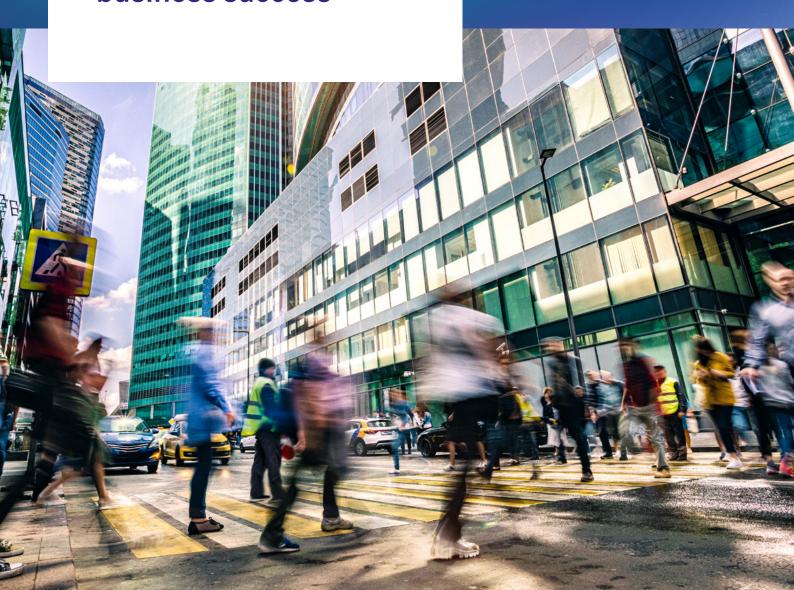


Navigating Disruption

The future of agile business success





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Foreword

Doing business in 2021 is not easy. It requires resilience, foresight, and nerve.

The uncertainty and volatility have not only been created by the global pandemic, but by ongoing climate concerns, trade squabbles and geopolitical upheaval. But one thing remains consistent: businesses want to connect, collaborate and trade around the globe.

We found that disruption & digital transformation has accelerated over the last few years.

While many businesses were already investing in strategic ICT projects to drive differentiation and growth, the events of the past 18 months made it clear that the way to survive – and even thrive – was to embrace digital transformation.

Comprising some of the world's fastest growing economies, the eyes of the world are on North Asia. So, how are ICT and business decision-makers adapting to the new reality? How are businesses using digital transformation to boost not only resilience, but future-proof their strategies to realise new opportunities? And what adaptive technologies are businesses investing in to drive agility, security, and business outcomes?

Our research has found digital transformation in North Asia is driving business opportunity and growth, despite the many challenges. But there's still work to do. The importance of holistic business digital transformation plan, that brings together connectivity, cloud, collaboration, and cyber security has never been higher.

I hope the insights in this report inspire new ideas and drive your business toward truly adaptive business success.



Paul Abfalter Head of North Asia & Global Wholesale Telstra



Methodology

Telstra commissioned Kantar, an independent market research company, to research the impact of the 2020 events on digital transformation as well as shifts in future transformation strategy.

The insights in this report were derived from 512 ICT and business decision-makers in Mainland China, Hong Kong, Japan, South Korea, and Taiwan in March 2021.

Respondents came from businesses operating in a range of industries and with a range of annual IT budgets.

Respondents were all key decision-makers, holding titles including CIO, CTO, CDO, Director of IT and Security Management, and Digital Transformation Lead.

Executive Summary

While digital transformation in North Asia was progressing strongly, it was accelerated by the COVID-19 pandemic.



Of businesses have fully or close to fully implemented their digital transformation strategies



Of businesses say the need for new digital transformation projects has increased



Of businesses have seen an increase in digital transformation project investments

The future of digital transformation does not have a single focus. Instead, businesses are balancing priorities and investments across four key transformation priorities:



Empowering collaboration in a modern workplace



Optimising experience through connectivity



Future-proofing business with cloud innovation



Protecting your business with a comprehensive cyber security posture

96%

Of businesses say remote working has fundamentally changed their approach to digital transformation.

