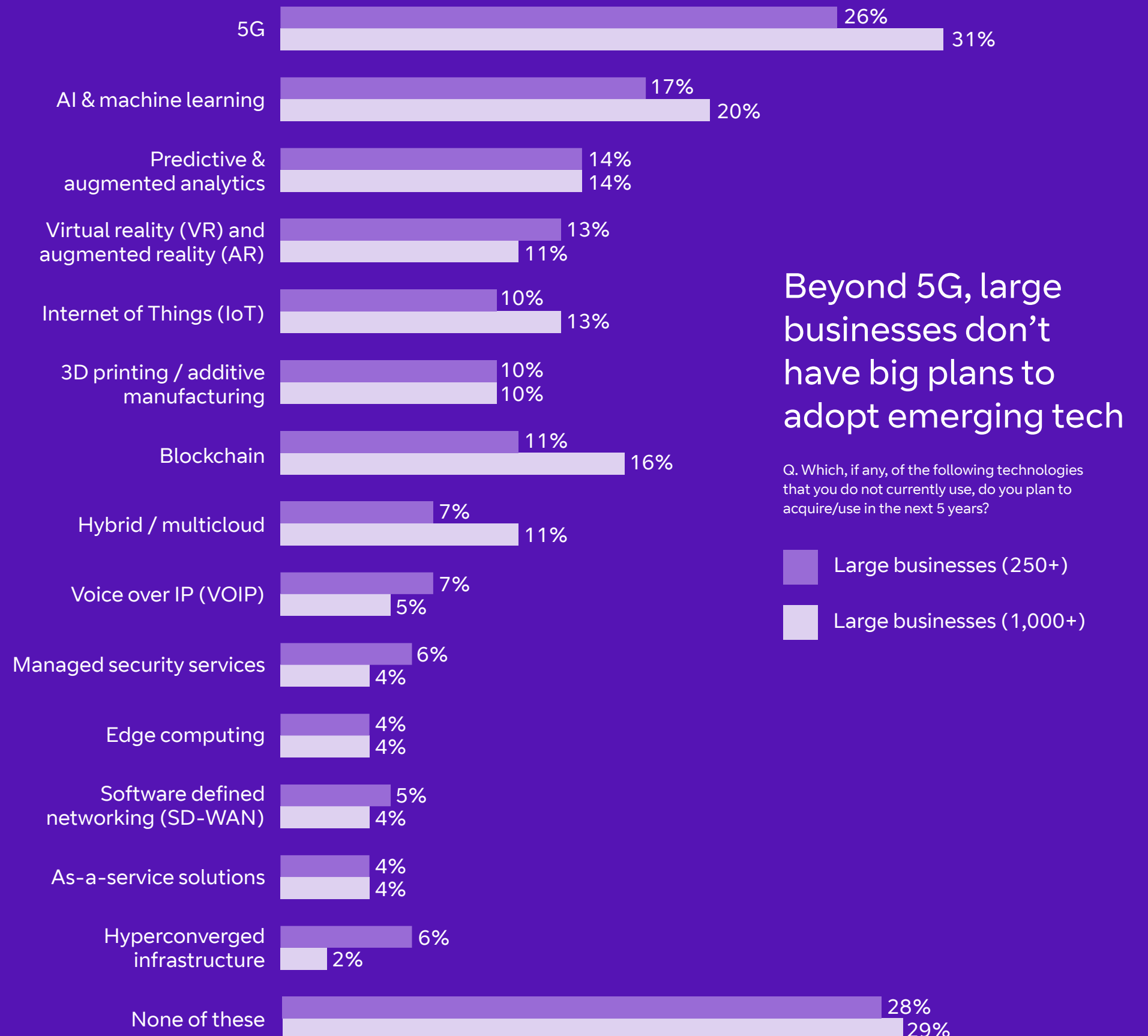
Large businesses aren't rushing to acquire emerging tech in the next five years.

