

BearingPoint® // Beyond

**B2B is the
'North Star' for
5G revenues:
how do CSPs
get there?**

www.bearingpointbeyond.com



Introduction

2020: a new decade and the real beginning of the 5G era. At the start of the year 33 CSPs across 18 countries had launched commercial 5G services and another 77 operators will do so in 2020. As CSPs now double their rate of investment in 5G, they have to get real if they want to see RoI – swiftly moving from the ‘PR’ phase to introducing effective strategies to drive new revenues

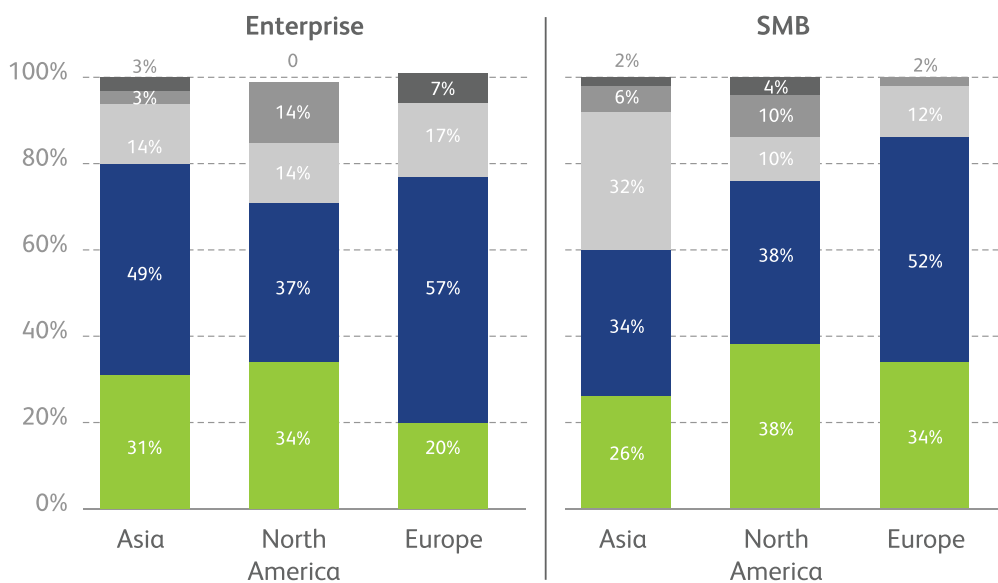
5G is different. When it comes to monetization, the GSMA predicts that 5G will become the first generation of mobile technology to have a bigger impact on businesses than on consumers¹. Industry watchers agree. More importantly, so do many CSPs. But if B2B is the ‘North Star’ for 5G revenues, no one seems to have drawn a map for operators of how to get there. Indeed, there are more questions than answers surrounding the 5G B2B opportunity. What are the winning use cases? Which segment – SMB or enterprise – represents the biggest opportunity? How important are generic, horizontal offerings vs. specialized, vertical services? Will businesses buy from CSPs or will they look to other companies? What’s the role of the CSP in the 5G value chain?

To help CSPs navigate the 5G B2B journey, BearingPoint//Beyond commissioned a large-scale primary research study to examine the real attitudes of both CSPs and business customers around the world towards 5G, and the potential role of the CSP in the 5G era. Conducted and analyzed in late-2019, research firm Coleman Parkes interviewed 250 technology decision makers from 100 enterprises and 150 SMBs – in verticals such as manufacturing, financial services, retail, health, education, transportation and media – across Europe, Asia and North America. 90 senior executives within CSPs were also surveyed from these three regions.



The view from businesses: great expectations, but don't forget SMBs

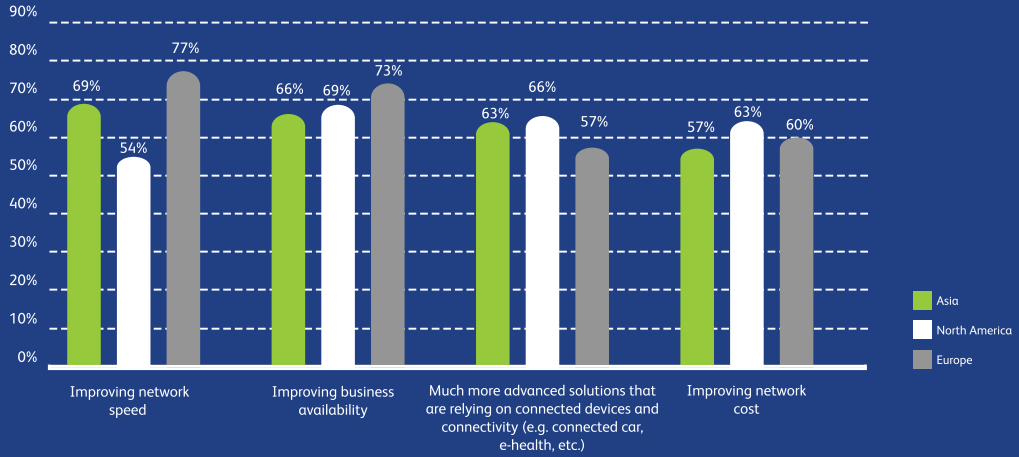
Businesses believe in 5G. 75% of both large enterprises and SMBs across all regions think that 5G will be important to their businesses.



How important do you think 5G is to your business?

Why will 5G be important to large enterprises? Unsurprisingly, improving network speed and business availability are important – much early 5G marketing has focused on 5G's impressive speeds and reliability. However, what's interesting is the idea that's making the GSMA and industry watchers excited – 5G enabling more advanced solutions combining devices,

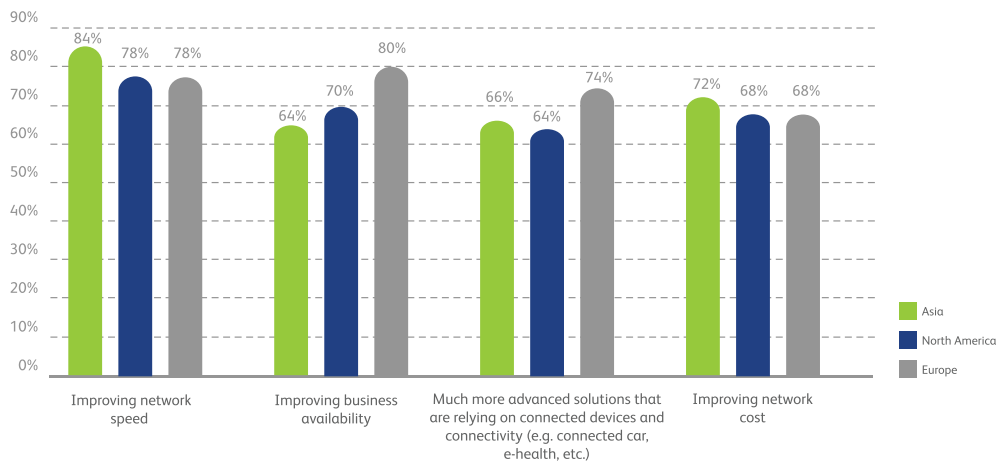
connectivity and applications – is perceived as a big opportunity for enterprises around the world. Awareness of the more advanced potential of B2B 5G is high. This is especially the case in North America, where enterprises appear to be taking a more sophisticated approach to their 5G thinking.



