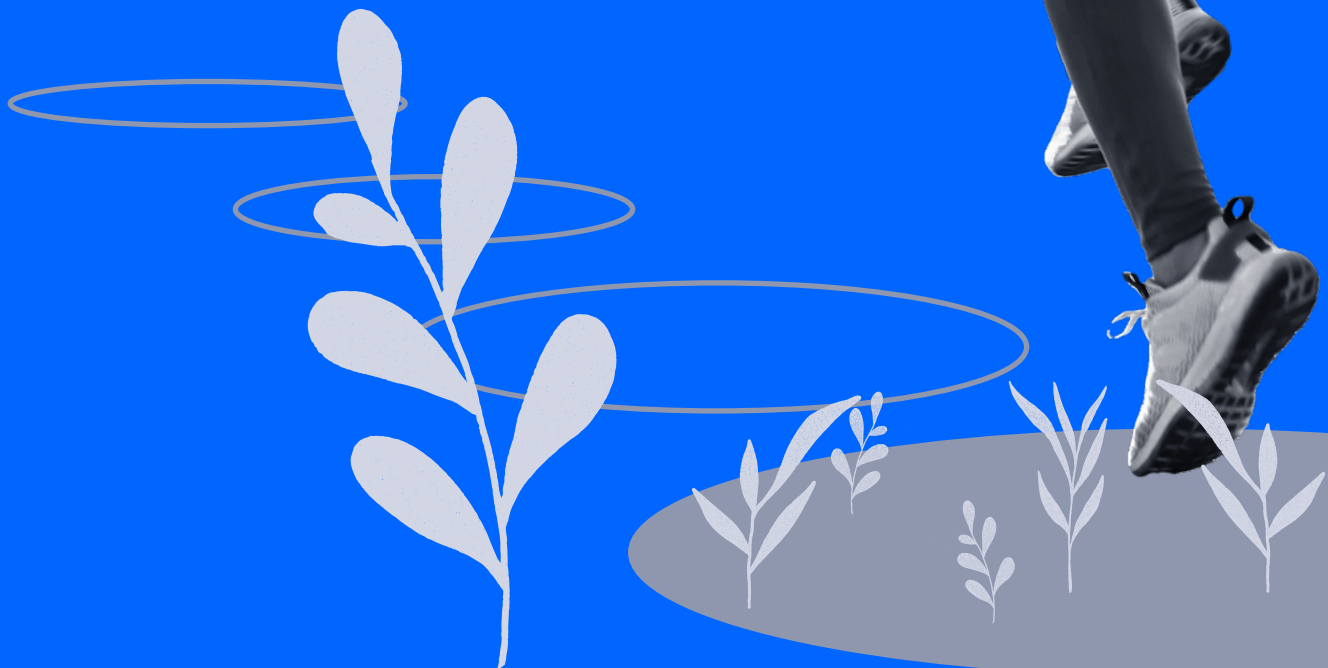


CYBER SECURITY & CLOUD

# Planting *Digital Seeds* for the Future

A CLOUD AND CYBER SECURITY FOCUS

How have businesses' approach to Cloud and Cyber Security changed since the pandemic and how are they poised for the future of work?



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# 1. Executive foreword

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## María Jesús Almazor, CEO Telefónica Tech Cyber Security & Cloud:

"COVID-19 has upended many previous assumptions of digital transformation. In this research, Telefónica Tech wanted to find out to what extent the pandemic has advanced digital strategies to prepare them for future growth.

As businesses navigated the conditions of the pandemic, an element of 'firefighting' is to be expected as conditions changed at pace. For example, our research revealed that 33% of respondents had identified that prior remote working practices had left them open to security vulnerabilities. If we are to take the next leap in our digital transformation journeys, it's only expected that we first focus on the areas that need to be fixed. But as we look ahead to the future, it's time to start planting the digital seeds that are going to result in business growth and opportunities.

Encouragingly, as we emerge from the pandemic, confidence has grown in two of the key areas that stand to make the biggest difference to our working worlds.

63% of respondents stated that their approach to cloud technology is better than before the crisis.

As we look to the future, we should also start to see how the cloud helps businesses to scale by driving innovation and productivity efficiencies. Affirmatively, 54% of respondents believe that cloud-based infrastructure is the technology that would offer the greatest strategic value to their organization.

The rise in remote working, e-commerce and cloud computing has also led organizations to bolster their cyber security posture. In our research, 60% stated that their approach to cyber security is better than before.

At Telefónica Tech we understand that businesses of all sectors and sizes are going to be looking to technology vendors to help them simplify the complex and better manage their cloud estates securely and effectively."



