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FROST INDUSTRY QUOTIENT (IQ):

Asia-Pacific Hosted Telephony
and Unified Communications and
Collaboration (UCC) Services
Providers, 2016

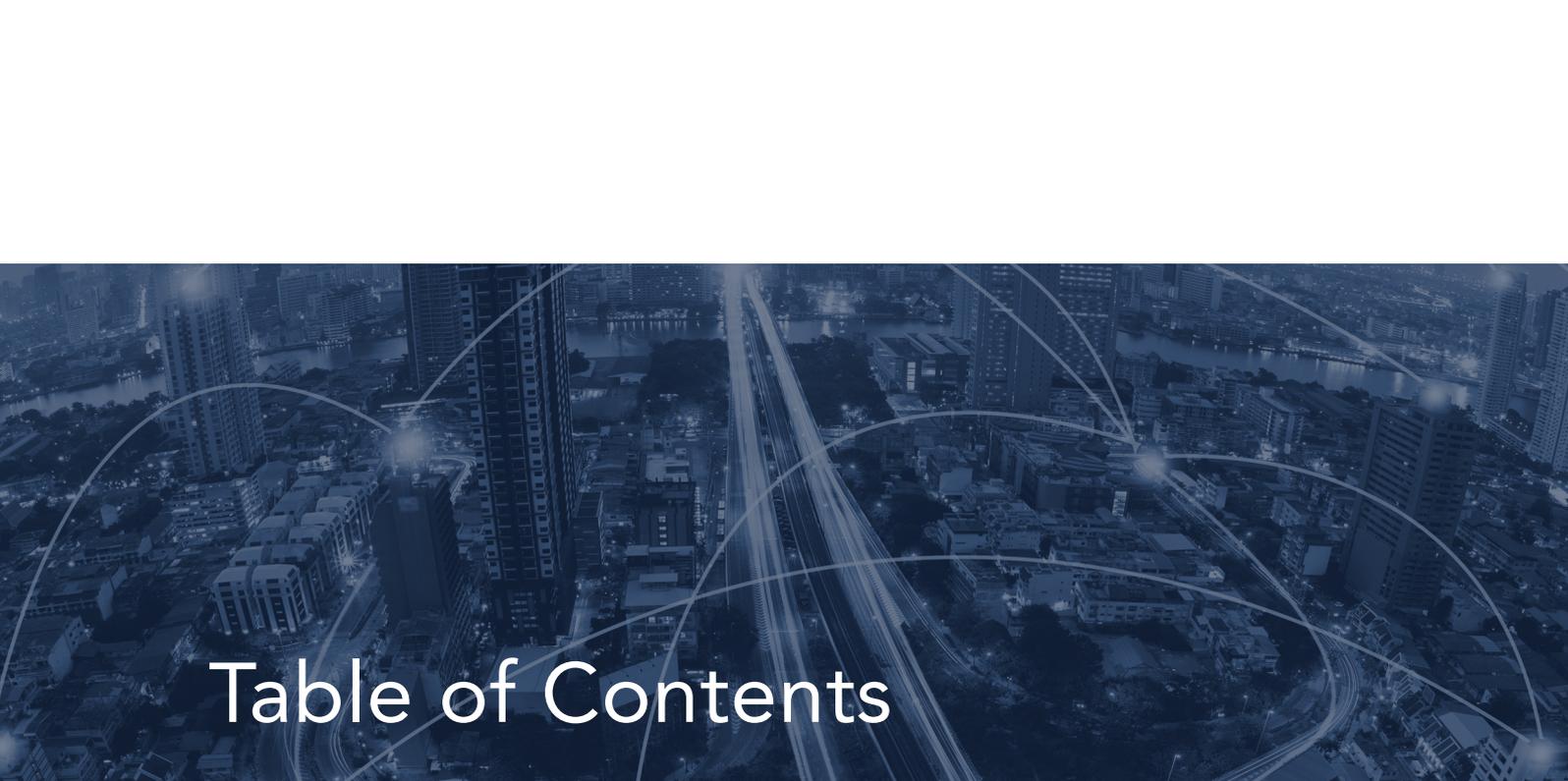


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1 MARKET DEFINITION AND SCOPE

The hosted telephony and Unified Communications and Collaboration (UCC) Services are part of the Unified Communications-as-a-service platform provided by market participants. The following definitions explain the features and components of the services involved. ¹



HOSTED IP TELEPHONY (IP CENTREX AND HOSTED IP PBX)

Hosted IP telephony (IP Centrex and hosted IP PBX) services refer to network-based voice services where all call control, voice switching, PBX functionality and network infrastructure related to service provisioning are owned, maintained and managed by a third-party (i.e., a service provider). Hosted IP telephony services are usually delivered over an IP connection and terminate at an IP endpoint. Mobile hosted IP PBX users are an exception, as the service can be delivered over the cellular network and terminated on to a mobile device.

