IDC MarketScape

IDC MarketScape: Asia/Pacific Next-Generation Telcos: Telecom Services 2020 Vendor Assessment

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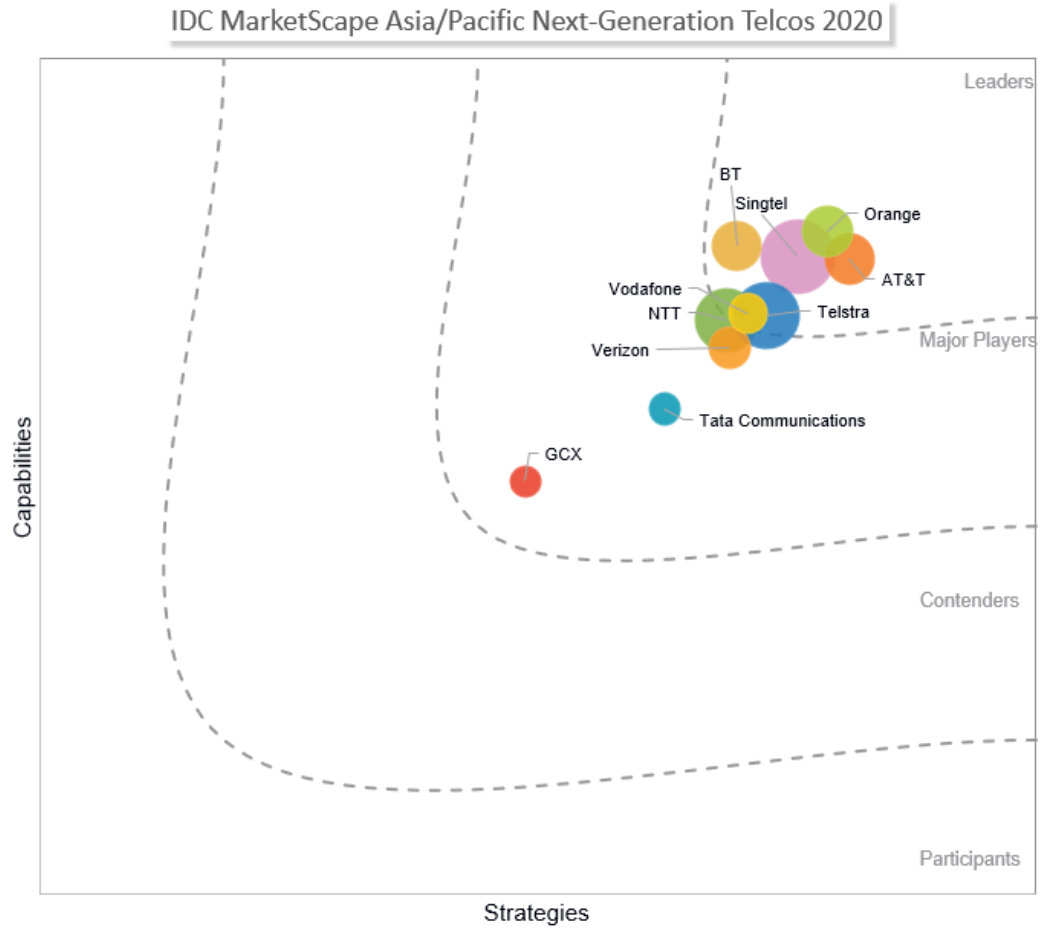
THIS MARKETSCAPE EXCERPT FEATURES: TELSTRA

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape: Asia/Pacific Next-Generation Telcos: Telecom Services 2020



Note: Please see the Appendix for a detailed methodology, market definition, and scoring criteria.

Source: IDC, 2020

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IDC OPINION

This study leverages the IDC MarketScape framework to evaluate the leading regional and global telecommunications service providers (SPs) in Asia/Pacific (AP). The primary focus of this study is to assess telecommunications SPs' capabilities to meet the telecommunication and ICT needs of various customer segments. IDC identified the top 10 providers by scale and scope of operations in terms of strong regional network presence, suite of managed services offerings in the region, and a large base of midsize and large-sized enterprises, multinational corporations (MNCs), and government clients across AP. The evaluation framework consists of a large variety of parameters, such as comprehensiveness of service offerings, datacenter and cloud capabilities, go-to-market (GTM) strategy, growth strategy, partner ecosystem, and innovation strategy.