97%

Of businesses say an adaptable, secure, and resilient communications network is critical for digital transformation.

75%

Of businesses are accelerating the migration of workloads to cloud services.

62%

Of businesses say cyber security was their biggest remote working challenge.

67%

Of businesses say hybrid work will be the norm over the next year.

74%

Of businesses are focusing on their Wide Area Network strategy to address the increase in traffic.

58%

Of businesses will move the majority of apps to the public cloud as part of their employee support strategy.

58%

Of businesses are increasing their cyber security policies to support remote workers in the next 18 months.

70%

Of businesses say collaboration and communication solutions are key to future success.

94%

Nine in ten businesses are looking to expand either within Asia or globally.

54%

Of businesses are using a hybrid multi-cloud strategy as part of their digital transformation.

78%

Of businesses say introducing measures to protect against cyber security threats is top of their ICT investment priorities.

As such, businesses are spending on a wide range of ICT priorities.



Cyber security



Cloud infrastructure and services



Unified communications and collaboration solutions



Network and connectivity

Digital Transformation in North Asia

Transformation through disruption

Digital transformation maturity

Businesses across North Asia had embraced digital transformation even before the pandemic made the use of digital processes critical.

More than two thirds of North Asian respondents have either fully implemented, or are close to implementing, their digital transformation strategy. Just 5% of businesses have recently started the transformations, with most of their implementations still to come.



Of business in North Asia that took part in the research have fully or close to fully implemented their digital transformation strategies.

South Korea leads the way, with 70% of businesses almost fully digitally transformed, with respondents in Japan showing 63% of their businesses fully transformed. Notably, in a country with a lot of smaller businesses, about one in seven (15%) of Japanese respondents say they have only just started their transformations and still have a long way to go.

Figure 1: Current status of digital transformation strategy

28%

Fully implemented and activated

28%

Implemented some but still need to achieve quite a lot (implemented about half)

38%

Implemented most (near completion) of it

6%

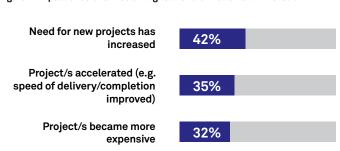
Just started and need to execute a major part

The impact of lockdowns on transformation

Priority on digital transformation was already high on the agenda for many businesses, but everything changed as lockdowns began. As businesses in North Asia and around the globe worked from home and moved services online, the demands on networks, IT systems, and transformation projects changed immediately.

42% of North Asian businesses say that the need for new digital transformation projects has increased, with the respondents in Hong Kong (46%) seeing the highest percentage of new transformation projects.

Figure 2: Impact of coronavirus on digital transformation and innovation



And it is not only new projects but increasing demands on existing programs. Over a third (35%) of businesses say their digital transformation projects were accelerated to deliver more quickly. Increasing priority and turnaround time is only possible with more resources. Luckily, almost three quarters of businesses say they saw an increase in digital transformation project investments. Respondents in Taiwan are most likely to state they had seen new digital transformation investment (82%), with more than four in ten (44%) of those Taiwanese businesses seeing a funding increase of more than 10%.



Of businesses have seen an increase in digital transformation project investments as companies shifted to remote work.



Barriers to digital transformation

So, what are the main challenges businesses see when implementing digital transformation projects?

The wholesale move to remote working creates specific challenges for IT departments to maintain business continuity. The biggest challenge quoted is increasing connectivity capacity to empower people to work remotely (42%), followed by adding new cloud collaboration apps (41%).

But, as businesses move beyond enabling remote workers to wider transformation projects, new barriers are emerging.

Unsurprisingly, cyber security emerges as the top challenge for every market except China, where businesses see bigger challenges in their readiness to deal with change, whether in terms of their own data and applications, or their wider IT infrastructure.