A bundled IP Centrex/hosted IP PBX offering may include local and long-distance voice, call control, and management features, a data transport line, and Internet access services. The service also provides administrators with a Web-based interface to manage moves, adds, and changes (MACs), and obtain usage reports, among other tasks. Hosted IP telephony typically involves the use of a shared services provider network infrastructure where several clients/customers are supported via the same softswitch or application server. Software instances may be shared or dedicated.

¹ The scope of this research study covers only services delivered through hosted/cloud platforms on a subscription basis. Premise-based deployments are not included.

Revenue is calculated based on the end-user price, which is the actual price paid by customers for the service, excluding the spending on networking such as MPLS, VPN, and other broadband related expenses.



HOSTED/CLOUD UNIFIED COMMUNICATIONS

A hosted UCC solution involves the delivery of pre-integrated network-based applications. The benefits of hosted UCC solutions are based on the vision of having ultimate flexibility in accessing communications and collaboration capabilities anywhere, anytime, on any device, and on any network.

UCaaS solutions are sometimes defined by the number of integrated applications sharing presence information and a common/unified user interface. For example, certain service providers have integrated the BroadWorks hosted IP telephony platform with Microsoft Skype for Business to enable a common/unified user interface for both messaging and calling. In such a scenario, the telephony capabilities are supported on a multi-tenant platform, where both the hardware and software components are shared across customer organizations.

In other instances, UCaaS refers to a specific architecture, typically founded upon a virtualized UCC suite of applications hosted in a data center and leveraging a shared hardware infrastructure, yet offering dedicated software instances to individual customer organizations. Examples of this type of architecture include Alcatel-Lucent OpenTouch Cloud Solution, Cisco Hosted Collaboration Suite (HCS), Mitel MiCloud, NEC UNIVERGE Cloud Services, and Toshiba VIPedge. In such scenarios, customers may only be deploying certain elements of the solution (such as telephony); however, vendors and service providers use the term UCaaS or cloud UC to refer to the underlying multi-instance architecture.