Some of the key differentiators for success in this market are:

- **A wide portfolio of enterprise connectivity options with a software-defined overlay.** IDC predicts that by 2024, 60% of companies in AP will leverage all four connectivity types (fixed, cellular, low-power wide area networks [LPWAN], and Wi-Fi) throughout their daily functions, with cellular and LPWAN seeing the greatest increase in adoption. The growth of distributed WAN and hybrid multicloud networks has been a major theme in recent years and will have a profound impact on network configuration for enterprises. The growth of Internet of Things (IoT) networks and the rise of 5G will also have profound implications going forward. Software-defined WAN (SD-WAN) and edge computing are key drivers for hybrid WAN connectivity. As fiber-based broadband networks proliferate, SD-WAN becomes more popular. 5G will further drive SD-WAN by connecting remote and dispersed sites. Edge computing will bring applications closer to these sites and will allow access to cloud-based applications. IoT connectivity has been a highly competitive space, with the licensed technologies, such as narrowband IoT (NB-IoT) and category-M (CAT-M) solutions, jostling with unlicensed technologies, such as long range (LoRa) and Sigfox. However, as enterprises deploy more assets in remote and dispersed areas, they will continue to connect these assets with the best available, low-power solutions.
- **Development of edge computing platforms for next-generation applications.** The confluence of emerging technology trends, such as cloud, IoT, mobility, and analytics, is driving the rise of edge computing as the next frontier for capturing and analyzing enterprise data. New applications are being served from edge cloud locations, and the increasing adoption of software-defined networking (SDN) is pushing services from discrete appliances to edge cloud locations. The deployment of 5G will add even more capabilities to the edge cloud and boost investments that will shift more services to the edge and will create a marketplace for virtualized services. For applications that need quality of service (QoS) with guaranteed service-level agreements (SLAs) and low latency, 5G will be crucial in combination with the shift to the edge cloud in multiple locations. Developing edge capability needs to be a strategic priority for communication SPs if they are to realize their objectives of becoming true digital SPs and move further away from the "dumb pipe" scenario. Too much ground has already been lost to cloud SPs, such as Amazon Web Services (AWS) and Microsoft. The edge infrastructure will be crucial for communications SPs to support a variety of network access types and generate new revenue streams.
- **Thinking of cloud and networks as one.** Communications SPs lost the battle with hyperscale cloud providers, such as AWS, Microsoft Azure, and Google Cloud platform. Despite significant investments, they were not able to keep pace either with the ability of cloud providers to build out their networks at a large scale and across borders and geographic

regions. Although the communications SPs' community has moved away from the early ambitions to become hyperscale cloud providers, they, after a few years of experimentation, have begun to find their feet with regard to potential services that they can offer to the enterprise customer base. The multicloud and hybrid cloud landscape is quite hard and complex to manage for today's enterprise. Although cloud interconnect offerings have become table-stakes now, communications SPs are differentiating themselves further by providing cloud management and orchestration platforms, which not only provide a single-pane-of-glass view of all the cloud resources, but also weave in the network resources, along with online marketplaces, to subscribe for new virtual network services on the go. Rather, the new positioning is not only because of losing the hyperscale battle, but also because of networks and cloud becoming more and more intertwined for enterprises on their respective journeys.

- **Leveraging a new class of network intelligence.** Over the past few years, artificial intelligence/machine learning (AI/ML) has gradually been adopted by communications SPs to enhance network operations by leveraging network traffic and end-user data to refine the efficiency of network operations. On the customer-facing side, AI/ML has been used to augment customer experience (CX) and provide tools for process and sales process automation to recommend services to end users. AI/ML or machine intelligence facilitates the development of predictive and prescriptive applications that offer predictions and recommendations and automates routine functions based on predefined algorithms that also evolve with ML capabilities. It is seen that communications SPs' AI/ML have implemented intelligence in intent-based networking, security intelligence automation and network forensics, customer experience automation, and sales process automations. Carriers that implement and leverage this new class of intelligence and automation will be able to reduce churn, operational costs, and significantly improve customer experience.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

For the purpose of this study, IDC defines the "next-generation telcos" as international IP VPN, international Ethernet services, and a suite of managed services that include cloud services and professional IT services (excluding support services) offered in the AP region for the enterprise segment. IDC defines the enterprise segment to include the midsize and large-sized enterprises, multinational corporations (MNCs), and government clients that have regional or international ICT requirements. Vendors are evaluated based on their current capabilities and next three to five-year strategies they set for this customer segment in the AP region. Capabilities or strategies in the consumer, small and medium-sized enterprises (SMEs), or wholesale segments are not included as part of this vendor evaluation.

