Strategic plays to help Asia Pacific’s Communications Service Providers capture new growth in B2B markets
ENTERPRISE MARKETS MATTER MORE THAN EVER FOR CSPS

In such a challenging environment, enterprise markets matter more than ever. However, with the majority of APAC CSPs principally focused on retail domains in the recent past, many companies are starting from a low base when it comes to B2B. As a result, some still have a modest sales proposition for their enterprise customers, or a poor understanding of vertical segments in target industries. Others have been slow to acknowledge that rising expectations are not limited to retail segments, and that enterprise customers now expect the same standards in their business transactions that they’ve become used to in their consumer experiences.

With the digital disruptors ready to move into the B2B domain with force, APAC CSPs face a potentially existential risk. If they fail to inject enough urgency into their operations and cannot adjust to these disruptive headwinds with enough speed and agility, they will likely end up as pure connectivity providers in commodity markets—for enterprise customers as well as consumers. And that, ultimately, means a race to the bottom on price, with only the very leanest operators emerging victorious.

However, all is not lost. A collection of industry and societal trends, fuelled and accelerated by digital transformation, are offering a potentially vital pivot opportunity to CSPs. These trends open up a series of strategic plays that can help navigate to new growth in enterprise and B2B markets. Tough choices will be required, of course. Today’s business models, capabilities, and workforce competencies will have to be radically upgraded. But if APAC CSPs can look beyond pure connectivity, take their digital transformations to the next level, and start extending their reach into customer ecosystems and value chains, they have the chance to enable a true step change in productivity and growth.

THE GLOBAL TAILWINDS DRIVING CSPS TO NEW ENTERPRISE GROWTH

The world is becoming ever more connected in ever more ways, creating completely new means of serving enterprise customers through mobile and embedded connectivity business models. Gone are the days when those customers simply wanted a limited number of laptops, PCs, smartphones, and tablets connected to the network. Now, we’re witnessing nothing short of an explosion in the number of connected enterprise devices—and in the vast volumes of data transferred between them. Industries will be using anything up to 30 billion connected sensors and 25 billion connected devices by 2020, for instance. 4G networks will make up 53 percent of mobile connections in 2018, helping fuel massive growth in mobile data traffic (set to reach a staggering 49 exabytes a month globally by 2021).1

Advances in network technology are bringing vastly enhanced agility, efficiency, and cost-effectiveness to CSPs’ networks. For example, Software-Defined Wide Area Networks (SD WANs) provide a significant value-creation opportunity. By shifting enterprise networks from proprietary hardware to the cloud using flexible and open WAN technologies, CSPs can create omnichannel experiences for their enterprise customers, with pervasive automation and self-service capabilities baked into the core. That helps make the days of inflexible and slow responses, long lead times, and high CAPEX and OPEX a thing of the past.

Instead, enterprise customers can benefit from on-demand requests, fast and simple provisioning, and anything up to a 30 percent reduction in total cost of ownership.

Other technology advances are also opening up new opportunities for CSPs. Policy-driven networking and multi-access edge computing (MEC) are creating new kinds of high-bandwidth low-latency network architectures that vastly increase user access at the network edge. That kind of access is becoming ever more essential...
Furthermore, as Industry X.0 continues to transform industries with smart, agile, connected, living technologies, CSPs have the opportunity to create the vertical-specific platforms that will put them at the centre of the enterprise ecosystems of tomorrow. In areas like manufacturing, healthcare, retail, and more, enterprises are connecting together their workers, offices, and factories in new ways and on an unprecedented scale. Those ecosystems of connections call for new levels of hardened network security, new self-service tools, new marketplaces, and simplified and consolidated reporting and billing.

So, whether it’s in creating ecosystem platforms centred around the industrial IoT, or in establishing the pervasive, analytics-enabled, software-defined networks of the future, CSPs have numerous opportunities to capitalise on true digital transformation and provide new solutions for their enterprise customers in the digital age.

