

Tough times, but innovation springs internal

How cloud is the key technology enabler helping businesses innovate in a turbulent period



Research report by





Executive summary

We are suffering the after-effects of the post-pandemic world, with climate shocks, the war in Ukraine and the conflict in Gaza all causing significant disruption to supply chains, contributing to a rise in energy costs. Economic losses have also created a cost-of-living crisis across most countries.

In this year's survey, 82% of respondents said that the current global economic climate had had at least some impact on their IT plans. We've seen significant layoffs in the tech sector over the last year, but we've also experienced a surge in innovation, with new ideas and thinking fuelled by the explosion of generative AI and access to large language models.

Almost all of us are seeing the value AI can bring to productivity and the services we provide our customers. Almost all of our respondents have AI in their plans, but nearly two-thirds are already using it, representing a significant speed of adoption. The so-called "magnificent seven" of Apple, Nvidia, Tesla, Microsoft, Alphabet, Amazon, and Meta, all closely associated with AI, collectively increased in market value by 111% in 2023, giving a definite feeling of optimism going forward.

Cloud remains the essential enabler, with all of our surveyed companies using cloud services, and 49% having a cloud-first strategy and 49% a hybrid approach. This emphasises that there are no "one-size-fits-all" solutions, and that the smart companies are choosing the appropriate services and tools for each job. However, half of our survey said that migration had been more complex than expected, while 41% said their cloud costs had been too high, up from 33% last year. That explains the increased focus on cloud economics and FinOps, but also points to the need for better planning and greater visibility and control over costs where possible. We will be covering these topics in our written content, webinars and video podcasts this year.

Despite some reports suggesting that organisations are reducing their ESG focus, this year's data shows that many businesses remain fully committed to their sustainability initiatives. However, at the end of the procurement cycle we are still seeing that "cost is king". It's important to understand the tension between cost control, the increased infrastructure demands that AI solutions will bring, and the need for clearly defined, controlled, and monitored cloud migration, cloud-first, and AI plans.

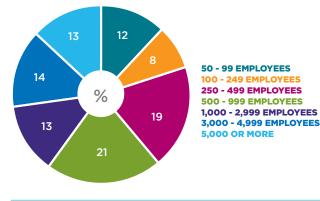
2023 was a pivotal year. I believe that we are at the start of a new phase of fast proliferating new technologies, powered by AI, but underpinned by cloud technology for the supporting compute, storage, and network bandwidth they all require. The way we interact with technology is changing. We are moving beyond keyboard, mouse and multi-touch screen technology to a more immersive, 3D web with voice, gestures, and eye tracking. Is this a third wave of the Internet, the fifth industrial revolution? Whatever we call it, the opportunity for innovation, new thinking, and increased digitisation is there for our members and their customers.

David Terrar - CEO - Cloud Industry Forum

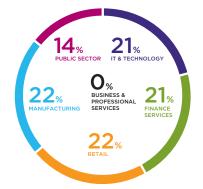
Methodology and sampling

In early 2024, Vanson Bourne conducted a major research project on behalf of the Cloud Industry Forum, designed to assess where businesses are on their cloud journeys, where focusing their innovation efforts, the impact AI has had across industries, how the current economic uncertainty is affecting businesses, and how cloud can support wider business initiatives such as ESG. The survey polled 250 senior IT and business decision-makers in large enterprises, small to medium-sized business (SMEs) and public sector organisations. All of those represented have UK operations.

How many employees does your organisation have globally?



Within which sector does your organisation operate?





Cloud computing

As the sophistication and scope of cloud computing has grown, its definition has evolved to cover many different things. It might be used to describe hosted IT services or outsourcing of any type, or it can be defined as something more specific, such as data storage, application management, platform as a service, or software as a service. However, for the purposes of this report, we have stuck with the tried-and-trusted definition of cloud put forward by the National Institute of Standards and Technology (NIST):

Cloud computing is a term that relates to the IT infrastructure and environment required to develop/host/run IT services and applications on demand, with consumption-based pricing, as a resilient service. Communicating over the internet and requiring little or no client end components, it provides resources and services to store data and run applications, from many devices, anytime, anywhere, as-a-service. The services can, in turn, be scaled up and down as needed to meet a customer's variable operational needs, ensuring maximum cost efficiency.