What is the biggest opportunity of 5G for your organization (Enterprises)?

While much of the discussion around B2B 5G focuses on large enterprises, our survey reveals that SMBs present a very interesting opportunity to CSPs. According to Ovum, SMBs represent 99% of businesses worldwide and are a major engine of growth, job creation and source of new innovation in most economies, yet until now SMBs have received little attention in the 5G conversation. SMBs across all regions see 5G in a positive light. Again, the value to them of speed and reliability are rated

highly (more than for enterprises), and expectations of improved network costs are also higher. Positively, SMBs see 5G as an enabling technology for more advanced solutions. European SMBs are most enthusiastic (86%), SMBs in Asia least so (60%). These insights demonstrate a clear 5G opportunity for CSPs in the SMB market, where maturity in thinking is high – most notably in Europe, but also in Asia and North America.

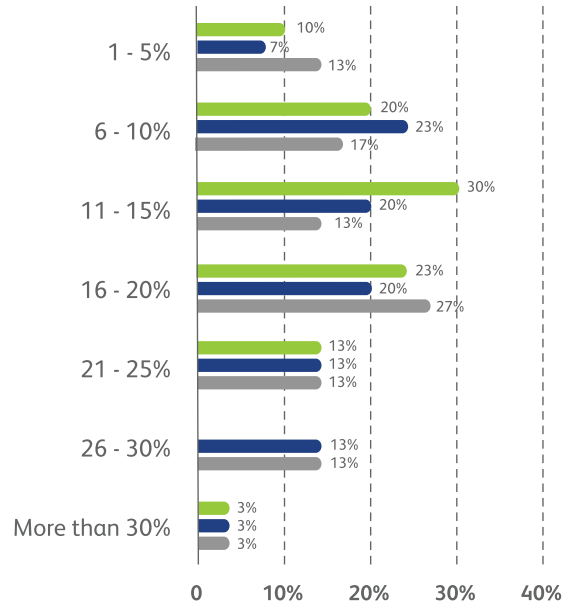


What is the biggest opportunity of 5G for your organization (SMBs)?

CSPs' 5G financial imperative: Do the numbers add-up?

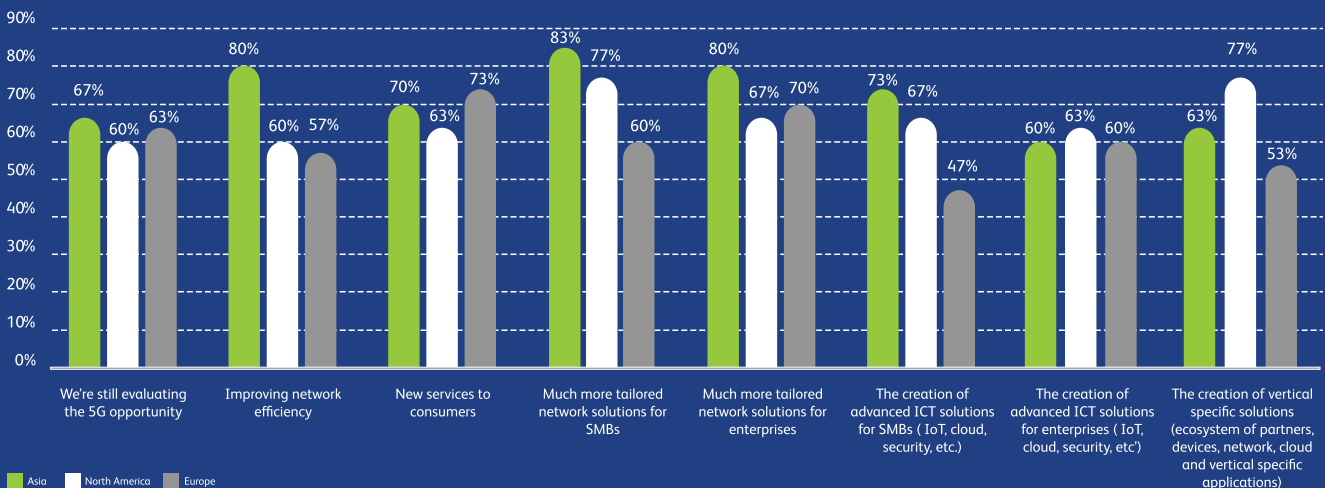
CSPs anticipate that 5G business-to-business (B2B) use cases will have a significant impact on current revenues. On average CSPs expect a 15% revenue bump, with North American and European CSPs slightly more bullish at 16%.

If you were able to successfully implement 5G use cases, by what percentage would you expect your revenues to grow in the next 3 years?



Obviously, this is very encouraging news for an industry investing up to \$1 trillion in new 5G network capacity but at the same time struggling with sub-2% compound annual growth in revenues (CAGR)².

However, CSPs are very conservative when it comes to their views on the opportunities and the offerings that 5G brings to their businesses. Most CSPs still believe the 5G opportunity is for connectivity services. The research reveals some interesting regional commonalities and idiosyncrasies, but in summary:



What is the biggest opportunity of 5G for your organization?

Asia: There are very surprising findings when it comes to Asia, as some of the real 5G pioneers are in South Korea, China and Japan. The GSMA expects Asia to become the world's largest 5G region by 2025³. Conversely, currently 66% of CSPs are unsure of where the biggest 5G opportunity lies for them (the highest amongst the three regions), with much expectation orienting around more tailored network services. Asian CSPs are confident leading on 5G technology, but less so in pioneering 5G business models and new ways to unlock the potential of 5G by experimenting and innovating with new, more advanced B2B services.

Europe: At least for the moment, European CSPs seem to think that 5G opportunities look much like those of 4G (73% see consumer services (B2C) as the biggest 5G opportunity). This is troubling as every indicator points to enterprise, SMB and vertical industry solutions as being where the real revenue growth will

be for 5G. In particular, they are significantly underestimating the interest and potential of offering sophisticated services to European SMBs (74% of whom believe they are a big opportunity for them). Confidence levels, and belief, seem in short supply in this region.