There is a huge amount of potential value for CSPs to capture. The digital transformation of telecommunications is high stakes – for the industry and for society alike. CSPs can develop networks that are self-optimising, self-healing, and self-securing. Increasing digitalisation means they can reimagine connectivity using the IoT, machine-to-machine communication, and augmented and virtual reality. And new kinds of user experience can deliver truly effective, delightful forms of customer service, and match the very best experiences offered by the digital giants. The total size of the prize? An extraordinary US$2 trillion opportunity for both the telecommunications industry and society over the period 2016-25.2

Of this $2 trillion, the value to the telecom industry could exceed $1.2 trillion in cumulative operating profit from 2016 to 2025. Society and consumers could benefit from more than $800 billion in value – the majority of which will come from efforts to connect the billions of people still unconnected to the internet. The initiatives under Networks of the Future and Beyond the Pipe representing the largest-value opportunities. B2C and B2B business models will be repositioned as new digital services move participants beyond connectivity towards a future exemplified by cross-industry competition and collaboration.
Focus on: Telstra
With 2017 revenues of US$5 billion, and year-on-year growth of 1.6 percent, Telstra Enterprise is a key player in the APAC enterprise space. The company has operations in 20 countries, focusing on the Telstra Programmable Network, dynamic security, the IoT, and Liberate (a mobile convergence solution for enterprises). They have a growing Business Technology Services Group, covering software, mobility, and cloud services, as well as advising on implementation and management. Their success is founded on a strong push for B2B digitalisation (improving customer experiences and enabling new interactions on digital platforms) and a targeted acquisition strategy (including Cognevo in the managed network services space and Readify in application development and software-focused consulting).

APAC: A HIGH-POTENTIAL REGION FOR CSPs

How well positioned are APAC CSPs to capture their share of this value? Today, the B2B performance of the region’s leading CSPs is highly varied. In absolute terms, Japan’s NTT is one of the leading CSPs in terms of largest enterprise revenues in APAC by far, although companies like Telekom Malaysia derive a higher proportion of their revenue from enterprise customers. However, revenue growth in the enterprise space has been hard to come by, with many companies showing mid-single digit CAGR in the period 2015 to 2017. Yet some, such as Telkom Indonesia, have bucked the trend. The company enjoyed a revenue CAGR of 25.2 percent over the 2016-17 period thanks to their focus on integrated ICT, digital business and smart city solutions.

Overall, leading APAC companies enjoy healthy revenues and solid growth. Aggregate total revenue for the major regional players was US$667 billion in 2017 and is set to grow by over 3 percent in the period to 2019.11 In terms of EBITDA margins, companies from developing APAC countries have performed best in recent years, although EBITDA growth is expected to be largely static across the board over the short term.7

Furthermore, enterprise revenues are forecast to remain mostly flat for APAC CSPs. And while enterprise data services are set to grow over the next few years, the market for voice services is expected to contract.8

Intensifying competition, revenue pressures from commoditisation, and slowing growth are driving APAC players to focus on digital offerings. These companies are laying the groundwork for a shift away from pure connectivity provision by strengthening their advanced network capabilities (such as the IoT, 5G connectivity, network function virtualisation, and software-defined networking). South Korea, Japan, and China, in particular, are leading the way for 5G commercialisation, with governments of these countries universally agreeing to work together as part of a coherent approach to foster the development of 5G networks. Companies are also pursuing M&A activity with increasing aggressiveness, especially in the IoT, enterprise security, and cloud spaces. China Mobile plans to invest US$300 million in subsidising IoT device makers, for instance,10 while Telstra have been expanding inorganically through their acquisitions of cloud services providers iKloud and Vmtech.11

Cloud is likely to be a key focus for many APAC CSPs in the next few years. The most notable global CSPs, including DT, NTT, Orange, and Telefonica, compete in the cloud market with mature global giants like – Amazon, Microsoft, Google, and Alibaba. The market is witnessing intense pricing pressures, prompting some of the players to exit the business, for instance, AT&T and Verizon selling off some of their data centres, due to severe cost basis competition in the public cloud sector. APAC CSPs continue to invest heavily in expanding their cloud portfolios and data centres to grow market share in the region and compete with other global players – which are increasing their data centre investments significantly in the region.2

Managed security services: a key focus for APAC CSPs
Most APAC CSPs now have offerings in managed security services (MSS), including, in particular, threat monitoring and management. There are opportunities to develop this space further, with managed security operations centres, managed virtual security, and advanced cybersecurity services.