Summary of key findings

Cloud remains a key focus for organisations in 2024:

- 100% of surveyed organisations said they are accessing cloud-based services to meet their needs, with 57% utilising AWS, 51% Azure and 51% IBM in our sample. Elsewhere, 39% of organisations reported using Google Cloud, 28% Oracle and 18% Salesforce.
- Organisations are split on how they approach cloud technology and their data, with 49% reporting that they use a cloud-first approach, 49% opting for a hybrid approach and the remaining 2% reporting the use of on-premises technology.
- The most common motivation for using cloud is its potential to offer greater flexibility of IT spend (33%), while 32% of organisations cited cloud's ability to make them more agile as a business.
- 37% of businesses said that between 40-60% of their IT infrastructure is hosted in the cloud while 29% of respondents reported that they host 60-80% of their IT assets in this manner.

Artificial intelligence continues to fuel innovation:

- 96% of organisations believe that AI will be at least somewhat important to their organisation in the next five years, an increase from 86% in 2023.
- Further to this, 42% of respondents reported that they consider AI among their most important IT projects, ahead of other considerations such as security and IT sustainability (both 40%).
- It's no surprise that nearly 94% of organisations report that they are either planning to or are already using generative AI. In fact, 62% of businesses report that it is already in use across at least some of the parts of their organisation.
- 96% report that gen AI will (or has already) benefited their organisation, including improving data analytics (46%), customer service (45%) and/or products and services (43%).

ESG still front of mind:

- 40% of respondents reported that IT sustainability is an important project for their organisation, underlining the sustained relevance of ESG-related initiatives.
- To add to this, 44% of respondents said that ESG and sustainability is extremely important to their organisation when deciding which cloud vendor to use, an increase from 30% in 2023.
- Despite this, 45% of respondents said that cost was a key priority when deciding on whether or not to work with a cloud managed service supplier, while 41% referenced the availability of services and 39% mentioned partnering with a trustworthy company. These all rank ahead of sustainability credentials (28%).

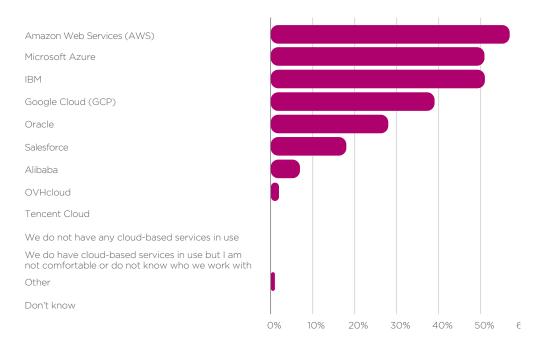


1 Economic challenges

Cost remains king

This year, a good place to start is to examine how current economic uncertainty is affecting businesses, particularly the impact it is having on IT and cloud investment as well as recruitment and technological expansion. Despite the unique set of challenges facing businesses in 2024, the value of cloud is clear for all, evident in the fact that 100% of the organisations surveyed said that they are using cloud-based services, up from 95% in 2023.

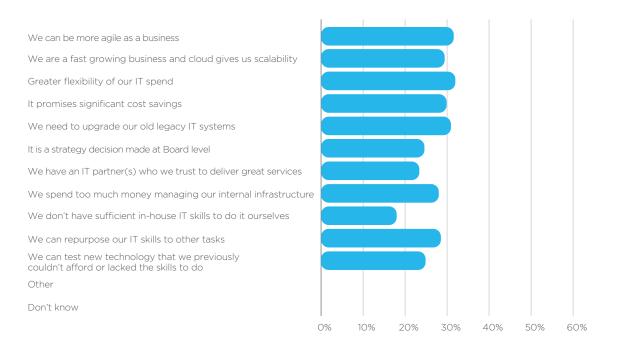
How important will the following technologies be to your organisation in the next five years?