But, after cyber security, it is clear that there are a wide range of equally important challenges businesses must balance. From infrastructure readiness to funding, cloud strategy to app and data readiness, and network architecture to skills gaps, a wide range of potential challenges were all identified by between 19% and 24% of businesses.

Figure 3: Barriers in achieving digital transformation

Cyber security	30%
Infrastructure readiness (i.e. the IT infrastructure in place within the country)	24%
Budget	22 %
Cloud strategy	22%
Application / Data readiness	21%
Network architecture (i.e. existing network in place within the company)	21%
Human capital restrictions	19 <mark>%</mark>
Compliance policy	14%
Competing internal priorities	14%
User adoption	12%

Strategic transformation focuses

Figure 4: Key drivers of a digital transformation strategy

The path to agile outcomes

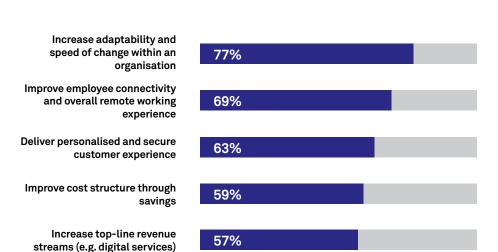
Adaptive business priorities

Digital transformation is not an end by itself, it needs to deliver tangible business outcomes.

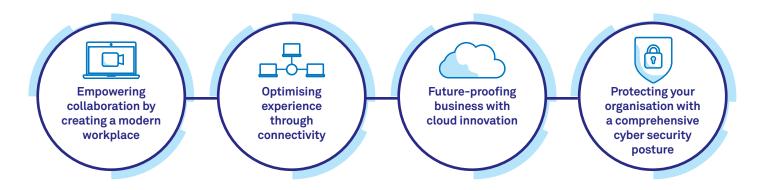
It is clear that businesses are placing increasing priority on their ability in order to adapt to new circumstances to best prepare their organisations for future success.

The top driver for digital transformation strategy is increasing agility and speed of change (77%), followed by boosting remote working experience (69%), and delivering personalised customer experiences (63%).

So, how do businesses achieve those outcomes?



The future of digital transformation does not have a single focus. Instead, businesses are balancing priorities and investments across four key transformation priorities:



Exploring adaptive transformation in detail

Empowering collaboration by creating a modern workplace

The rise of the remote business

When businesses started to implement remote working, few would have thought quite how drastically the experience would change the way we view work in the future. While the initial impact of remote work on business and on our IT infrastructure is now in the past, what is clear is that the changes to the way we work are permanent.



Of businesses agree that the need to work remotely has fundamentally changed their businesses' approach to digital transformation.

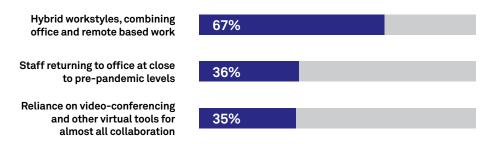
In fact, almost all (96%) of businesses agree that the move to remote work fundamentally changed their business, with South Korean respondents seeing the biggest (98%) impact.

Part of that change has been the emergence of new tools and processes to replace in-person collaboration. Today's modern workplace is investing in employee experience through digital transformation. More than half (58%) of businesses cite unified communications and collaboration as crucial to their recovery.

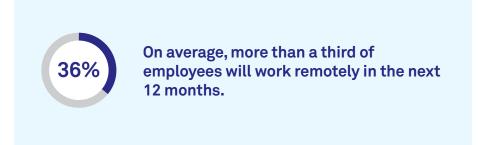
The need for ongoing collaboration investment

The need for collaboration solutions is here to stay as hybrid working models, combining office and remote working, emerge.

Figure 5: Staff working style over the next year



More than two-thirds (67%) of businesses say hybrid work will be the norm over the next year in North Asia generally, with the figure reaching as high as 77% in China.



Overcoming challenges to define future ways of working

The road to a modern workplace is not smooth. Every business has to tailor its approach, iron out kinks, improve workflows, and create a workplace culture unique to its business.