NTT Communications is a leader in the Asia Pacific MSS market, offering a high level of automation, self-control orchestration, and automated log analysis, together with cost-effective low-touch/zero-touch policy management and improved threat detection through machine learning. In February 2017, they expanded their MSS offering further with a partnership with Malaysia’s Diversified Gateway Berhad.12

Telstra have a global network of over 500 cybersecurity experts, offering a range of managed services, including firewalls, security operations centres, DDoS protection, content filtering, and gateways. In 2017, they opened two new security operations centres from which they offer a broad range of services to government and enterprise customers.13

---

The four future strategic plays for CSPs

In choosing the right strategic play to make, there are four models that stand out. Ranging across both the short and the long term, each of these plays requires very different skills, capabilities, and investment priorities. And the way each creates value for the business is equally distinctive. The four plays are:

1. **Multi-sided platform model.** A sophisticated consumer-focused play, where the CSP creates a platform to maximise its reach into the ecosystem of partners, customers, and developers, embedding itself into the daily lives of its users.

2. **Digital mobile-only attacker.** A digital mobile pure play offers core digital services to enterprise customers across products and channels, building apps and ecosystems around pure mobility.

3. **Vertically integrated service provider.** Focused on the end-to-end provision of services, whether premium content for consumers or industry-specific connectivity solutions for enterprises.

4. **Connected industry orchestrator.** A long-term play, in which the CSP focuses on creating hyperlean, exceptionally cost-effective networks and injecting ubiquitous connectivity into industrial value chains.

---

**Focus on: Telkom Indonesia**

With total 2016 revenues of over US$8 billion, Telkom Indonesia serves more than 1,300 corporate customers, nearly 300,000 SMEs, and several government institutions across the country. The company has seen particularly strong growth in its data, Internet, and IT segments, which have experienced year-on-year growth of over 30 percent. That’s thanks to their focus on becoming a leading digital mobile business and developing innovative services such as e-marketplace Xooply; big data and analytics service Xaight; advertising simplification tool Aim Right; among other IoT, network, and smart city solutions. The company has plans to expand internationally across Southeast Asia, and has entered into a joint venture with Telstra to provide services to enterprise customers to provide services to enterprise customers.  

---

**SUCCESS FACTOR | KEY CHARACTERISTICS**

<table>
<thead>
<tr>
<th><strong>1</strong> Multi-sided platform model</th>
<th>Maximise reach via ecosystem of partners, customers, developers - become an essential part of the daily digital routine of every user</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Integrated experience of own and 3rd party services, B2C, B2B2C</td>
</tr>
<tr>
<td></td>
<td>• Agile &amp; open platform (API)</td>
</tr>
<tr>
<td></td>
<td>• Device open and software managed, 3rd party products</td>
</tr>
<tr>
<td></td>
<td>• Subsidising / cannibalising services</td>
</tr>
<tr>
<td><strong>2</strong> Digital mobile only attacker</td>
<td>B2C superior bundling of mainly self-owned services, incorporating acquired rights to high-demand content at premium fees.</td>
</tr>
<tr>
<td></td>
<td>• Controlling customer contracts, devices and access</td>
</tr>
<tr>
<td></td>
<td>• Advanced customer segmentation: focus on B2C</td>
</tr>
<tr>
<td></td>
<td>• Owned and closed devices</td>
</tr>
<tr>
<td></td>
<td>• CSF: scale, synergies, superior customer service</td>
</tr>
<tr>
<td><strong>3</strong> Connected Industry orchestrator</td>
<td>Inject ubiquitous enhanced connectivity (edge, compute, security, QoS) to objects in Industry value chains to radically improve productivity and growth</td>
</tr>
<tr>
<td></td>
<td>• Best country network and access to superior global reach</td>
</tr>
<tr>
<td></td>
<td>• Focus B2B, Industry X-D and efficient asset (Access, NFV/SDN, MEC/5GaaS, Facilities)</td>
</tr>
<tr>
<td></td>
<td>• Devices, sensors are open, software managed and important touch points</td>
</tr>
<tr>
<td></td>
<td>• Hyper lean operating model, digital first channel</td>
</tr>
</tbody>
</table>