“

*We are excited to be working at the helm of digital transformation, unlocking business potential and helping customers to realise their ambitious plans.*

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## 2. Introduction

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[The vast majority of businesses](#) were already heading on a digital transformation journey to some extent before the pandemic struck. But the crisis has significantly accelerated this need for organizations around the world. In this research study, Telefónica Tech sought to find out how businesses turned to digital services when adapting to the conditions of the pandemic.

There is so much to be learnt from the way that businesses responded to the crisis, so that we can act with hindsight and meaningfully plan for the future. This study will look at how cloud technology served businesses through the pandemic and how organizations' cyber security practices withstood the growing nature of cyber threats and to what extent they are poised for the future of work.



### 3. Methodology

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This research of 810 IT professionals, including respondents in Brazil, Germany, Spain, UK and the Republic of Ireland, aged eighteen and over, was conducted by Perspectus Global on behalf of Telefonica Tech during December 2021. The survey respondents work in a range of ICT job roles across small, medium and large enterprises and MNCs, with 54% being of Management to Board level, and all respondents declared that they are either the sole decision maker (57%) or have influence over the IT decision making (43%) for their business.

### 4. Key findings

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**33%** of respondents identified that their prior remote working practices had left them open to security vulnerabilities

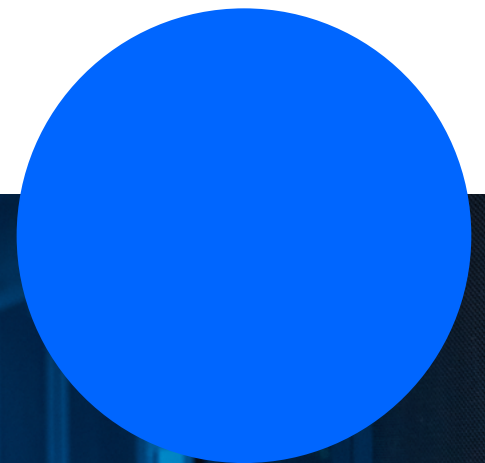
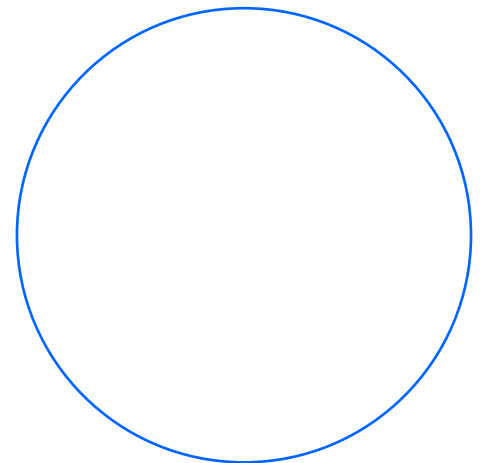
**54%** of respondents believe that cloud-based infrastructure is the technology that would offer the greatest strategic value to their organization.

**57%** of respondents from businesses of all sizes are utilizing cloud-based infrastructure.

Cloud-based apps and solutions are also being used by **45%** of organizations across all business divisions.

**63%** of businesses stated that their cloud technology processes are better than before the crisis.

**60%** of businesses stated that their approach to cyber security is better than before the crisis.



## 5. Cloud technology adoption gathers pace

Conceivably one of the biggest turning points for many organizations during the pandemic was the use of the cloud.

The growth of cloud is certainly a movement borne out of a need for flexible computing power and high availability combined with greater control over disaster recovery and business continuity. It's a solution high on agility which means that for many organizations, it's the best option to manage a workforce remotely. International Data Corporation (IDC) forecasts that "whole cloud" spending [will surpass \\$1.3 trillion by 2025](#) while sustaining a compound annual growth rate (CAGR) of 16.9%.

In our research, 54% of respondents believe that cloud-based infrastructure is the technology that would offer the greatest strategic value to their organization. There were also some clear trends within certain sectors where respondents rated cloud-based infrastructure highly to their organizations. These were energy (89%), consulting (82%), hospitality (80%) and government (68%).

Interestingly, these were also the sectors that had the highest uptake of cloud infrastructure; with hospitality at 80%, government at 74%, energy at 67% and consulting at 64%.

Comparatively, our research found that overall, 57% of respondents from businesses of all sizes were utilizing cloud-based infrastructure. Cloud-based apps and solutions are also being used by 45% of organizations across all business divisions.