31% plan to invest in 5G, but this seems modest given 5G's enormous predicted benefits. Elsewhere only 14% plan to acquire predictive and augmented analytics, 5% say they'll invest in VOIP and just 2% in hyper converged infrastructure.

The gap between large and small companies is less pronounced here. In places it doesn't exist – more small companies plan to acquire virtual and augmented reality than large companies, for example.

But large companies are more likely to see new tech as critical to achieving their ambitions and staying competitive in the next five years. For example, 47% of large companies see AI and machine learning as critical, against just 18% of small companies

And larger companies are more likely to have tech investment strategies in place. 30% of all businesses have planned their tech spending over the next five years, but this rises to 39% among large companies, and drops to 20% among small companies.



Beyond 5G, large businesses don't have big plans to adopt emerging tech

Attitudes
and adoption
vary between
industries



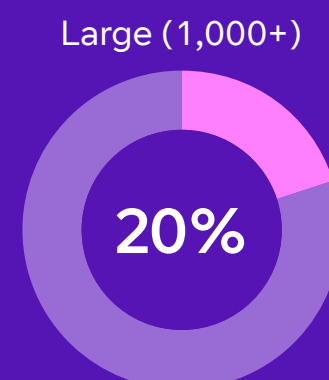
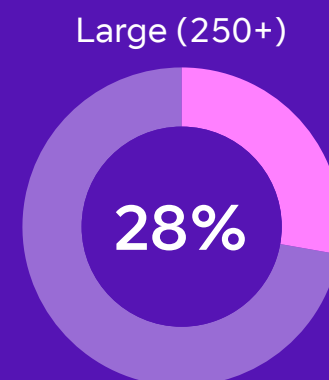
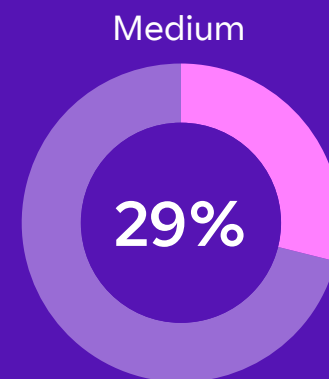
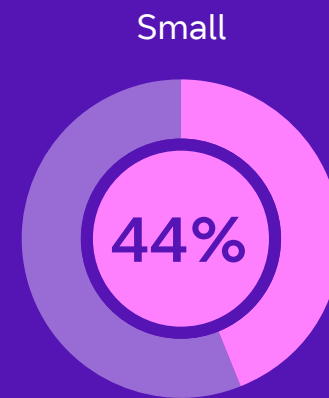
There are striking variations between different industries and sectors when it comes to using these transformational technologies.

At the top end, unsurprisingly, we find IT and telecoms with the highest rates of tech adoption. Financial services and manufacturing both have slightly higher than average adoption rates too.

Elsewhere, hospitality and leisure lags way behind, as does medical, health and education. As you can see in the chart opposite, nearly half (48%) of the medical, health and education respondents aren't using any of the technologies on our list (excluding VOIP).