What is interesting is that within our survey sample, the three most popular cloud services in use are AWS at 57%, Azure at 51% and IBM at 51%. While Google Cloud Platform (39%) continues to be widely recognised as one of the three largest cloud providers, the survey results indicate growth amongst the likes of IBM, Oracle and others.



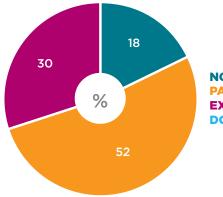
Why is your organisation utilising cloud-based services?



This year's survey indicates that cost remains one of the most common motivations for cloud adoption. Given the circumstances facing businesses, this comes as little surprise. 33% of respondents said that cloud-based services allow for greater flexibility in IT spend, while a further 30% highlighted that cloud promises significant overall savings.

Elsewhere, the need for agility, scalability and flexibility offered by cloud are highlighted as common reasons for adopting the technology. 32% of respondents said that cloud allows their business to be more agile, while 29% said that it offers them the ability to scale easily. Perhaps crucial to these efforts, 24% also said that cloud offers them the ability to test new technology that was previously unaffordable or too complex.

How do you think the current global economic climate will impact your organisation's IT programme?



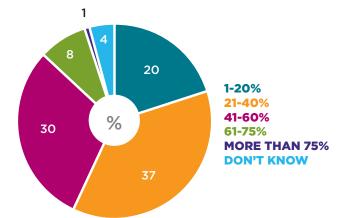
NO IMPACT - WE CONTINUE TO INVEST AND GROW PARTIAL IMPACT - SOME PROJECTS HAVE BEEN PUT ON HOLD EXTREME IMPACT - ALL SPEND HAS BEEN PUT ON HOLD DON'T KNOW

Many organisations are transparent and honest about the impact that economic constraints have had on their IT projects. As shown above, 82% of respondents said that the current global economic climate had had at least some impact on their IT development. Of those, 30% said that the impact had been extreme while 52% said at least some projects had been put on hold as a result.



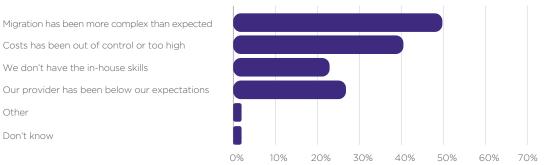
Controlling costs

Approximately, what percentage of your organisation's annual IT budget was/will be spent on cloud or cloud related IT in the following timeframes? - Last 12 months



The ability for cloud to generate new savings is crucial in challenging economic periods, as it frequently occupies a significant proportion of an organisation's IT spending. The chart above shows that cloud or cloud-related IT spending occupied an average of 36% of budgets over the last 12 months

Where has cloud strategy fallen short of expectations within your organisation?

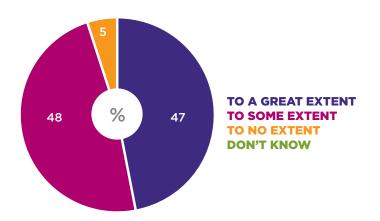


Of those respondents that said that their cloud strategy had fallen short of their expectations, 41% said that this was because costs had been out of control or too high. This figure is up from 33% last year and indicates that organisations are looking for greater visibility and control over costs where possible, particularly in the current economic climate.

Cloud providers and service providers alike must take note here: be mindful of the challenges facing customers and adapt offerings accordingly to ensure that customers have an accurate picture of how cloud will impact their finances.



To what extent have the cloud-based services that your organisation uses saved you money?