To qualify for inclusion in this IDC MarketScape study, SPs must have network services, multiprotocol label switching (MPLS)-based, and/or Ethernet-based international services for enterprise segment in AP. They must also have a portfolio of managed services, including managed WAN and managed security, network and application acceleration solutions, cloud services, and other ICT services targeting the enterprise segment in the region.

This year, IDC considered the following 10 global and regional telecom SPs that operate in the AP region:

- AT&T
- BT Global
- Global Cloud Xchange

- NTT
- Orange Business Services
- Singtel
- Tata Communications
- Telstra
- Verizon
- Vodafone Business

ADVICE FOR TECHNOLOGY BUYERS

Communications SPs operating in AP are seeking to become the ICT partner of choice for enterprises that are seeking rapid growth regionally and in their respective countries. These enterprises are embracing the 3rd Platform and are initiating complex efforts for the digital transformation (DX) of their businesses, and, to this end, communications SPs are helping them achieve their goals with a portfolio of solutions and products that include SDN, hybrid cloud deployments, and managed services.

Communications SPs are attempting to go "digital" themselves as they transform their networks to incorporate software-defined and virtualization paradigms, investing heavily in analytics, automation, and other emerging technologies that will transform not just their network architectures, but ultimately their business.

As the networking environment, driven by DX, continues to evolve and as more and more businesses implement new technologies, IDC believes that the enterprises should take a note of the following:

- **Management of a multi-WAN, multicloud ICT environment.** As organizations grapple with the complexity of a multicloud, multi-access network architecture, they should look toward their communications SPs to help them on their network transformation journey. IT and network departments struggle to manage the increasing complexity of not only the overall network, but also the connectivity mix. Some of the configurations have added complexity because of the emergence of private networks, with traffic even going through a mix of public-private networks depending on the use case. Orchestration is increasingly becoming challenging, especially because the enterprise IT departments usually do not have the requisite skills or resources in-house. Moreover, IT departments will also have to balance the sometimes conflicting needs to use multiple vendors to lower dependence with the fact that multiple vendors add complexity. Enterprise should engage communications SPs to better understand their deployment plans, particularly in those coverage areas that map to assets that are deployed at the enterprise's campuses, factories, and other facilities, especially those in remote and dispersed areas. Organizations should also consider an outsourced and managed option for specific portions of the network and/or specific regions to see if it can be more cost-effective and efficient than managing through in-house teams.
- **Network transformation to accelerate the DX journey.** The adoption of 3rd Platform technologies is putting a lot of strain on legacy ICT infrastructure, including the networks. Cloud computing is a key pillar of the enterprise's drive toward DX. As enterprise applications move to the cloud, the WAN needs to evolve to support the new application paradigm. Enterprises worldwide are embracing hybrid- and multicloud IT strategies that include adoption of software as a service (SaaS) and platform as a service (PaaS)/infrastructure as a service (IaaS) offerings as a means of gaining business agility and creating operational efficiencies. Evaluating software-defined technologies, such as SD-WAN will support the DX journey. SD-

WAN is a solution that rises in response to this need and holds the promise of aligning the WAN with the application networking requirements of a digitally transformed enterprise. It also holds the promise of integrating cheaper broadband with private line-based connectivity to deliver more value out of network investments over time. However, while evaluating technology vendors and communications SPs, enterprises should evaluate the provider's capability and road map to deliver the long-term strategy of not just SD-WAN, but also virtual network services.