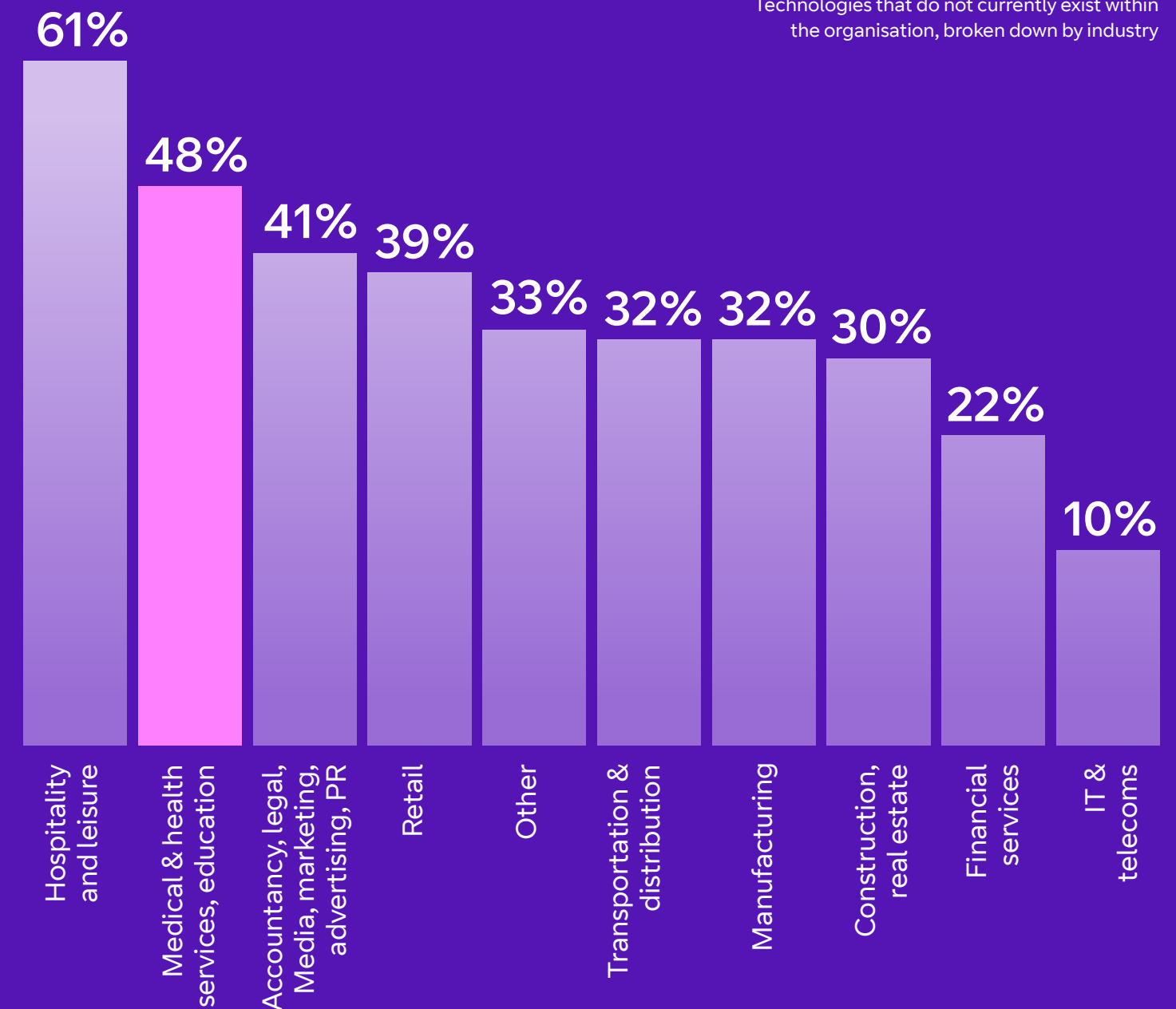
These sectors look likely to fall further behind. 43% of hospitality and leisure businesses don't plan to adopt any new tech in the next five years. 38% of those in the medical, health and education sectors said the same.

In less forward-looking sectors, there could be huge advantages to blazing a trail and adopting new technologies before your competitors.



Rate of digital transformation varies by industry

Base: All respondents (1,006), excluding VOIP.
Technologies that do not currently exist within the organisation, broken down by industry