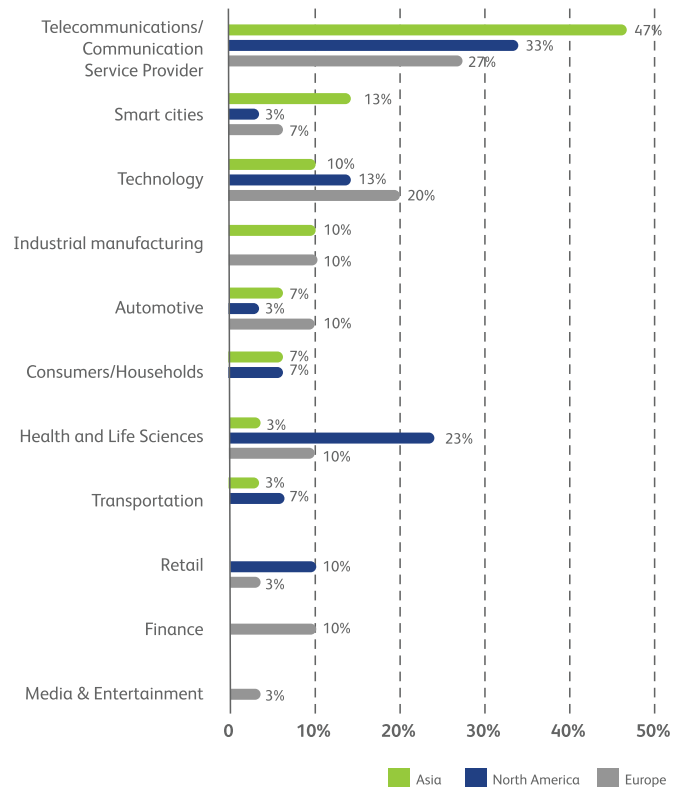
North America: While there are similarities in the views of North America CSPs with their peers in Europe and Asia, there is also one outstanding expectation. This is in the potential of vertical industry solutions enabled by partner ecosystems – 77% of CSPs agree it's a big opportunity for their business, higher than any other opportunity they mentioned (besides ICT for SMBs). The revenue potential of these solutions and the interest in them from vertical sectors is significant. This trend speaks to a heightened level of confidence in the region, that will likely drive the creation of more innovative and successful services.

The vertical play

There is a growing consensus amongst industry watchers in the value of verticalized 5G use cases. Yet, at the same time, there seems like there is confusion among CSPs on which vertical 5G use cases to prioritize. In Asia, in particular, 47% of CSPs preferred to see 5G as a horizontal opportunity – continuing to provide commodity connectivity plus network services on offer today, which would generate no real payback on 5G investment. In truth, it's not easy to develop verticalized propositions, especially as this is a completely new way of thinking for many CSPs – but this journey will be made all that much harder without prioritizing clear focus areas.

CSPs still believe that the most relevant sector for their 5G offering is around tailored network services and don't identify verticals which will materially benefit from 5G. This raises significant concerns in terms of CSP readiness to capitalize on their 5G investments.

Gartner estimates that in 2020, worldwide wireless network infrastructure revenues will reach \$4.2 billion, an 89% increase from 2019. This investment is in sharp contrast with sub-2% CAGR growth in revenues forecast to 2030⁴. This means CSPs need to be more radical. Until now, telecoms industry business models have been all about selling high volume, repeatable and standardized network-based services largely to mass consumer markets. 5G, on the other hand, opens many new possibilities in SMB and enterprise segments. While many of them are as yet unclear, they will require CSPs to accelerate innovation, be bold and take risks and rapidly experiment with a growing number of services, solutions and new business models.



To which of the following key sectors do you believe your 5G offering is most relevant?

3 GSMA Mobile Economy report, 2018

4 Gartner - Forecast: Communications Service Provider Operational Technology, Worldwide, 2017-2023, 2Q19 Update



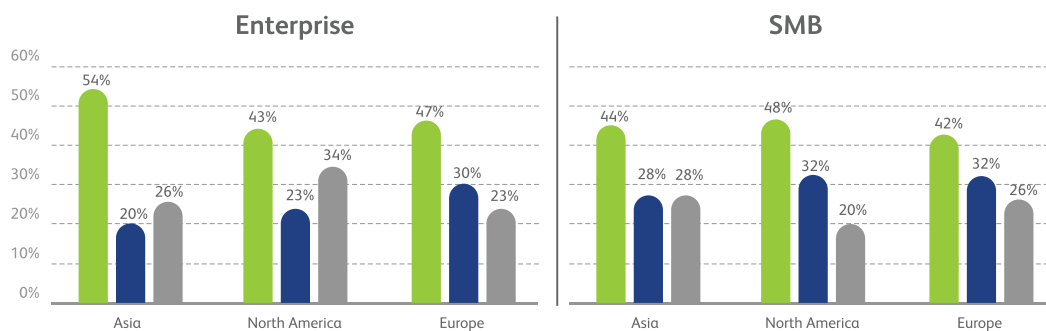
Getting under the hood of enterprises and SMBs

Confusion vs. collaboration

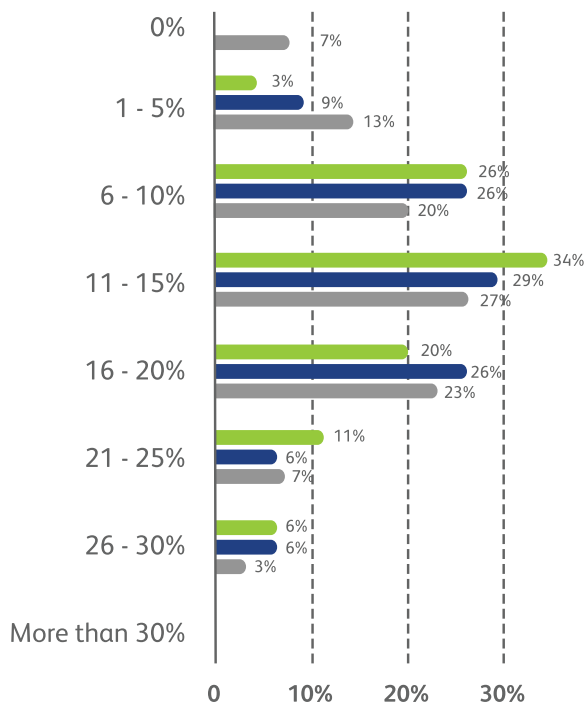
Confusion, uncertainty and traditional thinking towards 5G is not restricted to CSPs. Digging deeper into business attitudes, we asked enterprises and SMBs what they expect to be the most important benefit of 5G. When it comes down to it, higher speed is universally regarded as the greatest benefit. Going further, we questioned enterprises about whether they saw 5G as more of a cost saving or revenue generating opportunity – and cost reductions were rated more highly.