Overall though, the above chart shows that cloud remains a source of savings for many. 94% of those surveyed said that their use of cloud has allowed them to save money, with almost half (47%) saying it has saved them money to a great extent. It is more important than ever that businesses remain able to access cloud in a cost-effective fashion.

Member viewpoint

"It's clear that despite the challenging business landscape, organisations remain firm advocates of cloud and its potential to transform the business. Leaders are continuing to dedicate investment to its development and application within everyday operations, and plan to continue to do so in the coming 12 months and beyond.

"There is also clear recognition that properly planned and managed cloud implementations help companies save money in the long term, and this focus on cost has led to the growing focus on cloud economics and FinOps as a discipline. It's important that service costs are controlled and manageable, or providers risk falling short of meeting their customers' expectations."

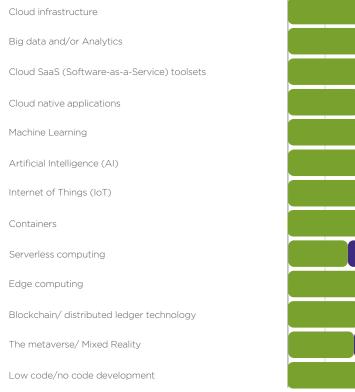
David Terrar, CEO at Cloud Industry Forum.



2 Innovation in the face of uncertainty

This year's survey results prove that businesses remain focused on innovation and are open to using new technologies more extensively to help deal with the challenges of the present and plan for the future.

How important will the following technologies be to your organisation in the next five years?





CRITICAL VERY IMPORTANT SOMEWHAT IMPORTANT NOT IMPORTANT AT ALL DON'T KNOW

The above chart demonstrates that AI and machine learning (ML) are continuing to grow in importance, considered critical or very important by 67% and 68% of respondents respectively. This indicates a consistent desire to master the technologies and meet their full potential.

Other technologies such as blockchain and the metaverse are less likely to be considered critical or very important at present, underlining their status behind AI and ML in the current pecking order, but also as important areas of focus for the coming years. It's our belief that some of the reticence towards the metaverse that our data shows is to do with the friction of, maybe even the clunkiness of current headset technology, and extended reality options, but that will begin to change. This is something we will be exploring in upcoming research.

The statistics also clearly show that cloud's position as an integral business technology shows little sign of waning. All respondents said that cloud infrastructure will continue to have at least some importance to them in the coming five years, with 82% considering it either critical or very important. Cloud SaaS toolsets (74% critical or very important) and cloud-native applications (68% critical or very important) are also held in similar regard.



Member viewpoint

"There's a lot of appetite for innovation today, and technology itself is bringing smarter, more cost-effective ways to innovate without risk. From quantum emulators to AI platforms that can start new projects in just a few clicks, many developments are available through the 'as-a-service' model which enables teams to drive innovation without breaking the bank.

After all, innovation can be risky. Companies can invest early and get ahead - but risk using new unproven technology - or stay focused on existing software and hardware, keep risk to a minimum and face the possibility of falling behind. Many organisations are adopting multi-cloud solutions to access the best solutions in an open cloud that reduces risk and helps to relieve cost pressure.

Al also offers organisations ingenious ways to handle repetitive tasks, perform complex analysis and synthesise content faster. This in turn supports and drives progress for the entire industry, which is undoubtedly why we are seeing great appetite for Al solutions around the world, all enabled by a cloud approach."

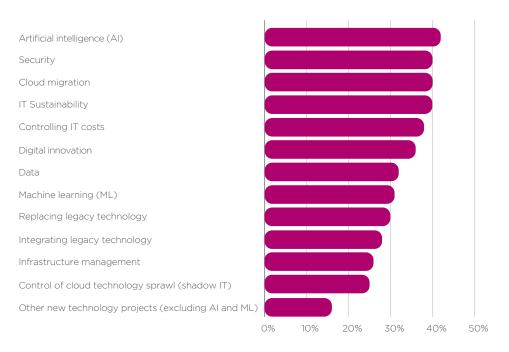
Emma Dennard, Northern Europe at OVHcloud.