---

**Success demands a departure from today’s models and competencies. The four key plays for APAC CSPs**

Each scenario needs distinctively different skills and capabilities, as well as divergent investment priorities and value creation logic.
Each play brings its own opportunities and challenges, and in deciding which to choose much will depend on the particular circumstances of the CSP in question. The digital mobile-only attacker play calls for a truly digital-first care/operating model that can reduce operating costs while increasing responsiveness. The provider needs an innovative and agile service factory that can adapt rapidly to changes in enterprise demand, adjusting pricing, making offers, and creating new services at pace.

The vertically integrated service provider route is likely to be relevant for the larger, more traditional CSPs, not least because of the significant capital investments required. For consumer-focused businesses, this play means acquiring or creating the high-value content that can be sold at a premium through multiple digital channels, as well as investing in the advanced analytics that can drive hyper-personalised effective customer experiences. In the B2B space, it means embedding connectivity services right across enterprise value chains, developing exclusive or proprietary industry-specific solutions.

Adopting the multi-sided platform model is a sophisticated approach for the long-term success of a CSP. Here, the company creates a platform which extends its reach right out into the ecosystem of partners, customers, and developers, ranging across traditional sector boundaries and regional borders. By integrating their proprietary services with those of third parties using APIs on an agile and open platform, these players can effectively ‘own’ the customer – and the network through which they access the digital world.

Most instances of this play have focused on the consumer market to date. Comcast’s X1 service and Liberty Global’s One Video platform show the possibilities a platform model opens up.16

Connected industry orchestrators, in contrast, take the same flexibility and openness and apply it to creating and enhancing ubiquitous connectivity in industrial value chains. Using edge-computing, advanced network security, and high QoS, these players aim to create the hyper-lean operating models and digital-first platforms that ensure premium network performance and the efficient use of Industry 4.0 assets for their enterprise customers. Take AT&T’s Indigo platform, for example. The company is bringing together wireless technologies like 5G with big data, machine learning, cybersecurity, and software-defined networking to create a hyper-fast, secure, and private next-generation network.17

Focus on: Softbank Corp

Japan’s Softbank Corp. has been a leading CSPs in optimising their network operations with a next-generation mobile IP core network and developing a portfolio of advanced IoT solutions. Their focus is on connecting the huge volumes of data embedded in IoT devices, and using artificial intelligence to read, analyse, and then commercialise that data. They have adopted a network convergence system to support the bandwidth demands of those IoT services and have launched the world’s first commercial service using MIMO spatial multiplexing (a powerful core technology for 5G connectivity). In further additions to their IoT capabilities, they acquired leading UK semiconductor designer ARM Holdings in 2016, and selected the Affirmed Mobile Content Cloud (MCC) to deliver IoT services and mobile connectivity to enterprise customers in 2018. An embedded subscriber identity module (eSIM) platform is also under development to promote IoT solutions.18

For B2B markets, the connected industry operator is a potentially high-value, high-growth strategic play for CSPs focused on long-term success. The ultimate goal: to inject ubiquitous enhanced connectivity into industrial value chains, to become the backbone of Industry 4.0 and beyond, and thus to radically improve productivity and growth.

In both this play and in the multi-sided platform play, exploiting the pervasive network is the key to success. This pervasive network, which combines existing network technologies with wireless computing and digital services, is an environment in which the connectivity of devices is embedded so broadly and so deeply, that it’s ‘always on’ but never noticed.

The potential advantages in reorienting to digital are thus clear. But for most CSPs in APAC, capturing the real value on offer means embarking on a journey. It means starting as a simple connectivity provider, becoming a fully-fledged digital B2B player, moving through a ‘connectivity +’ offering, to eventually orchestrating entire connected industries.

From simple connectivity ...