5G will certainly be faster than any previous generation and can clearly play a role in driving efficiencies through organizations, supply chains etc. However, it is 5G's potential to open-up entirely new, revenue-generating possibilities that is most exciting – just as 4G drove new devices, gaming, social media, e-commerce and content streaming. That message is being lost.

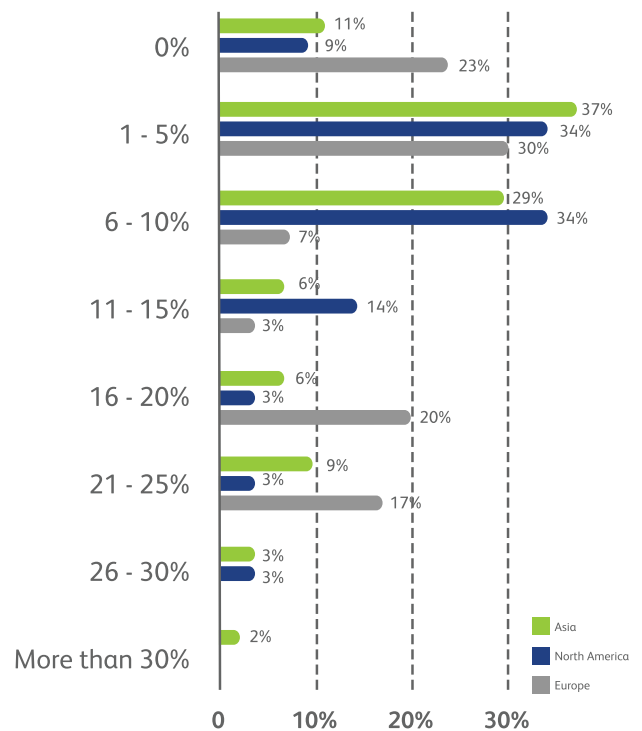
- Higher Speed
- Reliable, low latency communications (reduce delay time, get closer to real time reaction)
- Greater scalability (ability to connect many devices, sensors, IoT applications)



What will be the most important benefit of 5G technology for your business?



If you were able to successfully implement these 5G use cases, by what percentage would you expect your COST TO BE REDUCED in the next 3 years?



If you were able to successfully implement these 5G use cases, by what percentage would you expect your REVENUES TO GROW in the next 3 years?

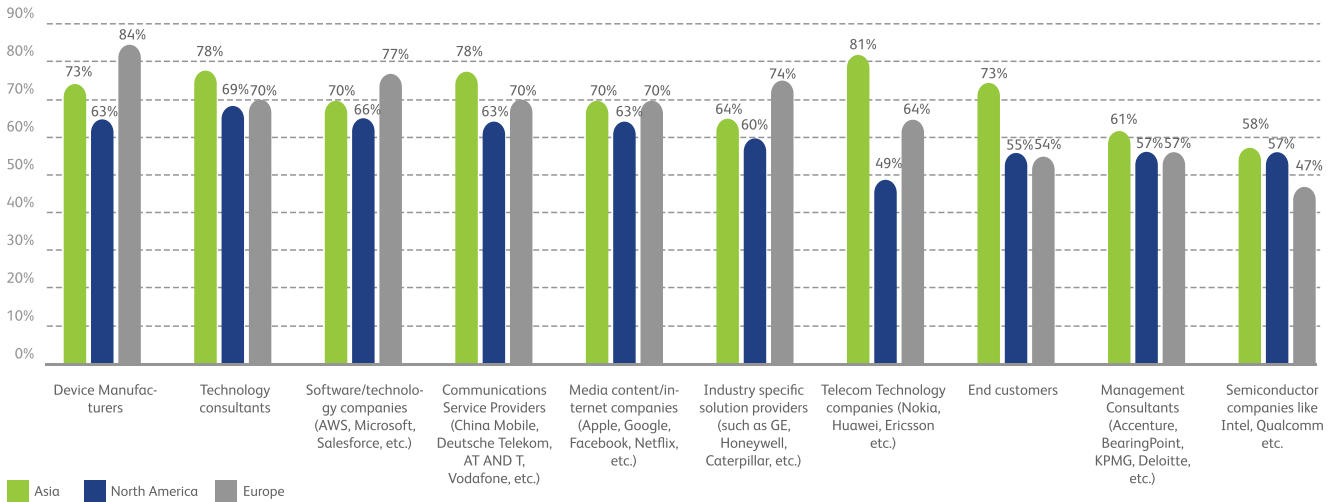
Business model change is not easy, but there are ways to facilitate disruptive innovation and bring in new thinking. Invariably this starts with much deeper collaboration between CSPs and enterprise/SMB customers. This helps to ground innovation on deep understanding of the problems customers want to solve and the pains/gains alternative solutions offer. As we enter the much-hyped 5G era, it's time for CSPs to sit down with their B2B customers to better understand the challenges

they face and better explain the possibilities of 5G. While they are doing this, CSPs need to establish relationships with new business owners in enterprise and SMB such as CMO/CIOs. Together, they can identify and shape relevant solutions that better fit B2B needs – both to increase efficiency and discover new ways to engage with their own customers and grow their revenues using 5G-based solutions. Because if CSPs don't, someone else will.

The ticking collaboration clock

Enterprises and SMBs know that, in order to build powerful 5G use cases, they must collaborate with both suppliers and technology players (“partner ecosystems”). We asked them how

important a range of ten different types of industry player are in helping to developing them.



How important are each of the following players in helping you develop 5G use cases?

Surprisingly, while CSPs are moderately important, they do not lead the field. In Asia, network equipment providers like Huawei are perceived as more important partners than CSPs, who come in joint second with technology consultants. CSPs rank third in North America, behind technology consultants and software and technology companies (AWS, Microsoft etc.),. In Europe, CSPs are seen as joint-fourth most important partners in developing 5G use cases, behind device manufacturers, software and technology companies and industry-specific solution providers (GE, Honeywell etc.), alongside technology consultants.

In summary, CSPs don't stand out as obvious partners for enterprises and SMBs to build 5G use cases. And while 5G is not mature yet, CSPs need to urgently address this as they don't have the luxury of time. Already, large enterprises and SMBs are choosing their partners for 5G and operators are not at the top of the list. CSPs need to demonstrate a willingness to change and to collaborate with businesses, and quickly.