The biggest obstacles to fostering a successful hybrid environment and enabling successful remote working for employees are primarily digital:

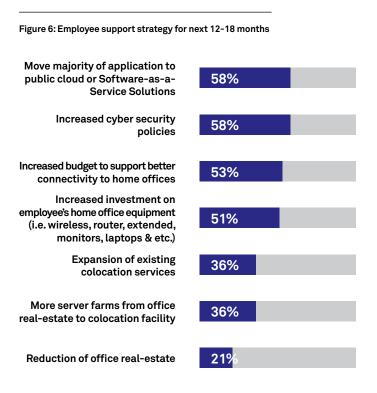
62% 51% 50%

Cyber security, including Connectivity and data retention and data infrastructure issues loss protection

Provision of technical support to remote workers

There are key regional differences within those challenges. Businesses in China are 11 points more likely than the average to find connectivity and infrastructure issues a big challenge, while respondents from Hong Kong are the only businesses to rank audio and video conferencing issues in their top three barriers.

As businesses look to boost employee experience, it is clear that cloud, connectivity, and cyber security will form the basis of future workplace strategies.



It is not just collaboration: The move online is driving automation too

While the impact of employees working remotely has seen demand for data and collaboration rise, the lack of staff in the office had a much wider impact on IT teams. Consider that on-site visits are severely limited and that physical access to digital infrastructure has been largely put to a stop. That's why as many as 68% of businesses are investing in automation and remote IT management to offset those problems, potentially with more focus in the future. The practice has already become popular in South Korea (79%) and China (70%) and is likely to see more uptake as hybrid models continue to become the norm.

Optimising experience through connectivity

Demand for data exploded over the past year

Many businesses became digital businesses over the past year. As employees, customers, and partners moved their operations online, the demand for data exploded.

As a network provider, Telstra had a front row seat to understand the extent of the impact. Data demands spiked significantly through 2020, resulting in an increase of up to 50% on our international networks.

Looking more broadly, the global telecommunications market experienced 35% growth in international internet capacity last year, according to analyst firm Telegeography.

The reason is clear. While consumers were streaming video to connect with friends and family and stay entertained, businesses were enabling employees and customers with software-as-a-service cloud apps to optimise their remote experience.



Data demands spiked significantly through 2020, resulting in an increase of up to 50% on our international networks.

Your business is only as good as the network it runs on

But those experiences are dependent on the strength of the networks they run on. As mentioned previously, more than half of respondents say connectivity and infrastructure issues which cause poor application performance through bandwidth availability, poor coverage and other issues are their biggest challenge with the dramatic and rapid shift to remote work.

Figure 7: Remote working challenges

Connectivity and infrastructure issues which cause poor application performance (bandwidth availability, non-urban coverage & etc.)

51%	62%
North Asia (N=512)	China (N=103)
50%	45%
Hong Kong (N=101)	Taiwan (N=103)
48%	50%
Japan (N=102)	South Korea (N=103)

Yet, there are significant disparities across North Asia when it comes to network challenges. Respondents in China see the worst issues, with more than six in ten (62%) citing connectivity as their biggest remote working challenge. Meanwhile, businesses in Taiwan (45%) and Japan (48%) state connectivity as less of a barrier than provision of technical support.

Connectivity underpins digital transformation

Despite the challenges, businesses across North Asia understand the importance of their networks to their ongoing success.

Three quarters (75%) of businesses in North Asia say their work is reliant on critical digital infrastructure and is dependent on the 100% uptime of that infrastructure. Investment in that infrastructure therefore is important for their businesses. Similarly, our respondents almost unanimously say that the performance of their network infrastructure is closely related to their ability to digitally transform.



Of businesses say an adaptable, secure, and resilient communications network is critical for their organisation's ability to implement digital transformation.

Future business growth requires strong networks

The good news is that businesses are now looking to future growth, built on a solid foundation of infrastructure. And businesses are putting their focus – and their budgets – on improving their connectivity to support new ways of working over the next 18 months.