- **Co-creation of service-level agreements based on business objectives.** As organizations continue to move further on their cloud journey, their expectations from SPs are also evolving. SLAs for enterprises, who have moved applications/workloads to the cloud, are less about the dedicated network bandwidth connecting to their workload, but more about performance of the migrated workload – ensuring that the application can be accessed with a certain degree of latency and reliability. Moreover, the cloud conversation has changed from "whether or not cloud" to "how many clouds," and enterprises are looking for solutions that provide optimal performance of their workloads, irrespective of where it is hosted. Organizations should look to partner with communications SPs who can define network performance in terms of business objectives, and provide SLAs, such as application performance, and even link it back to the enterprise business objectives.
- **One size does NOT fit all.** Enterprises need to be aware that even the best-positioned telcos may not necessarily meet all their ICT needs and requirements. Hence, buyers must evaluate the providers' capabilities based on specific business requirements to select the preferred partners.
- **Evaluating requirements and testing communications SPs' experience for embedded security offerings.** Evaluate and define the organization's IT infrastructure, systems, and all assets, with a view to identify which parts are highly at risk and what the risk profile may be. Subsequently, have the communications SP's managed security provider to demonstrate its security expertise in a variety of organizations and determine whether the managed security SP can deliver the necessary business outcomes specific to your organization.
- **Embrace mobility.** In the start of 2020, IDC predicted that by 2022, 75% of enterprise frontline workers will be enabled with mobile devices, apps, and connectivity services as part of a prioritized effort to increase the efficiency of task-oriented workflows. It is expected to be over 85% now as the COVID-19 pandemic takes its full toll on the way people work.

VENDOR SUMMARY PROFILE

This section briefly explains IDC's key observations resulting in Telstra's position in the IDC MarketScape. Telstra is evaluated against each of the criteria outlined in the Appendix, and the description here provides a summary of the vendor's strengths and opportunities.

Telstra

Telstra is positioned as a Leader in this 2020 IDC MarketScape study.

Building on its 2016–2017 announcements to invest AUD3 billion on the digitization of its business, Telstra announced in June 2018 a three-year strategy, Telstra 2022 (T22), aimed at rebuilding its brand and competitive edge in the hypercompetitive telecom market. The last 18 months has seen the carrier move swiftly along this transformation journey in order to regain some of its lost advantage in the telecom market in the region. With key priorities such as the simplification and digitization of its business, operational cost reduction, and driving profitable growth in its NAS and international

portfolio, the carrier is executing well on its ambition to deliver a superior customer and employee experience. All of this has enabled Telstra to break into the leader's segment.

Telstra's latest half year results (1H20) indicate that it has built a significant momentum in cost reduction of its overall business, resulting in higher profits. Executing on its T22 strategy, the carrier was able to reduce its operational costs by about 25% (YoY for the half ending in December 2019), with only a 3% reduction in overall revenues. This has been achieved through what Telstra described as "radical simplification" of its business, while continuous investments remain in its fixed and mobile networks, along with technology platforms.

Telstra's enterprise offerings in the market are underpinned by its global connectivity and platforms portfolio, which includes connectivity, cloud, and branch-oriented offerings. Telstra boasts one of the widest network coverage in the region, including the hotly contested submarine cable space, where the carrier owns a significant LIT submarine cable capacity. The provider offers MPLS IP-VPN, Ethernet Private Line (EPL), EPL express, and global internet and IP transit services globally. Its East Asia Crossing (EAC), Reach North Asian Loop (RNAL), and Asia/Pacific Cable Network 2 (APCN2), along with city to city (C2C) infrastructure, provides enterprises in key Asian cities with diverse low latency and multiple capacity options to connect within the region, as well as in Europe and United States. Telstra also introduced new 10G and 100G routes connecting Malaysia, Indochina, Singapore, India, and Sri Lanka to Europe. In line with digitization objectives, Telstra plans to offer new services, modifications, and cancellations through self-service portals for some of its connectivity portfolio, starting with its business grade internet offering, Telstra Internet Direct.

Telstra has further enhanced its software-defined network platform to complement its core offerings and has offered a range of services such as bandwidth on-demand, SD-WAN, and other virtual network services under the Telstra Programmable Networks (TPN) brand. Telstra's recent partnership with Equinix to integrate its TPN platform with the Equinix Cloud Exchange (ECX) fabric via programmable APIs further extends its multicloud interconnect capabilities and allows the carrier to provide its customers with connectivity to over 170 services providers across 38 countries globally.