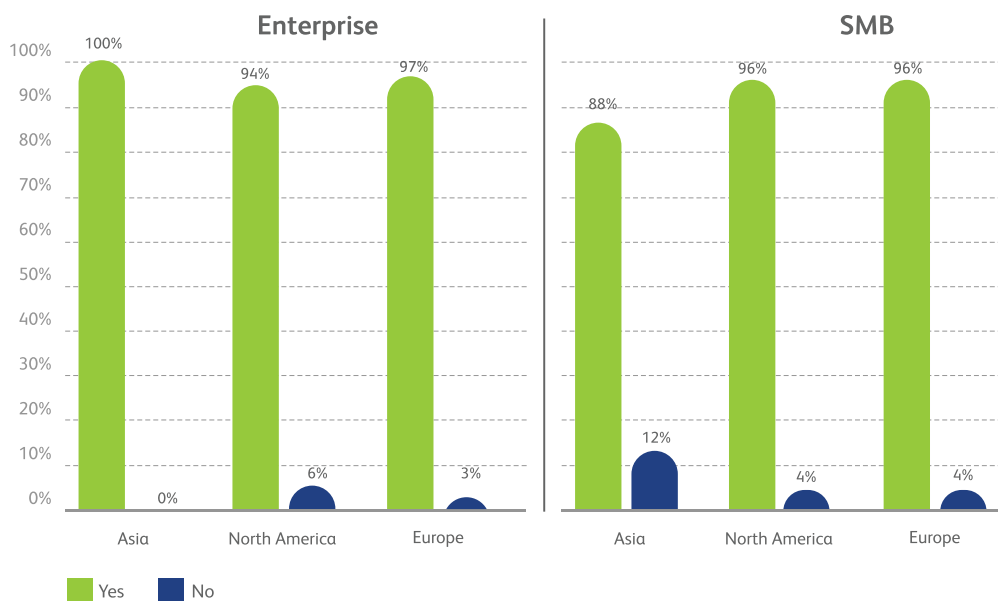
Why do business buyers feel this way? Collaboration saves time and money.

One important reason businesses don't see CSPs as the most important player to help them develop 5G use cases is that they are looking to buy solutions, and CSPs are looking to sell standard products. Businesses want to find the 'perfect' solution to their problem, rather than invent one by integrating lots of individual products together – which is too slow and costly. Instead, they want to buy complete solutions ("use cases") ready to be consumed in a bite-sized way, with no upfront investment and/or risk.

It's not about buying a network slice or mobile edge product. For businesses, it's about finding pre-integrated solutions, embedding the best available technologies, that can be used to quickly drive efficiencies or grow revenue. Even the largest

enterprises don't have the technology knowledge or capabilities to deal with the integration of new standalone technologies. So, they look to partners that understand their challenges, orchestrate the right ecosystem of technologies and players and deliver solutions that perfectly solve their problems. Historically, CSPs have tended not to work in this way and so businesses rank them lower than technology consultants or network equipment providers as potential partners with which to develop 5G use cases.

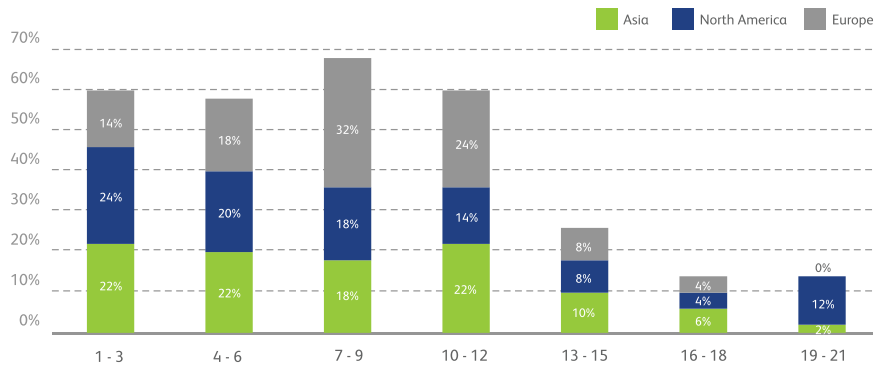
Enterprise and SMB views on the need for key players to collaborate to provide them with better services, is probably the one single point where there is uniform agreement across all businesses around the world.



Given the speed of change with technology do you feel that the key players in the market need to collaborate to provide you with a better service?

If CSPs want to improve their position with enterprises and SMBs they must collaborate with a wide ecosystem of partners to design and develop 5G use cases and solutions that fit business needs.

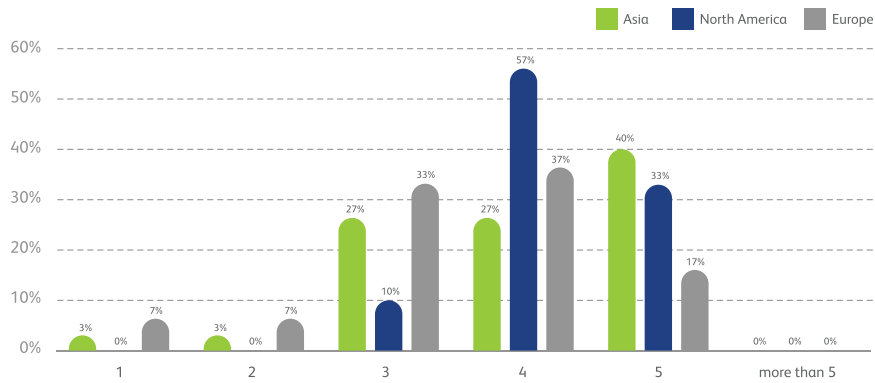
What sort of scale of partnerships are we talking about? On average, businesses expect to need 8.32 partners to support their 5G use cases. More than 60% believe that 5G use cases will involve between four and 12 partners.



How many partners do you believe will be needed to support the use of 5G in your business?

This is in stark contrast to CSPs, who think they need on average 3.9 partners to support 5G use cases. Worryingly, not a single

CSP anywhere in the world believes they need more than five partners.



How many partners on average do you believe will be needed to support the use cases in this key sector? (CSP view)

This is a significant disagreement. CSPs are still thinking too small – individual partnerships, rather than wider ecosystems in which tens or even hundreds of third-party providers can participate.

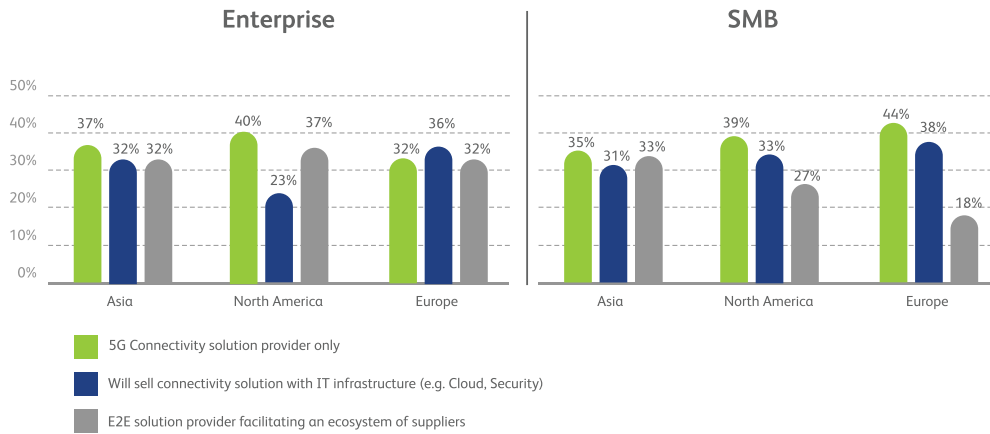
If they're to meet the expectations and demands of businesses, CSPs have to become masters of this partner ecosystem orchestration.