77%

of businesses are introducing networking solutions for remote workers and suppliers as a priority 74%

are focusing on uplifting overall Wide Area Network strategy and investment to address the increase in traffic 53%

have increased budget to support better connectivity to home offices

That is because businesses are increasingly looking to realise new opportunities. Almost one in two (49%) businesses are looking to expand within Asia Pacific, and 45% are looking to expand globally (including within Asia Pacific).

Figure 8: Future market expansion plans

49% Looking to expand within APAC

45% Looking to expand

globally

5%

Not looking to expand

Future-proofing businesses with cloud innovation

The accelerated move to the cloud

Cloud migration was an established part of many businesses' digital transformation strategies even before global social distancing mandates.

Yet we have still seen that the cost optimisation, speed, and agility boosts that businesses enjoy from cloud will likely only accelerate as remote working goes full scale.

Nearly all businesses across North Asia in the research say that the impact of the pandemic has seen the cloud become more critical to their business. In fact, 94% of respondents indicate an increased importance of cyber security and accessibility to cloud applications for remote workers.

Indeed, that view was held by every single respondent in China, underlining the widescale move to the cloud in the country. While Japan is the country with the lowest acknowledgement of an increased importance of the cloud (14% unsure or disagreeing), that may be because of a high existing priority on cloud in a mature technological market.

Cloud migrations to support new ways of working

That priority is seeing more investment in cloud migration.

Three quarters of businesses have accelerated their migration of workloads to the cloud to support remote work mandates for their employees and customers, led by businesses in China and South Korea.



Of organisations in North Asia are accelerating the migration of workloads to cloud services.

That migration is largely being implemented to support modern ways of working over the next 18 months.

More than half of businesses (58%) say they will move the majority of their applications to the public cloud or use software-as-a-service solutions as part of their employee support strategy – the top answer across North Asia.

One cloud is no longer enough

As IT environments grow in complexity, most organisations have realised that having just one cloud will not deliver the outcomes that they need. The future is multi-cloud.

According to Flexera's 2021 State of the Cloud report, a massive 92% of enterprises have a multi-cloud strategy today. That averages out at 2.6 public clouds and 2.7 private clouds being used by every organisation.

That trend has been reinforced across North Asia. Hybrid multi-cloud, bringing together private cloud infrastructure with two or more public cloud providers, is the chosen strategy for the majority of businesses.

Hybrid multi-cloud is the top choice for businesses in every country we surveyed, including almost two-thirds of businesses in China (64%). Full public cloud and hybrid cloud with a single public provider came in a distant second and third place, respectively.

Figure 9: Cloud architecture to enable digital transformation

54%

Hybrid multi-cloud (combination of private cloud and two or more public providers)

19%

Hybrid cloud (combination of private cloud and a single public cloud provider)

20%

Full public cloud (full native public cloud station, via one or more providers)

6%

Private cloud (leveraging company purchased assets and no public cloud services)

1%

Not yet determined

Protecting your organisation with a comprehensive cyber security posture

Cyber security remains the biggest challenge to digital transformation

It is no surprise that cyber security is front of mind for every IT executive when you consider that, according to IBM, the global average cost of a data breach in 2020 was USD\$3.86m.

We found that cyber security is the number one barrier businesses identified when considering what would impede their successful digital transformation.



Three in ten businesses identified cyber security as their biggest digital transformation challenge, ahead of infrastructure readiness and budget.

Cyber security challenges are most apparent in Taiwan (34%) and lowest in China, where only 23% ranked it a top challenge.

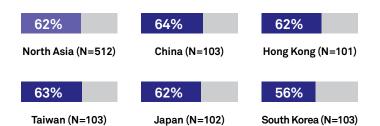
It is also the top barrier to successful remote working

It follows that cyber security is also the biggest problem for businesses looking to empower employees through remote working.

Across North Asia, 62% of businesses say cyber security is their biggest remote working challenge – the top answer in every single country.