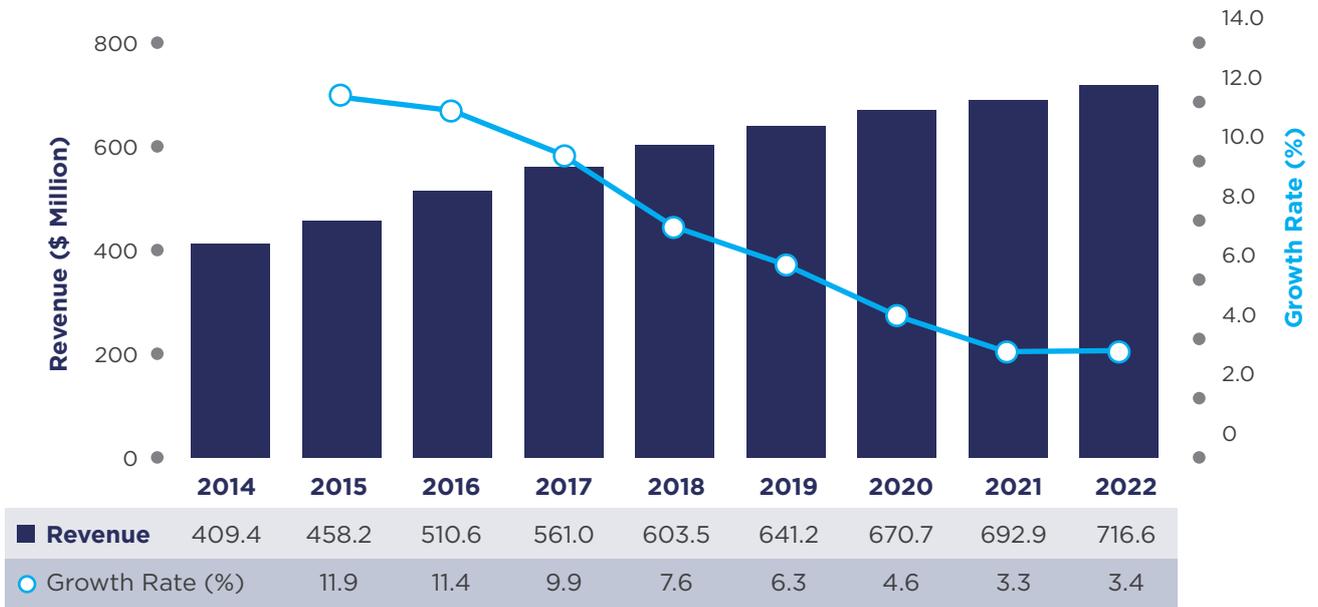
2 MARKET ASSESSMENT

The hosted telephony and UCC services market has shown signs of strengthening in the Asia-Pacific region. Frost & Sullivan had estimated a rise in the total spending on hosted telephony and UCC services to \$458.2 million by the end of 2015 (see Figure 1) and the install base was estimated to reach 3.6 million by the end of 2016. It is a highly concentrated market, with top participants such as Telstra, NTT Communications, Vocus, BT, and Verizon contributing to more than 60% of the market share. SMB remains the major customer segment, while large multi-national enterprises are actively moving to public cloud or hybrid cloud in recent years. Emerging verticals such as e-commerce, government, and education are providing huge growth potential for market participants. Large state-owned enterprises are also expected to embrace advanced communications technologies to improve their operational efficiency and accelerate business processes.

Key Trends for Asia-Pacific Hosted Telephony and UCC Services Market:

<p>Service Providers Enriching their Services Portfolio to Cater to Various Customer Needs</p>	<p>Asia-Pacific hosted telephony and UCC services market entered into fast-moving stage in the following aspects - 1) the variety of services available in the market increased across all the countries in the last 12 months, 2) the service capabilities were enhanced to serve different requirements of customers across verticals irrespective of their sizes, 3) local internet service providers (ISPs) and system integrators (SIs) became competitive with more dedicated resources and sales efforts as compared to incumbent telcos.</p>
<p>Asia-Pacific Install Base Hitting 3 Million by the End of 2015 Primarily Driven by Medium-to-large Enterprises</p>	<p>The total market reached US\$ 458.2 million in 2015, with a growth rate of 11.9% and more than 3 million users. Australia and Japan remain the largest markets in 2015, followed by Korea and New Zealand. Historically, SMBs having less than 100 users form the key customer segment, however, in the last 12 months, the market recorded a huge push from medium-to-large regional enterprises, which started to move their employees into a hosted platform.</p>
<p>Over-the-top (OTT) Companies Expected to be a Potential Threat to Incumbent Telecom Operators in the Voice Space</p>	<p>Telecom operators remain the key service providers in this segment, while system integrators such as Dimension Data and ECCOM (China) also achieved good growth. More importantly, internet service providers, managed service providers, and cloud service providers grew significantly and are expected to become strong competitive forces in the next 5 years.</p>
<p>Dynamic Regulations in the Asia-Pacific Region to Hamper Growth</p>	<p>Australia, Japan, Korea and New Zealand are the key contributing markets regards to Asia-Pacific hosted telephony users. Growth in countries such as Indonesia, China, India, and Vietnam is restricted, due to regulations for the protection of the voice revenue of local telecom providers. Regulations such as restrictions in number portability and the compulsory rule of in-country data centre operation hold back the expansion of global service providers in these countries, while local incumbents are yet to establish their full-fledged service capabilities.</p>

Figure 1: Total Hosted Telephony and UCC Services Market Sizing and Forecast, Asia- Pacific, 2014–2022



Source: Frost & Sullivan

3 INDUSTRY TRENDS

In this section, Frost & Sullivan examines the key elements that shape the Asia-Pacific in the hosted telephony and UCC services market.

3.1 REGULATORY

Countries such as Australia, Korea, Singapore, and Hong Kong have few barriers for global service providers to operate in, encouraging focus on the depth of service portfolio and implementation efficiency. These countries have seen an upsurge in hosted telephony services especially towards fixed-line and mobile convergence (FMC). Service providers offer packages bundled with UC application subscriptions for better collaboration.

Stringent telecom regulations in countries such as India, China, Indonesia, and Vietnam are among the biggest hurdles for foreign companies to providing hosted telephony services in these markets. Hence, the local telecom companies in these markets enjoy a strong monopoly.