3 AI takes progress to the next level

Al, particularly generative Al, has had a profound impact on technology in the last 12 months, with its various applications successfully capturing the imagination of the general public. Its popularity has helped fuel greater adoption, and the majority of businesses have since embraced it in some form or plan to do so in the future.

Al's popularity shows little sign of slowing

Which of the below are your organisation's most important IT projects?



The graph shown left is a clear indicator that AI is set to be an area of focus across industries in the coming 12 months. 42% of those surveyed highlighted it as one of their organisation's most important IT projects, the most popular response. This means it outranks security, cloud migration and IT sustainability in terms of focus, all of which were mentioned by 40% of respondents.



To what extent, if at all, is your organisation using generative AI?

We are not using it and have no plans to

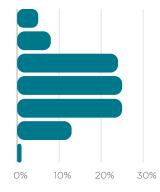
We are not using it but plan to in the future We are currently investigating how it could help our organisation

It is in use in some parts of the organisation

It is in use in most parts of the organisation

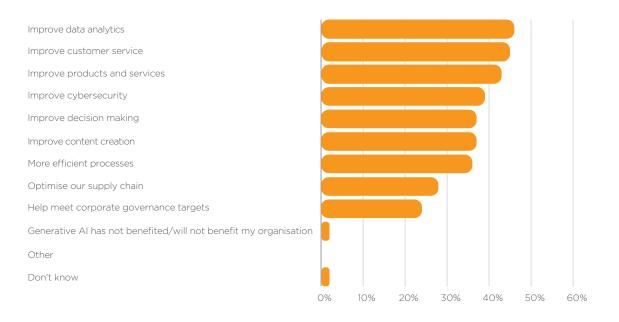
It has been launched across the entire organisation

Don't know



The appetite for AI can be seen in the popularity of generative of AI in particular. As shown, 63% of respondents said that they are currently using generative AI in some way, while 24% of those not currently using it are actively investigating how it could help their organisation, and 8% plan to use it in the future. In contrast, just 5% of organisations reported that they aren't already using generative AI and have no plans to.

In which ways, if at all, has generative AI benefited/do you think generative AI will benefit your organisation?



Generative AI's current and potential applications are varied and, in many cases, already impacting both organisations and their customers. When asked how generative AI has or will benefit their business, 46% of respondents said that they were using it to improve data analytics, while 43% said that it was in place to improve the quality of products and services.

Elsewhere, 45% of respondents are leveraging generative AI to enhance customer service, and a further 39% are using it to improve their cybersecurity capabilities. More than a third of respondents also stated that they are currently using or plan to use generative AI to improve their decision-making, assist with content creation and improve the efficiency of processes.



Member viewpoint

"Undoubtedly, generative AI is having a profound impact on businesses due to its versatility and potential to transform processes across the board. Its prominence shows little sign of slowing, and this will only grow further over the next few years.

For cloud, generative AI will support its further development in a range of areas. It will, for example, help cloud service providers identify how to make the technology work more effectively for more businesses, and will help those adopting cloud to figure out how best to integrate it into their IT estate."

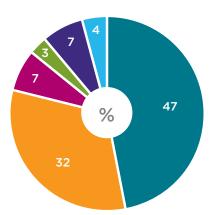
Stephanie MacLeod, Director at Kaizo.

4 The importance of ESG

Organisations hold firm on ESG initiatives

Despite some reports suggesting that organisations are reducing their ESG commitments to focus on navigating a tough economic climate, this year's data shows that many businesses remain fully committed to their sustainability initiatives. This is reflected in the fact that many are confident in their ability to meet ambitious targets in the coming years.

Does your organisation measure the carbon footprint of its existing data storage infrastructure?