Partner ecosystems, if built correctly, will help CSPs close the gap on innovation and industry knowledge, promoting real conversations and collaboration with customers. They will solve genuine problems and enable co-creation of far better solutions supported by innovative business models and revenue share arrangements that make them highly attractive for businesses to buy.

5G is still in its infancy, many use cases are unclear. Building diverse ecosystems of complementary skills, capabilities and industry knowledge will accelerate a CSP's path to winning B2B segments.

It is perhaps for this reason, or for historical positioning reasons, that roughly a third of enterprises and four in ten SMBs perceive the CSP's role in 5G use cases as a simple connectivity provider. This is especially pronounced amongst enterprises in North America and SMBs in Europe and North America.

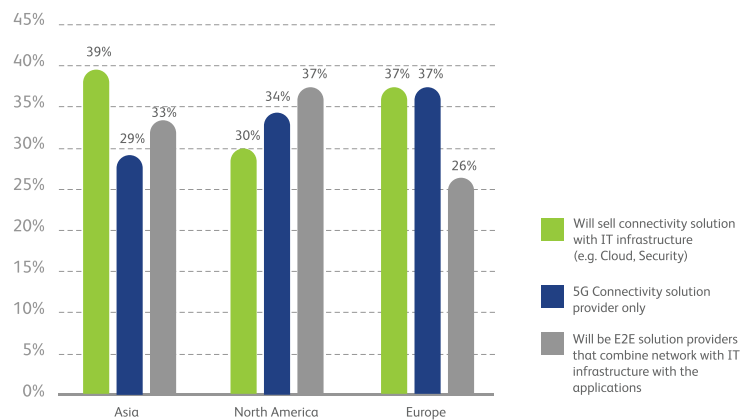
If CSPs were to limit themselves to this role, and maybe 5% of enterprise & SMB ICT spend, then they will both be commoditized and struggle to fund 5G investments, particularly standalone 5G networks. The economics simply won't work.



What do you think the role of Communication Service Providers (CSPs) will be in 5G/these evolving use cases?

The good news for CSPs is that many businesses do not expect them to play such a commoditized role. A reasonable number of enterprises and SMBs – especially in Europe – think CSPs will combine connectivity and IT infrastructure to provide solutions such as cloud and security.

What is encouraging is that roughly a third of enterprises and more than one in five SMBs see CSPs as end-to-end providers facilitating an ecosystem of suppliers. But what do CSPs expect their role to be?



What do you think the role of your company will be in these evolving use cases?

The answer is: more or less the same. Nearly four in ten Asian and European CSPs and three in ten North American CSPs see their role in 5G use cases as, essentially, a 'dumb pipe'. This speaks to a worrying lack of ambition amongst CSPs. This is especially evident in Europe, where just 26% of CSPs think they will play an ecosystem orchestration role. They do not appear to have the top down leadership drive to evolve their organizations, business models and technology platforms to embrace bigger opportunities.

North American CSPs, however, are more ambitious. Almost one in five expect to orchestrate ecosystems of providers to help businesses realize 5G use cases, and just over a third expect to

combine connectivity solutions and IT infrastructure. One of the reasons for this could be that many of the OTT and 'webscalers' are based in North America. CSPs in North America experienced first-hand the 'miss' of 3G and 4G, as value shifted from telecommunication services to OTTs.

It seems like they are more determined not to let it happen again, therefore they are aiming higher and willing to do much more to move-up the value chain and capture a much higher percent of use case revenue.

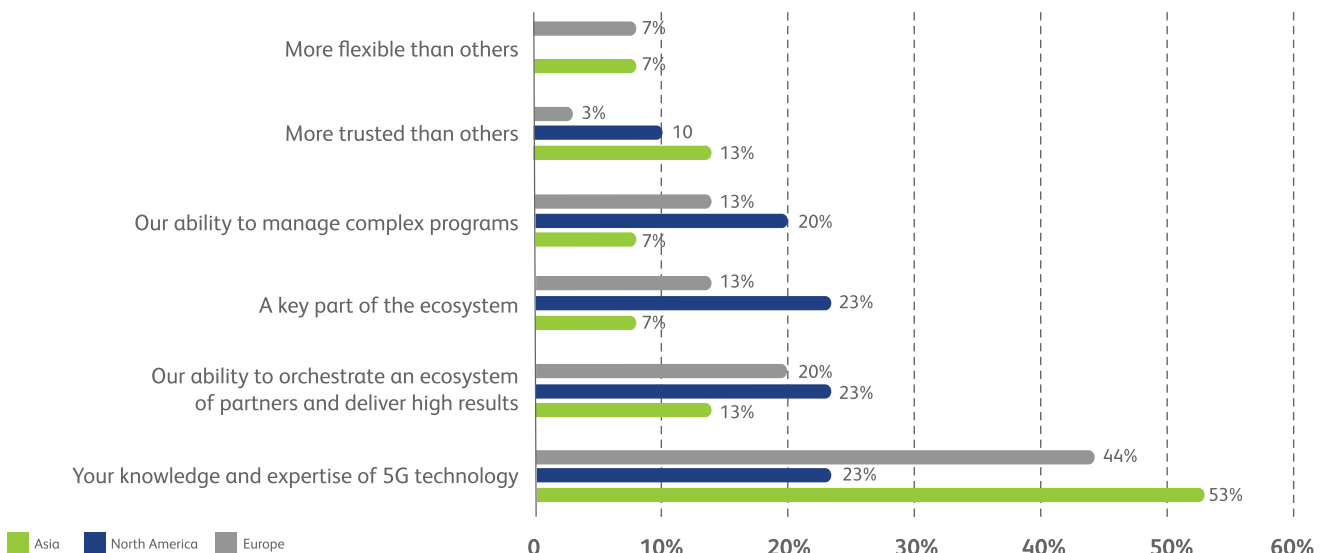
The question is how much more?

Are CSPs really typecast into a 'dumb pipe' role?

To understand the answer to this question, we have to look at what CSPs believe will encourage businesses to select them as their 5G solution partner relative to other players in the market. Then we have to compare this with what would drive businesses to make this happen.