The research identified that an organization's use of the cloud increases the larger it is, with an average of 64% of companies with 500 employees or more are currently utilizing cloud-based infrastructure<sup>1</sup>. The same is true of cloud-based apps and services with an average of 54% of large companies making use of them<sup>2</sup>.

Conversely, an average of 49% of organizations with 100 employees or fewer are currently utilizing cloud-based infrastructure<sup>3</sup> and an average of 37% are utilizing cloud-based apps and solutions<sup>4</sup>.



- 1 This can be broken down by 56% of organizations with 501-1000 employees, 69% of 1001 to 5000 employees and 68% of organizations with 5000 employees and above.
- 2 This can be broken down by 52% of organizations with 501-1000 employees, 58% of 1001 to 5000 employees and 52% of organizations with 5000 employees and above.
- 3 This can be broken down by 44% of organizations with 501-1000 employees, 50% of 1001 to 5000 employees and 52% of organizations with 5000 employees and above.
- 4 This can be broken down by 32% of organizations with 501-1000 employees, 41% of 1001 to 5000 employees and 36% of organizations with 5000 employees and above.

María Jesús Almazor, CEO Telefónica Tech Cyber Security & Cloud, comments: [To meet the demands of the decentralised workplace, we expect to see cloud adoption continue at an accelerated pace. But we also need to see an acceleration in the development of the skillsets around cloud – the current shortage of skills is holding businesses back. It’s telling that in our research, organizations rated ‘addressing the scarcity of talent and digital dexterity’ as the top challenge.](#)

[Gartner’s 2021-2023 Emerging Technology Roadmap](#) also highlighted that the current lack of skilled IT workers is hindering the adoption of cloud, edge computing, and other technologies. This was based on 437 global firms; for smaller enterprises the challenge is even greater as they don’t have the same resources to be able to attract, train and retain cloud experts. Investment in training and developing skillsets in this area will be key to meeting cloud acceleration.

But it’s not just cloud uptake that will be an indicator of how businesses are preparing operations for the future of work – it’s how the cloud is being used to drive innovation and productivity efficiencies. Thus, businesses rated ‘enabling multiple and competing outcomes’ as the second challenge to overcome.

The need to stay ahead of the competition during a period of rapid digital transformation can’t be underestimated. You only need to consider that just one process improvement can lead to huge productivity gains. Therefore, winning the race could suddenly be as simple as knowing which small incremental changes to make to gain the best outcome.

When you look at this through the lens of your competitors, this poses a challenge as well as an opportunity.

Research by [Computer Economics](#) notes that as we look to the future of work, it’s not just whether companies are in the cloud – it’s how they use it to truly innovate and stay competitive. It advises, “The “low-hanging fruit” in cloud migration has been picked, and “we are now in the stage of digital transformation where we are not just replacing existing tools - we are now enhancing them.”

Optimistically, having negotiated the pandemic and navigated numerous challenges that have arisen as a result, 63% of businesses stated that their cloud technology processes are better than before the crisis whilst 30% stated that it’s the same.

The research also found that collaborative tech such as video conferencing (55%) was also viewed to offer strategic value and which unsurprisingly, already has a good uptake of 61% of organizations.

Another positive take-away from the research was how respondents felt about the disaster recovery or Business Continuity (BC) plan that they had in place prior to the pandemic. On the whole, organizations reported that their business continuity plan was very helpful (59%) or somewhat helpful (38%) to their pandemic response. Whilst reassuring, this is a trend that you would expect. After all, the very essence of a BC plan is to clearly outline how a business will continue operating, should the unexpected happen.

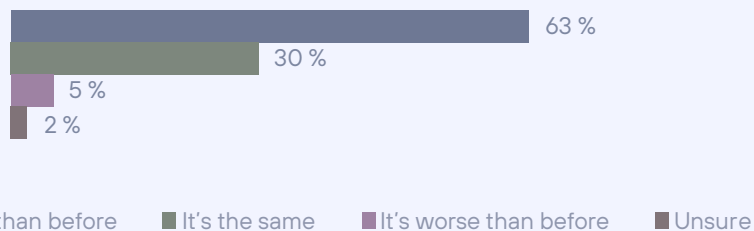


Figure One: 'Do you feel that your organization’s approach to cloud technology has changed since the pandemic?'

## 6. Cyber security confidence builds

When remote working becomes not just a convenience, but an organization’s only approach for keeping its lights on, the security of working practices deservingly gains prominence.

The research uncovered that the security posture of some organizations was a point of weakness prior to the pandemic. When asked what the pandemic had taught them, 33% of respondents identified that their prior remote working practices had left them open to security vulnerabilities. This was one of the top three lessons reported by a third of respondents.