The carrier's approach to offer end-to-end cloud-based services is also resonating well with enterprise customers. Telstra's portfolio of managed cloud services spans 24x7 proactive management, incident management, cloud connectivity, and cost management for AWS and Azure. This is complemented by its cloud professional services (advisory and implementation services) that work with a strong set of partners to provide end-to-end managed services. Australia and New Zealand (ANZ) accounts for a significant portion of Telstra's managed cloud services revenue (over 95%), although Singapore accounts for the rest. Telstra leverages eight centers of excellence (COEs) to deliver its managed cloud services.

The carrier is also doubling down on the ability of its services business to drive growth and increase customer intimacy through its new business unit, Telstra Purple. Services are a people and technology-intensive business, and although this may seem counterintuitive to the directive from senior leadership of becoming leaner, Telstra is betting that its investment in this business (professional and managed services) will reap the rewards for double-digit growth over the next three years.

Telstra has continued to evolve its MSS portfolio, which spans network, infrastructure, endpoint, and identity protection, as well as OT/IoT monitoring, managed SIEM, distributed denial-of-service (DDoS) mitigation, and SOC augmentation services. Given Telstra's background and strength as a network

and infrastructure provider, its managed network security services and managed secure web gateways are among its top MSS revenue contributors. Telstra also offers a security monitoring solution that is based on its own open MSS cybersecurity platform and is focused on delivering a broad set of threat lifecycle capabilities to its customers. In addition to the above, the carrier has continued to develop its advanced security analytics capabilities based on its acquisition of Cognevo (2016) and has made tremendous progress in its cloud-based security delivery and cloud security services.

Overall, Telstra is continuing its transformation journey and is focused on expanding aggressively within and outside of AP, leveraging its various partnerships and acquisitions.

Strengths

Comprehensive Software-Defined Portfolio to Complement Its Network Assets

Telstra continues to develop on its vision to build "networks of the future" through various software-defined initiatives, including virtualization of its core and implementing a programmable network fabric that facilitates increased flexibility and operational agility in serving customers in Australia and international markets. Over the past 12 to 18 months, the carrier has done well to bring together its various offerings in the software-defined space and integrate capabilities from its Pacnet acquisition, partnerships with Cisco and VeloCloud (now VMWare), among others.

The Telstra programmable network portfolio provides customers with solutions to introduce flexibility and agility in their network environments to help them on their DX journeys. In addition to existing offerings of a physical router and a virtual router (as a router VNF), the carrier also launched Telstra Cloud Router on TPN to provide organizations with simplified and scalable layer 3 connectivity option to multiple cloud providers. The virtual nature of the offering, along with on-demand provisioning and hourly billing, makes it an attractive option for potential customers.

Accessed through Telstra's domestic and international network, it includes offerings such as on-demand bandwidth, software-defined WAN and LAN, optimized connectivity for multicloud access, virtual network services, and a self-service portal to allow its enterprise customers to manage their subscriptions. With organizations realizing the critical role of networks in powering their DX journeys, Telstra's software-defined portfolio, compounded with its widespread network assets, give the service provider an edge over some of their competitors in the region.

Strong Professional Services Capabilities Under the Newly Formed Telstra Purple

Telstra started its journey in the wider consulting and services space with acquisitions of small agile consultancies, such as Company85, Kloud, and Readify over the last few years, and has managed to grow and integrate them within the Telstra ecosystem. The newly positioned business unit, Telstra Purple, brings these entities together under a single umbrella to give its professional services team a formal structure, with the aim of delivering solutions that go beyond the technology by solving the most critical business and technology problems for its customers. Despite an organization-wide focus on cutting costs, Telstra sees this as a growth engine and is investing in developing the right set of tools, processes, platforms, and its most important asset, its people. Telstra Purple allows the carrier to have wider business-oriented conversations with its customers, something that it has always been doing, but in a limited capacity. The formalization of Telstra Purple lends its professional services capabilities a structure and serves the purpose of reinforcing Telstra's focus on guiding customers on their respective transformation journeys in the customers' mind.