Security
is the main
concern
for large
businesses

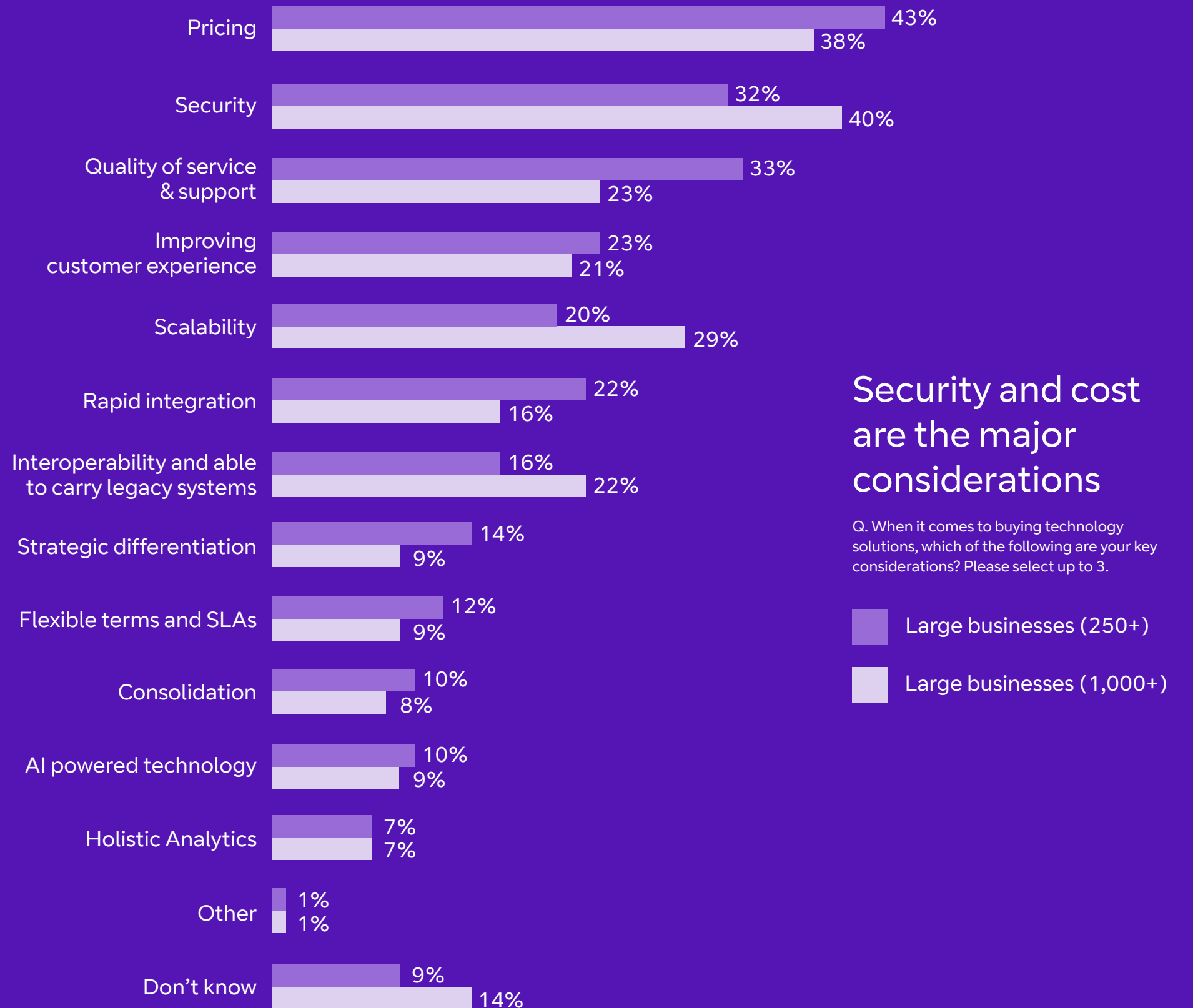


When large businesses consider buying new tech solutions, security is the main concern.

In a very short time, the coronavirus forced businesses to find new ways of working. With more people working from home, this created new security challenges too.

7 in 10 large companies said their cyber security threat had increased in the last year. 75% said their security-related workload had increased. As a result, 65% said external partners had become more important in managing their cybersecurity.

Their next considerations when acquiring new tech are cost and scalability. Making changes can also be harder for larger businesses. They worry more about resistance to change obstructing their digital plans, and about the complexities of rolling back legacy technology.



Security and cost are the major considerations

Q. When it comes to buying technology solutions, which of the following are your key considerations? Please select up to 3.