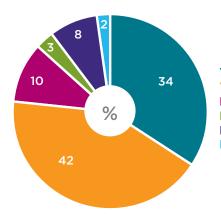


YES - FOR MORE THAN 12 MONTHS YES - WE HAVE ACTIONED THIS WITHIN THE LAST 12 MONTHS NO - BUT WE PLAN TO WITHIN THE NEXT 12 MONTHS NO - BUT WE PLAN TO AFTER THE NEXT 12 MONTHS NO - AND WE DON'T HAVE PLANS TO DON'T KNOW

Cloud



On-premises

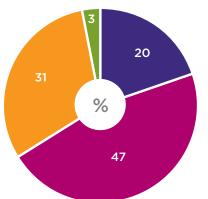


YES - FOR MORE THAN 12 MONTHS YES - WE HAVE ACTIONED THIS WITHIN THE LAST 12 MONTHS NO - BUT WE PLAN TO WITHIN THE NEXT 12 MONTHS NO - BUT WE PLAN TO AFTER THE NEXT 12 MONTHS NO - AND WE DON'T HAVE PLANS TO DON'T KNOW

As the graph above shows, 79% of respondents are currently measuring the carbon footprint of their existing data storage infrastructure in the cloud, with 47% having measured this for more than 12 months already. Just 7% firmly indicated that they do not have any plans to measure this in the future.

Interestingly, the proportion of organisations measuring the environmental impact of their onpremises storage infrastructure is slightly lower, with just 34% revealing that they have been doing so for more than 12 months.

How would you describe the sustainability of your organisation's IT emissions?

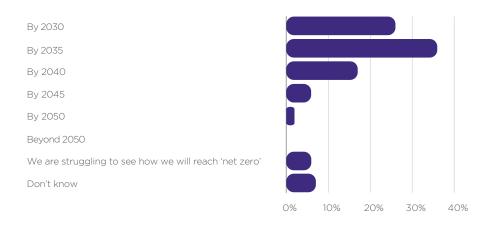


BEHIND OTHERS IN OUR INDUSTRY MIDDLE GROUND - ON PAR WITH OTHERS IN OUR INDUSTRY ESTABLISHED AND MATURE - AHEAD OF OTHERS IN OUR INDUSTRY DON'T KNOW

Businesses are largely positive about their sustainability credentials, and this is growing year on year. According to the above chart, 31% of respondents believe the sustainability of their organisation's IT emissions is 'established and mature', and ahead of others in their industry. This figure has increased from 16% in 2023, confirming the progress that has been made.



When does your organisation plan to be 'net zero'?

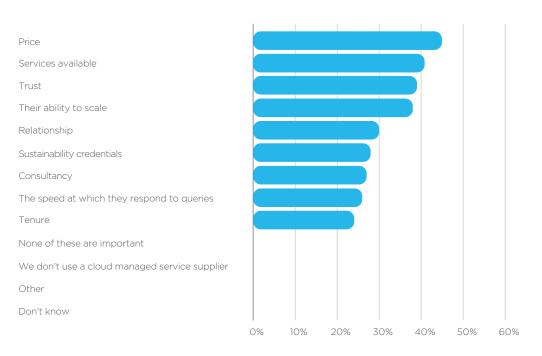


In a similar vein, almost all of the organisations surveyed now indicate that they are taking steps to reach net zero, with 36% of those surveyed planning to reach the milestone by 2035. Overall, 87% expressed that they plan to reach net zero by at least 2050.

More than a quarter (26%) of respondents plan to achieve net zero before 2030, suggesting that many are quite comfortably maintaining their sustainability ambitions, despite a tough economic climate.

But cost considerations always come first

Which of following priorities are most important for your organisation when thinking about working with a cloud managed service supplier?