At the outset of that journey, a connectivity provider will look to both radically digitalise their operations and offerings and manage total cost of ownership with a new level of effectiveness. So, they’ll create digital omnichannel strategies, they’ll embed intelligence and data-driven decision-making in their operations, they’ll introduce new product lifecycle management capabilities, and they’ll establish Network-as-a-Service, SDKs, and APIs to onboard industry-specific applications. They’ll also take steps to simplify product portfolios, decommission legacy infrastructure, and reduce technology complexity through double-decoupling.
As they become a truly digital B2B player, the CSP will be transforming their touchpoints with their enterprise customers, building end-to-end omnichannel propositions covering the entire customer journey from quotation, to order, to provisioning, to maintenance and assurance. They’ll be enabling digital service management, just like the very best OTT providers do. They’ll be applying analytics extensively (including machine learning and other forms of artificial intelligence) to customer experience, service management, and network automation. They’ll be improving security and cyber-resilience across their networks, applications, and devices. And they’ll be adopting network virtualisation and making plans for a future dominated by 5G and multi-access edge computing.

As their digital maturity grows, the CSP will now be offering “connectivity ++” services like cloud, cybersecurity, SD WAN, multi-access edge computing, and multi-protocol label switching (MPLS). They’ll be pivoting their digital services to the platform economy, expanding their B2B partner ecosystems, and bundling connectivity with third-party digital and industrial applications. They’ll start integrating digital twins, augmented and virtual reality, blockchain, and other Industry X.0 technologies with internal operations (suppliers, field service, network simulation) to create new assets to serve ecosystem needs. And they’ll embrace concepts like the “living enterprise” and “applied intelligence” as they create rapid delivery capabilities, intelligent digital processes, and deep-rooted cultures of innovation.

Finally, the CSP takes on a role as the mainstay of the connected industry, whether that’s in healthcare, manufacturing, insurance telemetrics, transportation fleet management, Device-as-a-Service, or any other field. They’ll be rotating to the new in everything they do, adopting mindsets of continuous innovation, testing, and monetisation. They’ll be extracting value from assets embedded in connected industry value chains, offering vital interoperability and interfaces for the markets they serve. And they’ll be engaging in value-based transactions built on contextual awareness, policy controls, and trust within their ecosystems, fortified by network security, network resilience, and the traceability of network data.

In this new era, the CSP’s revenue model shifts away from one characterised by the provision of standalone single products to one in which numerous diversified communication services are enriched by the partner ecosystem. Consider the possibilities in a field like connected vehicles. In the years to come, vast numbers of sensors will be embedded in transportation fleets, enabling data to be gathered from vehicle components in real time and then analysed instantaneously with intelligent analytics. As-in-service insights into performance are continuously fed back to manufacturers, a radically new kind of improvement feedback loop is created – and CSPs are at the centre.

<table>
<thead>
<tr>
<th>Key Value Elements</th>
<th>Service Access</th>
<th>Recurring charges (per service and contract commitment)</th>
<th>Number of transactions</th>
<th>Value per transaction</th>
</tr>
</thead>
</table>

Shifting to a revenue model based on transactions in an expanding ecosystem

FROM stand alone, one-product service provider
TO one to many, diversified communication services enriched with Partners offer
The connected industry orchestrator play shares some of the characteristics of the vertical integration play in the B2B space. But the former has a far more flexible asset model, and a much more open ecosystem:

- **Value proposition.** The vertically integrated provider combines digital connectivity and targeted, industry-specific services to create deep capabilities across enterprise customers’ value chains, whereas the connected industry orchestrator injects enhanced connectivity in devices right across the whole ecosystem to radically improve productivity and growth.

- **Performance measurement.** The vertically integrated provider measures success through vertical penetration and depth, ROI/ROCE, portfolio expansion, and growth. In contrast, connected industry orchestrators invest in differentiating assets, but acquire access to non-differentiating or commoditised assets through operating expenditure.

- **Control points.** Vertical integration offers closed, contract-based channels, using as-a-Service models through a one-stop-shop, while industry orchestration embeds control points deeply into industry value chains, using connected objects, policy topologies, network slices, and APIs/SDKs.