Large businesses (250+)
Large businesses (1,000+)

Helping
large
businesses
go even
further



Large companies are ahead of the UK's SMEs when it comes to adopting new technology. But they could open up even more opportunities if they can better understand how this tech can contribute to their goals, and how to maximise its potential.

So what happens now? Based on our vast experience of working with businesses of all shapes and sizes, here are a few pointers to kick start the conversation at your company.

It's good to listen

You don't need to start from scratch. Talk to your partners, suppliers and customers about their experiences with emerging tech.

It's about partnership

The solution is not in any one technology or any one partner. It's about bringing it all together. Your business will benefit the most from a network ecosystem to support your goals.

All eyes on 2025

In 2025 we are switching the UK over to fully digital networks. Businesses should think about how to make the most of the many opportunities this will create.

Always start with security

Bake security into any future plans from the outset. Identify your challenges and find the partners and services that can help.

Connecting the dots is crucial

Seek out real examples of how businesses like yours have embraced these technologies. Then think about your industry, your business model and how both might change.

There is no time like now

Emerging technologies are not a fad – they can directly contribute to your most important business objectives. Building a sustainable long-term business model should start straight away.

We can help

Choosing trusted partners is a vital part of your digital transformation journey. Our experts can help you understand which emerging technologies are right for you, and show you how to maximise their potential.

Useful links and further reading

[10 ways to digitally transform your business](#)

[5G myths debunked](#)

[Productivity in the modern workplace
\(2020 and beyond\)](#)

[5 key artificial intelligence trends](#)

[How London's Royal Hospital for Neuro-Disability
automates routine checks with IoT devices](#)

[How Belfast Harbour uses Augmented
Reality headsets to carry out safety checks](#)

[How we're helping to build a world-leading
'living lab' for Scotland with 5G](#)

[Tips from trailblazing businesses who are
shaping the future](#)

Full list of technologies

Tech List	Description
Virtual Reality (VR) and Augmented Reality (AR)	Solutions that enable immersive experiences by creating an artificial environment (VR) or enhancing a real-world view (AR), usually experienced through a headset
Edge Computing	Computing and data storage closer to the location where it is needed, to improve response times and save bandwidth
Internet of Things (IoT)	Smart devices that collect data and connect to the internet, without the need for human input (e.g. smart energy meters, sensors, wearables)
AI & Machine Learning	Intelligent behaviour by machines, that work and react like humans (e.g. chatbots, voice assistants, robots) whilst having the ability to continuously improve
Software Defined Networking (SD-WAN)	A network architecture approach that enables the network to be intelligently and centrally controlled, using software applications. This helps operators manage the entire network consistently and holistically (e.g. SD-WAN, SD-LAN)
5G	The next evolution of the mobile network, providing faster speeds and lower latency
Voice over IP (VOIP)	Using the internet to carry voice communications, rather than a traditional phone line/system
As-a-service Solutions	Services hosted in the cloud by third parties, enabling businesses to access them on a subscription basis (e.g. Google Apps, Cisco WebEx, Microsoft Office 365)
Blockchain	A list of transactions that are linked using cryptography, meaning they cannot be modified
Predictive & Augmented Analytics	Intelligent data analysis solutions, making it easier to get actionable insights
Hyperconverged Infrastructure	A software-defined IT infrastructure that virtualises conventional 'hardware-define' systems. E.g. virtualises computing, software-defined storage and virtualised networking.
Managed Security Services	Network security services that have been outsourced to a service provider
Hybrid / Multicloud	Using a mix of on-premises, private cloud and third-party, public cloud services with orchestration between the various platforms
3D Printing / Additive Manufacturing	Construction of a three-dimensional object from a CAD model or a digital 3D model



Research conducted by **YouGov**

YouGov completed 1,006 online interviews with C-Suite and business heads in small (305), medium (207) and large (494) UK businesses. Fieldwork was carried out between 21 August and 13 September 2020.