Many European and Asian CSPs consider their knowledge and expertise of 5G technology as their sole selling point. This is

inside-out thinking – it's the same approach that saw CSPs become disintermediated during the 4G era. They exhibit a sense of self-doubt and a lack of ambition. Again, North American CSPs strike a more confident tone, believing their knowledge of 5G technology but also their ability to orchestrate ecosystems and the key role they can play in a 5G-based ecosystem puts them in a pivotal position to offer lucrative B2B services.



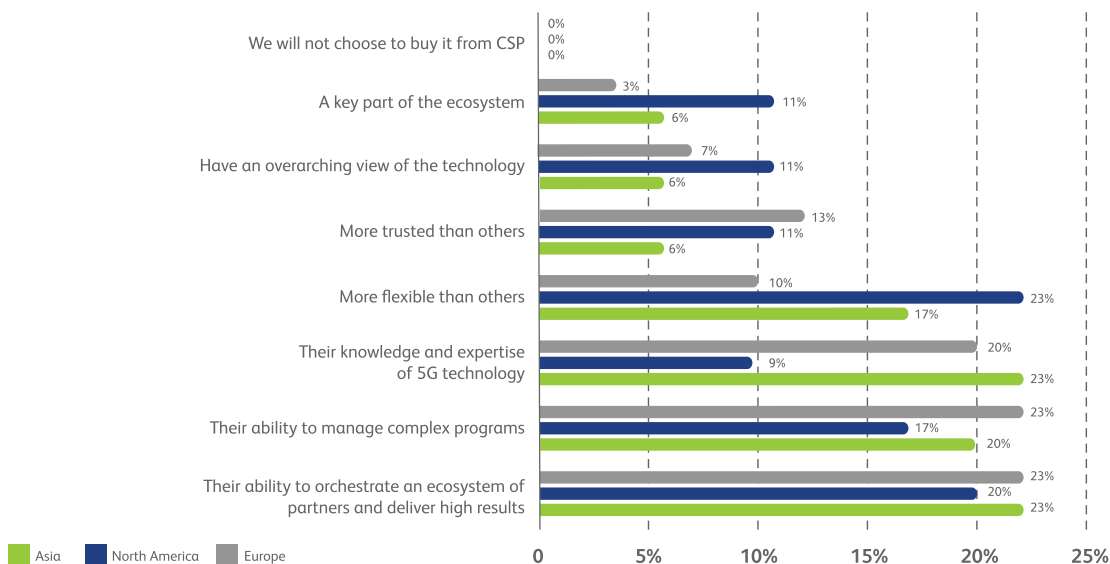
What is the key aspect that would encourage your customers to potentially choose you for developing their 5G based solution rather than another type of provider?



Amazingly, businesses see the situation differently – for them, there are a number of reasons to choose to work with CSPs to develop 5G solutions as opposed to other providers. In Asia, CSPs’ abilities to orchestrate ecosystems of partners, their knowledge of and expertise in 5G technology and prowess in managing complex programs will drive businesses to partner with CSPs. For European businesses, perceptions of CSP capabilities in ecosystem orchestration, managing complex programs and technical expertise will encourage them to work with CSPs.

While in North America, a CSP’s flexibility, abilities in ecosystem orchestration and management of complex programs will engage businesses.

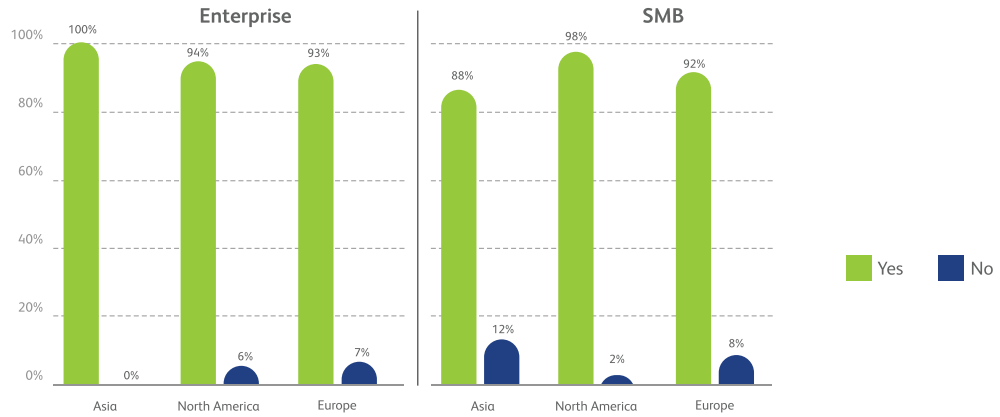
What’s interesting here is the commonalities between regions. Firstly, not a single business anywhere in the world said they would not choose to buy from their CSP. Secondly, the perceived ability of CSPs to manage ecosystems of partners to deliver results is high.



What is the key aspect that would encourage you to work with a CSP to develop your 5G-based solution rather than another type of provider?

Around the world, businesses have more confidence in CSPs than CSPs have in themselves. Furthermore, when asked if they

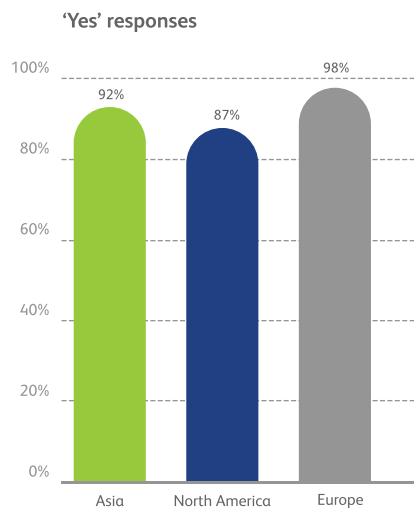
thought CSPs have a bigger role to play in the market than just connectivity, enterprises and SMBs strongly agreed.



Do you think a telco/communication service provider has a bigger play in the market than just communications and connectivity?

Perhaps most importantly, businesses are very open to working with CSPs beyond basic connectivity in the 5G era. Enormous numbers of both enterprises and SMBs would consider

purchasing new solutions from CSPs, and report that their budgets for new solutions are growing.



Would you consider purchasing new technology solutions from Communication Service Providers?

Finding their way: the route forward for CSPs by region

Asia: shake off doubts, act quickly

Asian CSPs are more likely to focus their 5G efforts on more traditional connectivity-driven models than higher value services approaches. 46% of Asian CSPs see themselves as solution providers, going beyond the connectivity plus IT infrastructure services that are common today. Just 17% see themselves as end-to-end actors facilitating an ecosystem of providers – the part of the market that will deliver the greatest returns.