Figure 10: Remote working challenges

Cyber security (data retention, data loss protection)



Meeting the challenge with new policies and tools

Cyber-attacks are growing at an exponential rate and cyber criminals often specifically target employees based on their lack of understanding when it comes to cyber security best practices.

More than half of businesses (58%) are boosting the breadth and depth of their cyber security policies as a means to support their employees over the next 12 to 18 months. This focus is most apparent in Japan, where 64% of respondents agree it is a key priority – making it their biggest focus in the coming years.



In the more immediate term, 78% of businesses in North Asia say introducing measures to protect against cyber security threats is top of their ICT investment priorities – describing this shift in importance as a direct result of the pandemic.

Businesses are spending to boost their cyber security posture

As employees work from home and businesses increase their use of public cloud, the threat surfaces the IT team must protect increases in size. Businesses need to consider a holistic cyber security approach that protects all of their data, wherever it resides.

That is why businesses across North Asia are investing significantly to maintain a strong cybersecurity posture.

60% of businesses say they will increase their ICT spend on cyber security to protect themselves against threats. This figure is highest in Taiwan (66%) and Hong Kong (65%), though it is a key investment priority everywhere.

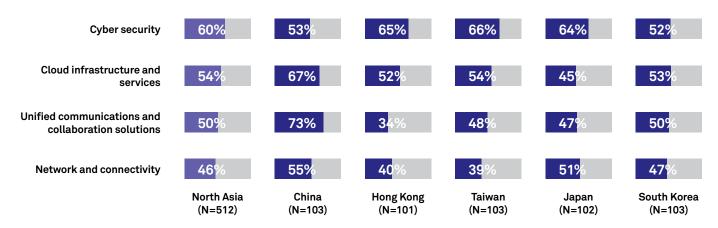
What comes next for transformation in North Asia

Investment plans highlight need for experience, expertise, and partnership

Businesses are spending on a wide range of transformation priorities

The future of digital transformation in North Asia requires investment – and it is clear that businesses have to balance their budgets across a range of priorities.

Figure 11: Avenues for increased ICT spending



While, on average, cyber security is the area set to see the biggest increase in ICT spending, there are significant differences in investment priorities across countries. Businesses in China, for example, are set to spend more money on unified communications and collaboration as well as cloud infrastructure and services, while Japan is focusing on cyber security and connectivity.

What is clear is that, with such a breadth of investment areas, nobody can do everything.

Partnership is critical for adaptive digital transformation success

Bringing together an ecosystem of partners with the right experience and expertise is critical. Cloud service providers stand out as the most sought-after partner to support companies with their digital transformation strategy and execution, but businesses are also looking toward systems integrators, application vendors, and telecommunications operators to help them navigate uncertainty and transform through disruption.



Navigating uncertainty toward a prosperous, adaptive future

The last 18 months have been marked by turbulent and at times uncertain change, but with this uncertainty, a raft of new opportunities for businesses in North Asia has emerged. These changes have enabled businesses across the region to leverage expansion plans, paving the way for long-term growth.

And change is happening fast. Social distancing mandates and travel restrictions have forced businesses to transform quickly: empowering employees to work remotely through collaboration, accessing cloud applications seamlessly, driving performance through connectivity, and maintaining the cyber security of their businesses. By and large, it is an amazing feat that the majority of businesses in North Asia have not only managed that acceleration but managed it so successfully they can now look toward future growth.

There is no doubt turning vision into strategy and action can be difficult, and the dramatic shift to support remote working has made things even harder. That is why it is crucial to find the right transformation partner for your business — because no one can do everything at once. The right partner can help your business design a transformation strategy, implement the technologies, manage the new systems, and future-proof your business with new innovation. At Telstra, we have decades of experience partnering with businesses across North Asia, helping them transform to connect with the world.

While the future remains uncertain, we firmly believe that with a strong transformation purpose, plan, and partner, your business can navigate disruption to define your own future success.



Contact your Telstra account representative for more details.