The finding was even more noticeable in sectors such as energy (56%), retail (47%), consulting (45%), transport (42%) and biotech (40%).

Yet, interestingly, our research highlighted that cyber security is one of the processes that organizations now feel more confident about. Encouragingly, having negotiated the pandemic and navigated numerous challenges that have arisen as a result, 60% of businesses stated that their approach to cyber security is better than before the crisis. This sentiment was felt even more resolutely by respondents from certain sectors including transport (83%), engineering (82%), energy (78%), retail (76%) and telecoms (71%).

A further 35% of respondents stated their approach to cyber security is the same as before the pandemic. But if we look at wider market predictions, it seems that our investment in cyber security technologies and practices is not faltering as we look ahead to the future.

[Fortune Business Insights](#) estimates that the global cyber security market is projected to grow from \$165.78 billion in 2021 to \$366.10 billion in 2028 at a CAGR of 12.0% in the forecast period. The rise in CAGR is attributable to this market’s demand and growth, returning to pre-pandemic levels once the pandemic is over.

The market research company puts the market growth down to the rise in remote working, the rise of e-commerce and the rise of cloud computing; all trends that were borne out of the conditions of the pandemic.

María Jesús Almazor comments: *It is inevitable that cyber attacks will continue to evolve and be a challenge in one form or another. Yet, the pandemic provided organizations with a testbed of extreme proportions and the fact that the majority have come out the other side feeling more confident in their approach to cyber security (60%) is certainly encouraging as we look ahead to the future of work.*

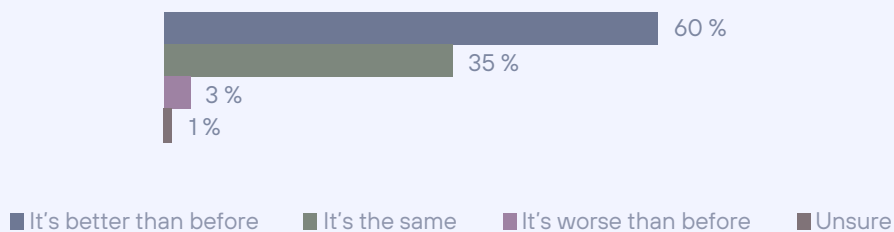


Figure Two: ‘Do you feel that your organization’s approach to cyber security has changed since the pandemic?’



## 7. Conclusion

It's reassuring that cloud infrastructure adoption is so high in the sectors that rate it as having the greatest strategic value. It's fair to say that the effects of the pandemic have been the catalyst that rapidly elevated interest in the cloud, but there will remain many organizations that are struggling to migrate their legacy systems. There is also a chronic cloud skills shortage to navigate and a need to simplify the complex to make the cloud manageable for organizations of all sizes.

In this research, we've seen cloud infrastructure utilization across businesses of all sizes (57%), but this is slightly more apparent in larger companies of 500 employees or more (64%).

When it comes to security, it's promising to see that 60% of organizations rate their approach to cyber security as better than before the pandemic. The speed of change and correspondingly, the agility required to navigate such an event put extreme pressure on organizations. But it may have also had the effect of accelerating the identification of security vulnerabilities, with 33% of respondents stating that they'd identified that prior remote working practices had left them open to security vulnerabilities.

María Jesús Almazor comments: [Despite a significant period where organizations were having to react to the conditions of the pandemic - and in some cases fighting necessary fires as they quickly adapted - it's time to look](#)

[ahead to the future and identify which seeds to plant to accelerate growth and opportunities.](#)

[Cloud technology and the reliance on secure hybrid working practices is a certainty as we look ahead. As organizations advance their digital transformation journeys, security should continue to be a key consideration woven into all business plans to maintain operational effectiveness and reputation management.](#)

Telefónica Tech recommends the following top tips when it comes to navigating an organization's journey to the cloud whilst keeping security front of mind:

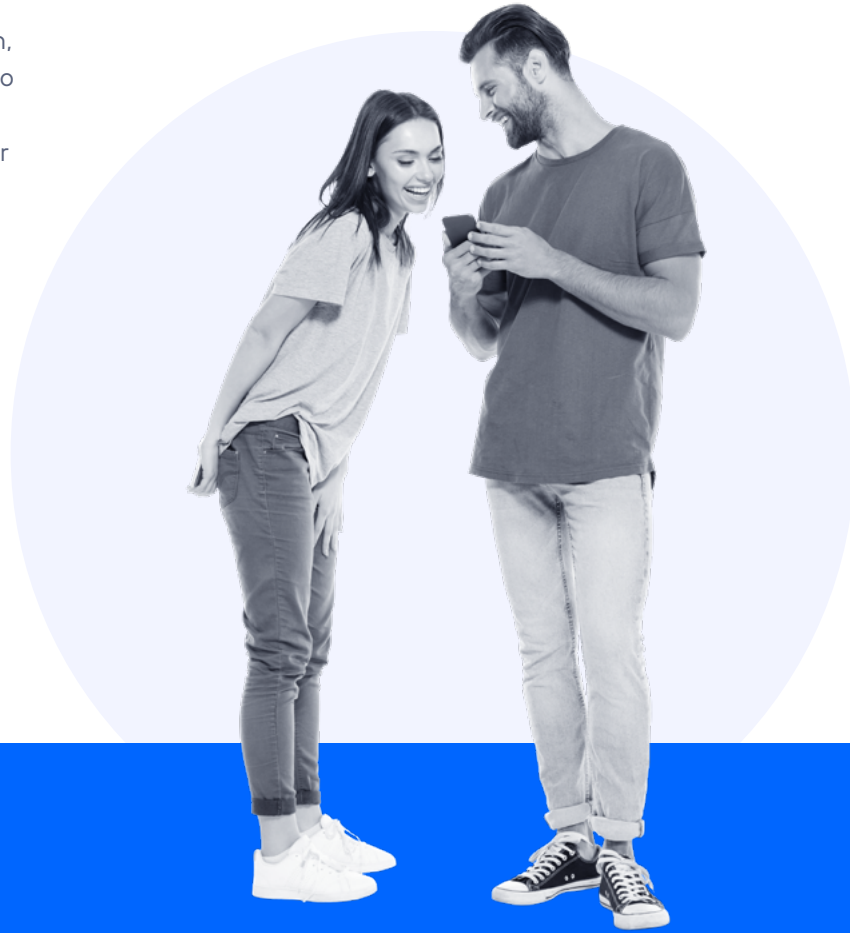
- Cloud transformation affects the whole business from finance to HR, so while the overall strategy needs to be led from the top down, every department needs to be heard, to make sure their requirements for the cloud are met.
- Understand your workload behaviours prior to moving them to the cloud. Are these applications that you're moving to the cloud ready? If not, you're probably moving the problem to a different location without resolving it. This could incur unnecessary costs.
- To realize the full benefit of the cloud's pay-as-you-go service model, look at the way employees are communicating to the business, the types of services



used and the overall operating model. The challenge is to ensure that users are fully adopting their software licenses and subscriptions. Monitor what's being utilized at key renewal points so that you know you're getting the full value from your cloud subscriptions.

- A common misconception when moving to the cloud from on-premise infrastructure is to keep existing security solutions. This gives some form of protection, but because the cloud works in a very different way to on-premise, you need a toolset that will adapt to the environment; whether that's public or hybrid cloud or on-premise.

According to Gartner, "we're now entering a new 'build' phase for IT budgets, in which CIOs are looking for partners who can think past the digital sprints of 2020 and be more intentional in their digital transformation efforts. This means building technologies and services that don't yet exist, and further differentiating their organization in an already crowded market."



## About Telefónica Tech

Telefónica Tech is the leading company in digital transformation. The company offers a wide range of services and integrated technological solutions in Cyber Security, Cloud, IoT, Big Data and Blockchain. With our worldwide presence and strategic hubs in Spain, Brazil, the UK, Germany, USA and Hispam, our capabilities reach more than 5.5 million B2B customers in 175 countries every day.

We unlock the power of integrated technology for all businesses, bringing together a unique combination of the best people, with the best tech and the best platforms, supported by a dynamic partner ecosystem. We do this in a simplified manner, to facilitate and accelerate tech adoption and make a real difference every day, to every business.

[telefonicatech.com](https://telefonicatech.com)



**References used in this document:**

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[IDC cloud spending report](#)

[Gartner 2021 – 2023 emerging technologies roadmap for enterprises](#)

[Computer Economics IT security, cyber security and compliance spending benchmarks](#)

[Fortune Business Insights cyber security market report](#)

**Notes:**

*\*The percentage figures in this report are presented as rounded numbers rather than with decimals. For example, 19.3% would be recorded as 19%.*

*\*\* When referring to size of business we define a micro business as ten employees or fewer, an SME as 11-100 employees, a mid-sized business as 101 – 1000 employees, a large business as 1001 – 5000 and a large enterprise as 5000 or more employees.*

For more materials visit the [Planting Digital Seeds website](#) 

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