Even with the strength of ESG efforts, the above graph shows that businesses remain focused largely on cost when choosing a cloud managed service supplier. 45% of respondents highlighted price as their top priority when it comes to selecting a supplier, ahead of a wide range of service offerings (41%), partnering with a trustworthy company (39%) and the ability of a supplier to help them scale (38%). A supplier's sustainability credentials are prioritised by just 28% of organisations, a figure that is unchanged since last year's survey.

This is a good indicator of the extent of the financial challenges organisations face, and while these are hampering businesses in some respects, it is positive that, sustainability does still feature prominently as a motivation for many. On the whole, the decision-making process when selecting a cloud supplier remains heavily focused on practical considerations, which is understandable in the short term at least.

Member viewpoint

"Cloud providers should take note that alongside the usual considerations such as cost, flexibility, trust, and security, ESG remains extremely important for many organisations when choosing a partner. Long-term, it is positive to see that the vast majority of businesses are already planning for net zero: many businesses are already measuring their carbon emissions and have been doing so for some time, while a large number are confident that they are operating a sustainable IT estate.

"While cost remains king, this hasn't had a demonstrably negative impact on sustainability efforts. Businesses aren't yet ready to give up on their green pledges in order to cut back on cost, nor do they feel a need to."

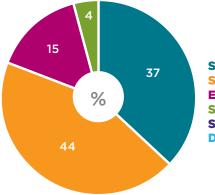
Ian Taylor, Regional Marketing Director, EMEA at Armor.

5 The promise of cloud

Hope shines through the cloud

For all of the challenges facing industries, cloud is consistently an enabler of further innovation and resilience. Decision-makers and employees alike are still overwhelmingly positive about cloud's potential to positively impact their organisation.

Do you feel your organisation is/ would be more or less secure if it is/ were using cloud services?

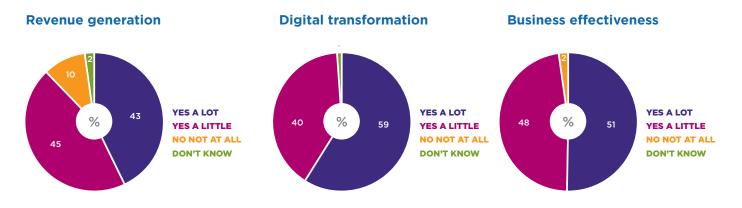


SIGNIFICANTLY MORE SECURE SLIGHTLY MORE SECURE EQUALLY AS SECURE SLIGHTLY LESS SECURE SIGNIFICANTLY LESS SECURE DON'T KNOW



As the graph above shows, 81% of respondents indicated that their organisation is made more secure by its use of cloud services, which is up from 66% last year. Just 4% said it would make the business less secure, demonstrating a clear confidence in cloud's ability to adequately facilitate data protection.

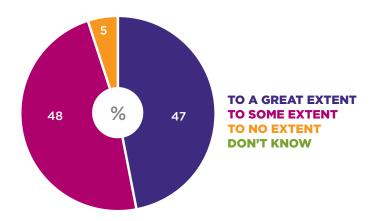
Has the implementation of cloud improved the following aspects of business performance at your organisation?



Further to this, the above graphs exemplify cloud's potential to support businesses in a range of ways, including in areas such as digital transformation and business effectiveness.

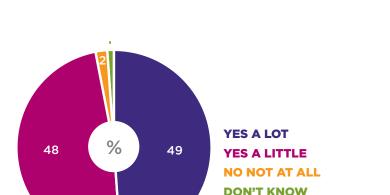
In particular, 88% of respondents said that cloud had successfully improved revenue generation (up from 79% in 2023), with 43% saying that it had a significant impact. To add to this, 98% of respondents were also positive on cloud's potential to improve business effectiveness, while almost all of those surveyed (99%) said it has been important in driving digital transformation.

To what extent have the cloud-based services that your organisation uses saved you money?