Asian business customers have more confidence in their CSPs. 92% of Asian businesses would consider buying new technology solutions from CSPs. Enterprise and SMB customers would rather work with CSPs due to their ability to orchestrate ecosystems of partners, manage complex programs, their knowledge and expertise around 5G and the fact they trust them more than other market players. Nearly seven in 10 Asian business IT leaders think CSPs should be offering 5G solutions combining connectivity with IT infrastructure, applications and other capabilities that would be offered through an ecosystem of partners.

It's clear that Asian CSPs face a considerable 5G B2B opportunity. However, their lack of confidence in their ability to embrace and operate more advanced 5G business models is holding them back. The Asian 5G B2B market is poised, businesses are practically crying out to work with CSPs. CSPs in this region must heed this call, shake off their doubts and act quickly.

Europe: a stark difference in CSP vs. business attitudes

The attitude of European CSPs is deeply concerning, suggesting rock bottom confidence. They're pinning their 5G hopes on 4G business models – consumer services and enterprise connectivity. Confidence levels, and belief, in more advanced services-based models is poor. Just a third believe their role will extend beyond basic connectivity and infrastructure offerings. Only 10% of European CSPs believe they will enact a role of end-to-end providers facilitating an ecosystem of partners.

Yet a massive 92% of European businesses agree that CSPs have a bigger role to play in the market than simply providing communications and connectivity. Almost seven in 10 European businesses want CSPs to offer 5G solutions combining their assets with those of partners. 97% would consider buying new technology solutions from CSPs – the highest in the world.

European enterprises want to work with CSPs on 5G because of their ability to orchestrate ecosystems of partners, because they can manage complex programs and because they understand 5G technology. SMBs value the CSPs' 5G expertise and overarching position, and their ability to orchestrate ecosystems.

There is no other region of the world where there is such a stark difference in attitudes between CSPs and their business customers. European companies are more likely to consider working with CSPs for 5G services than in any other region surveyed. They want them to offer 5G solutions with partners. European CSPs must re-engineer their mindsets to meet this demand, and while they have more time than most, they're starting further back than anyone.

North America: execute new business models quickly

North American CSPs are certainly the most confident and optimistic about the new business models they will be able to leverage as a result of 5G. More than three quarters of North American CSPs agree that creating vertical specific solutions using ecosystems of partners represents a big 5G opportunity. Half of North American CSPs expect to evolve into 5G solutions providers, with 40% of these CSPs anticipating a role in which they're end-to-end providers facilitating an ecosystem.

North American businesses are most positive about the role CSPs will play in 5G, with 96% believing they will do more than provide connectivity. 87% would consider buying new technology solutions from CSPs – the lowest of all regions surveyed, but no cause for concern. Again, large North American enterprises want to work with CSPs as they can orchestrate ecosystems of partners, manage complex programs and are perceived to be more flexible than other providers. SMBs rate CSPs as 5G experts, they trust CSPs and think they are flexible.

CSPs in North America do not suffer the same lack of confidence of their peers in Europe and Asia. They understand the business models which will see them achieve the greatest gains in 5G, though only one in five believes they will get there. The challenge for North American CSPs is to execute – to build the platforms and partnerships they will need to meet the needs and expectations of their business customers. Once they've started to do this, many more will believe that they can secure their position at the center of the 5G ecosystem.

What now?

This survey helps us understand what CSPs must become, and position themselves as, in order to move towards the 'North Star' of 5G B2B revenues.

Enterprises and SMBs alike believe that 5G will be important for their businesses. They believe that CSPs have a lot to offer them in terms of 5G products and services – certainly more than the simple connectivity + IT infrastructure offers of the 4G era – and they would absolutely consider buying from them.

With the destination clear, and the route now plotted, the real question is: why do CSPs lack the ambitions or the self-belief in their ability to win bigger B2B market share? Is it the reluctance of leadership to move away from their traditional domain into the adjacencies of use case orchestration? Is it that business model change is too risky for leaders who have built their careers upgrading their networks? Is it the challenge of managing the expectations of institutional shareholders who want CSPs to maintain high dividend yields and not increase investment into new areas? Or is it a perceived inability to bring about change in large organizations – attract new talent, introduce new ways of working and become more agile and experimental in their approach to product and ecosystem management?

What is clear though is that CSPs don't have the luxury of time. Businesses are not waiting for 5G and are definitely not waiting for CSPs. They are moving now, partnering and collaborating with providers who can help them solve their business problems. 5G requires a fundamentally different business model from 3G and 4G to generate RoI. To have any kind of future, CSPs need 5G to be a success. Given the stakes, they must target a far higher share of use case revenue. To do this, CSPs must start their journey immediately.

CSPs have to elevate their thinking about their own market position. They have to see the bigger picture. They have to choose a vertical and 'jump in'. Sometimes the easiest way for CSPs to engage with a vertical is to find a strategic vertical partner that has a wide understanding of that vertical, as opposed to taking on all the learnings themselves. For example, in order to move into agriculture, organizations such as the National Farmer's Union or the Office of Agriculture might be the right partner to close the gaps. Another way involves standardizing or creating a common horizontal layer with capabilities that are relevant for all engaged parties, such as connectivity, cloud or IoT. This means that only small increments are required in order to tailor solutions specific for particular verticals (no regrets), which enables CSPs to move quickly between industries, testing and uncovering successful outcomes. They have to collaborate with these customers. They have to co-innovate and co-create with a wide range of traditional suppliers, webscale companies, vertical market specialists and even competitors.

This requires the resolution of some internal issues, which we've addressed in previous studies⁵. But never before, given the potential and importance of 5G, has this shift in strategy, business model and mindset been more important. To truly succeed in the 5G era, CSPs must strive to become platform players orchestrating ecosystems of partners – in five years' time, any other approach will have been dashed on the rocks.



BearingPoint//Beyond

BearingPoint//Beyond is a rapidly growing SaaS-based BSS and digital platform solution provider helping organizations to reinvent their business model and grow revenue by utilizing digital platforms and partner ecosystems.

Our digital platform solutions are designed to help businesses experiment, launch and monetize new offerings at speed, with minimum risk and cost; building connections between technologies and partners, enabling them to collaborate, co-innovate and expand reach with an ecosystem of partners while taking advantage of new technologies such as cloud, IoT AI, 5G and more. This brings organizations closer to their customers, helping drive higher efficiency and automation, to become more agile in the face of competition.

We serve customers across Asia-Pacific, Europe, Middle East, Africa and the Americas, spanning industries from telecommunications, media and entertainment, to tech and IT, financial, and automotive.

BearingPoint//Beyond is owned by BearingPoint, an independent management and technology consultancy with European roots and a global reach. A worldwide consulting network with more than 10,000 people, BearingPoint supports the world's leading companies and organizations in over 75 countries, engaging them to achieve measurable and sustainable success.

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