Challenges

Challenge in the Domestic Australian Market

Given its status as an incumbent in the Australian market, Telstra continues to battle headwinds and shareholder pressure at the larger corporate level. However, the carrier has responded well thus far, delivering strong results on its ambitions to simplify and digitize its business radically through the T22 strategy. As the impact of NBN further increases, Telstra will need to accelerate its ambitions in a competitive marketplace. It must continue to invest in tools and platforms to enhance and provide value in its service delivery. It must continue to invest in people, either through organic reskilling or strategically acquire consulting talent. It must amplify its marketing presence with a clear articulation of its value proposition in order to retain its key customers and further grow in the AP region.

Transitioning to an Agile Back-end Solution Stack to Accelerate Its Transformation

As the carrier executes on its plans to digitize its processes and solution portfolio, integrations and transformation of the back-end business and operations support solutions has become paramount. Moreover, various acquisitions, both in Australia and internationally, including Kloud, Readify, Cognevo, Company85, MTData, and VMTech make this transformation even more challenging. Although the carrier is already under way in integrating some of these billing and operational systems, it will need to accelerate further its plans to ensure a uniform and superior customer experience, given the hypercompetitive nature of the market.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis or strategies axis indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represent the market share of each individual vendor within the specific market segment being assessed. This market share is derived from an estimation of revenue from enterprise services, including (but limited to) fixed voice and data, cloud, IoT, UC&C and managed services (excluding support services) from midsized to large enterprises, MNCs, and government segments within AP. The size of the bubbles has been scaled down to better reflect the positioning of each vendor in the chart.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and, ultimately, vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

In today's agile world, carriers are promoting software-defined networks to help their enterprise customers stay competitive in the market. Organizations around the globe are looking for a faster, flexible, and agile network to support their DX initiatives. Network services are becoming more intelligent as SPs continue to invest in technologies within their network core to deliver more efficient, scalable, and smarter networks to enterprises. However, realizing that most of the value lies beyond the network layer, telcos continue to expand their capabilities, moving deeper into the ICT stack, providing a comprehensive portfolio of cloud, M2M, IoT, enterprise mobility, SDN, professional, and managed services.

In this IDC MarketScape, the SPs are assessed on their strategies and capabilities in the AP region. The evaluation framework is based on a large variety of parameters, such as comprehensiveness of service offerings, datacenter and cloud capabilities, go-to-market strategy, growth strategy, partner

ecosystem, and innovation strategy (complete details in the following section). These parameters are evaluated from current capabilities and a future strategy point of view.

LEARN MORE

Related Research

- *Market Perspective: 2020 Technology Theme Implications for Asia/Pacific (Excluding Japan) Communication Service Providers* (IDC #AP46106320, April 2020)
- *IDC FutureScape: Worldwide Mobility and Telecommunications 2020 Predictions — APEJ Implications* (IDC #AP45221220, January 2020)
- *Carrier Cloud Business Models: Thinking of Cloud and Networks as One* (IDC #AP44533619, November 2019)

Synopsis

This IDC study is the eighth yearly assessment of next-generation telecom operators in Asia/Pacific. The primary focus of this study is to assess service providers' capabilities to meet the telecommunication and ICT needs of various customer segments. It leverages the IDC MarketScape framework to evaluate 10 leading regional and global telecommunications SPs in Asia/Pacific. The evaluation framework consists of a large variety of parameters, such as comprehensiveness of service offerings, software-defined platforms and cloud capabilities, go-to-market (GTM) strategy, growth strategy, partner ecosystem, and innovation strategy. Communications SPs are evaluated based on their current capabilities and the strategies they have set in the next three to five years for the enterprise segment in the Asia/Pacific region.

"Globally, communications SPs are undergoing a dramatic change in much the same way that most enterprises across verticals are undergoing changes. Asia/Pacific is certainly no exception, with communications SPs in this region facing the same enterprise business priorities as their counterparts in other countries, albeit with high deviations among Southeast Asian countries and mature Asia/Pacific markets. Enterprises are grappling with multiple objectives and imperatives, focusing on cost savings, new business models, customer centricity, and agility in operations. The heightened competitive intensity is forcing communications SPs to innovate, not only in operations, but also with how they engage with their customers and channel partners," says Nikhil Batra, associate research director, IDC Asia/Pacific Telecom Practice.

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications and consumer technology markets. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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