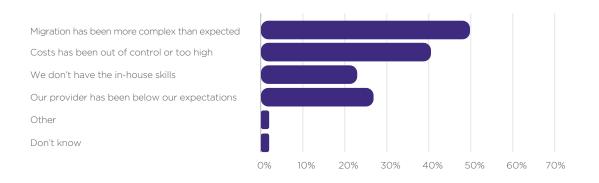
Elsewhere, organisations are clearly buying into cloud's potential to cut costs in hard times. As shown, 94% of respondents said that cloud had saved their organisation money, with 47% saying this was true to a great extent.





Has your organisation's cloud strategy delivered against its expectations?

Where has cloud strategy fallen short of expectations within your organisation?



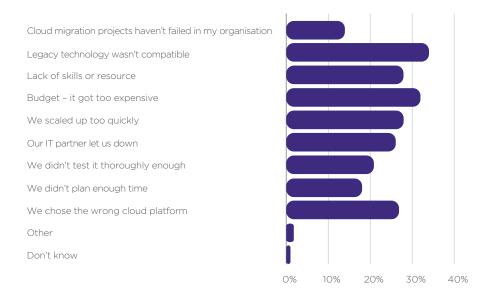
For all its qualities, there is still a need for cloud to grow and develop further. Half of those surveyed said that their cloud strategy had not entirely delivered against their expectations, which highlights some significant room for improvement.

Where respondents said that cloud had fallen short of their expectations, half (50%) said that migration had been more complex than expected and 27% said that their expectations on generative AI had not yet been met.

27% of respondents said that their cloud provider had performed below their expectations, while 23% also said that limitations had been brought on by a lack of their own in-house skills. It's clear that there is work to be done still in realising the full potential of cloud for many, and managed service providers have a major role to play in this.



Why, if at all, have cloud migration projects failed in your organisation?



Cloud migration projects have been unsuccessful at some point in 86% of organisations, with the majority being due to incompatible legacy technology (34%) or budgeting difficulties (32%). Just over a quarter (26%) said that they were let down by their IT partner. Cloud partners should respond to these by evaluating their existing offerings against the current needs of the market, and ensure they are tailored to suit the changing circumstances of their customers.

Member viewpoint

"Cloud remains a hugely effective tool in the armoury of the majority of businesses, supporting growth, security capabilities and enabling cost savings and revenue growth.

"That said, with new challenges facing businesses and many looking to adopt new technologies and embrace innovations such as generative AI, providers should continue to look at ways to enhance their offerings and improve the services they offer. Expectations for cloud are understandably high given its longstanding reliability, so organisations are relying on providers to keep pace with their requirements."

David Terrar, CEO at Cloud Industry Forum.



Conclusion

As has been the theme in recent years, economic uncertainty remains one of the few constants that businesses can reliably expect. On the whole, organisations are adapting well by focusing on the here and now and looking to leverage the various benefits of cloud and AI to help weather the storm.

Cloud services are almost ubiquitous in businesses now, so attention now turns to where businesses can maximise its potential. Leaders should continue to work closely with their service providers to ensure that they're getting the very most out of it, while providers should be examining closely how they can develop and adapt their offerings to help customers succeed in the age of Al.

While 2023 was the year of the generative AI explosion, the coming year will no doubt see it continue to take centre stage, but there is also a clear openness from businesses to invest time in exploring the rewards of other technologies such as machine learning, data analytics, IoT and the metaverse. By continuing to innovate, and dedicating time to fulfilling the potential of new technologies, businesses will be well equipped to not just survive, but thrive in the rest of 2024.



lan Jeffs ISG Country Manager UK & Ireland, Lenovo Chairman, Cloud Industry Forum



CLOUD INDUSTRY FORUM

About

The Cloud Industry Forum (CIF) is a not-for-profit membership driven trade body established in 2009 as a direct response to the evolving supply models for the delivery of cloud based software and IT services.

The Cloud Industry Forum advocates the use of online cloud services and as the market continues to mature, CIF continues to represent the digital community by bringing both cloud and business leaders together to educate and shape the world of Digital Transformation.



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