For CSPs intent on the vertical integration play, the acquisition of systems integration or industry-specific software companies could be a sensible next move. Open source initiatives should also be used to drive de facto standards. In contrast, for CSPs looking to become connected industry orchestrators, the immediate focus should be on acquiring 5G licences, rolling out dense fibre, and creating joint ventures and industry initiatives for specific markets.

**MAKING IT HAPPEN: PIVOTING WISELY WITH THE RIGHT INVESTMENTS**

Whichever strategic play or plays a CSP chooses to make, the same fundamental questions arise. How can we make such a major shift in our business quickly enough to capture first-mover advantage? How do we fund the necessary investments? Will our digital-first programmes generate enough value to do so? Or will they simply sustain what we’re already doing?

Sustaining the status quo won’t be enough. CSPs must adopt investment strategies that can both future-proof their business models and find growth that exceeds shareholder expectations. But many lack the available capital to transform their businesses quickly enough.

Exploiting the S-curve to make the right pivot at the right time

Fortunately, there is a proven methodology to help. By understanding the transformation S-curve, and how it can be exploited to both grow the core business and build a new business, a CSP can make the investments necessary to both transform their back office and enable the fundamentally new capabilities needed for the successful strategies of tomorrow.
The methodology calls for a phased approach:

1. **Transform the core business.** A CSP must take stock of its existing technology landscape and look for changes in its operating models that could generate the cost savings to fund investments in future growth. Here, automation plays a key role, and for many there will still be low-hanging automation opportunities that can be picked off with relative ease (such as billing or call-centre processes).

2. **Grow the core business.** Through the use of advanced analytics, the CSP can develop a much more sophisticated understanding of its core business. Then generate the actionable insights that can help monetise underutilised assets, as well as maintain and grow the customer base.

3. **Build the new business.** Thanks to its newfound efficiency and growing core business, the CSP will have additional funds to invest in its new business model, whichever strategic play or plays it has decided to make. It can thus start scaling the new business with targeted investments, whether that’s developing a new ecosystem to support a future platform business, or investing in hyper-lean, hyper-fast premium networks and Industry 4.0 technologies to support its enterprise customers.

4. **Make the pivot to the new.** At some point, the CSP must make the shift away from its existing business to focus on the new. Doing so at the right time is critical. A careful consideration of available funding, fluctuating market conditions, and stakeholder expectations is the key.
By understanding the key global and regional trends in enterprise telecommunications, and then making a deliberate and distinct strategic play to capture growth in those markets using a phased investment approach, APAC CSPs have an opportunity to pivot away from low-growth, fast-commoditising pure connectivity services and find new roles at the centre of the connected industrial ecosystems of the future.

In deciding which play to make, taking advice from experienced industry expertise can be invaluable. To find out how Accenture can help in every aspect of a digital transformation, tying consulting to product planning and integration, using design thinking, scaled agile principles, and an analytics-driven approach, please get in touch with us.

The digital disruptors are closing in. Now’s the time to make the right strategic play. A high-growth, high-revenue future awaits.

CONTACT US:
Gopi Kurup
gopi.kurup@accenture.com

KEY CONTRIBUTORS FROM ACCENTURE RESEARCH
Swati Vyas
swati.vyas@accenture.com

4S&P CapitalIQ
6Accenture Analysis
7S&P CapitalIQ, Accenture Analysis
8Gartner, Forecast: Enterprise Communications Services, Worldwide, 2015-2022, 1Q18 Update, 23 March 2018
10Internetofbusiness, 28 November 2017 https://internetofbusiness.com/china-mobile-invest-300m-iot-push/
13IDC MarketScape: Asia/Pacific Managed Security Services 2016 Vendor Assessment, October 2016
ABOUT ACCENTURE

Accenture is a leading global professional services company, providing a broad range of services and solutions in strategy, consulting, digital, technology and operations. Combining unmatched experience and specialized skills across more than 40 industries and all business functions—underpinned by the world’s largest delivery network—Accenture works at the intersection of business and technology to help clients improve their performance and create sustainable value for their stakeholders. With 449,000 people serving clients in more than 120 countries, Accenture drives innovation to improve the way the world works and lives.