In recent years, many of these governments have been gradually opening doors for companies to come and invest in the local markets through telecom licensing. In Japan, the government is trying to encourage more competition in the market. Telecoms and service providers are joining forces to provide value-added services. Such activities are likely to continue in these markets, thereby creating a favorable growth perspective.

3.2 ECONOMIC

Economic growth in the Asia-Pacific region remains favorable, when compared to other regional blocs. However, there are signs of a slowdown, especially in China, India, and Australia, with softened growth projections for these economic powerhouses. However, growing domestic consumption is expected to drive economic recovery.

Continued depreciation of regional currencies such as Chinese RMB and Singapore Dollars against the US Dollar implies a drop in profitability for the foreign participants in the market.

Due to such economic outlook, service providers are looking for advanced technologies to add to their portfolio of solutions and services. However, on global economic cues, technology investments by foreign participants have slightly declined.

3.3 TECHNOLOGICAL

In the Asia-Pacific region, technology maturity drives the availability of delivery modes and adoption from multiple deployment choices. Hybrid cloud has proved to be the preferred deployment model for large enterprises, while companies in the SMB sector opt for public cloud. Therefore, multi-instance platforms such as Cisco HCS are more suitable for large enterprises, which allow customers to integrate the existing investment with cloud offerings, while multi-tenancy platforms such as Broadsoft are designed for SMB and mid-market customers.

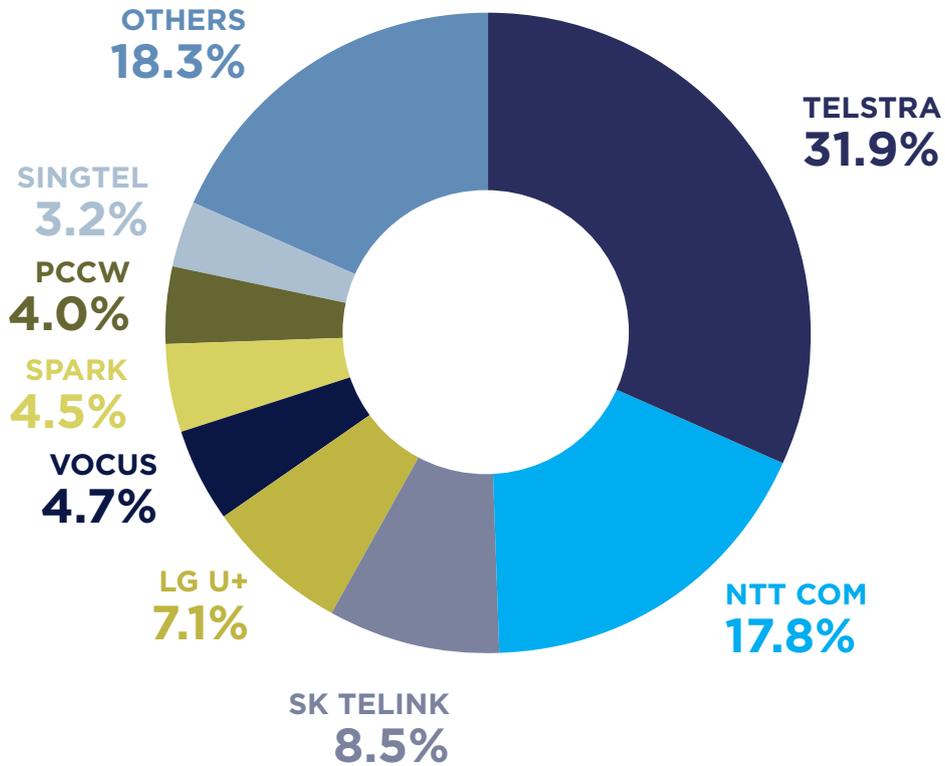
Another limitation of the technology and business model is the minimum user base required by service providers, which hampers penetration into the SMB sector. Most service providers are concerned about the profit margins and operational efficiency when it comes to small user base dispersed across a few countries/locations.

3.4 COMPETITION

The competitive landscape remains concentrated with the strong home advantage of domestic telecom operators, though system integrators and managed service providers are becoming competitive in recent years. Service providers are looking at expanding the service portfolio and customer deployment to most of the countries in the region as a result of improvements in the global infrastructure and growing cloud services capabilities.

The operational prowess of service providers is an important factor that dictates their eventual success in the market. Regional participants in the market are important as well as they dictate the landscape of vendor services in these markets. Regulations by the authorities in certain countries are leading to a higher concentration of local participants.

Figure 2: Total Hosted Telephony and UC Services Market Share, 2015



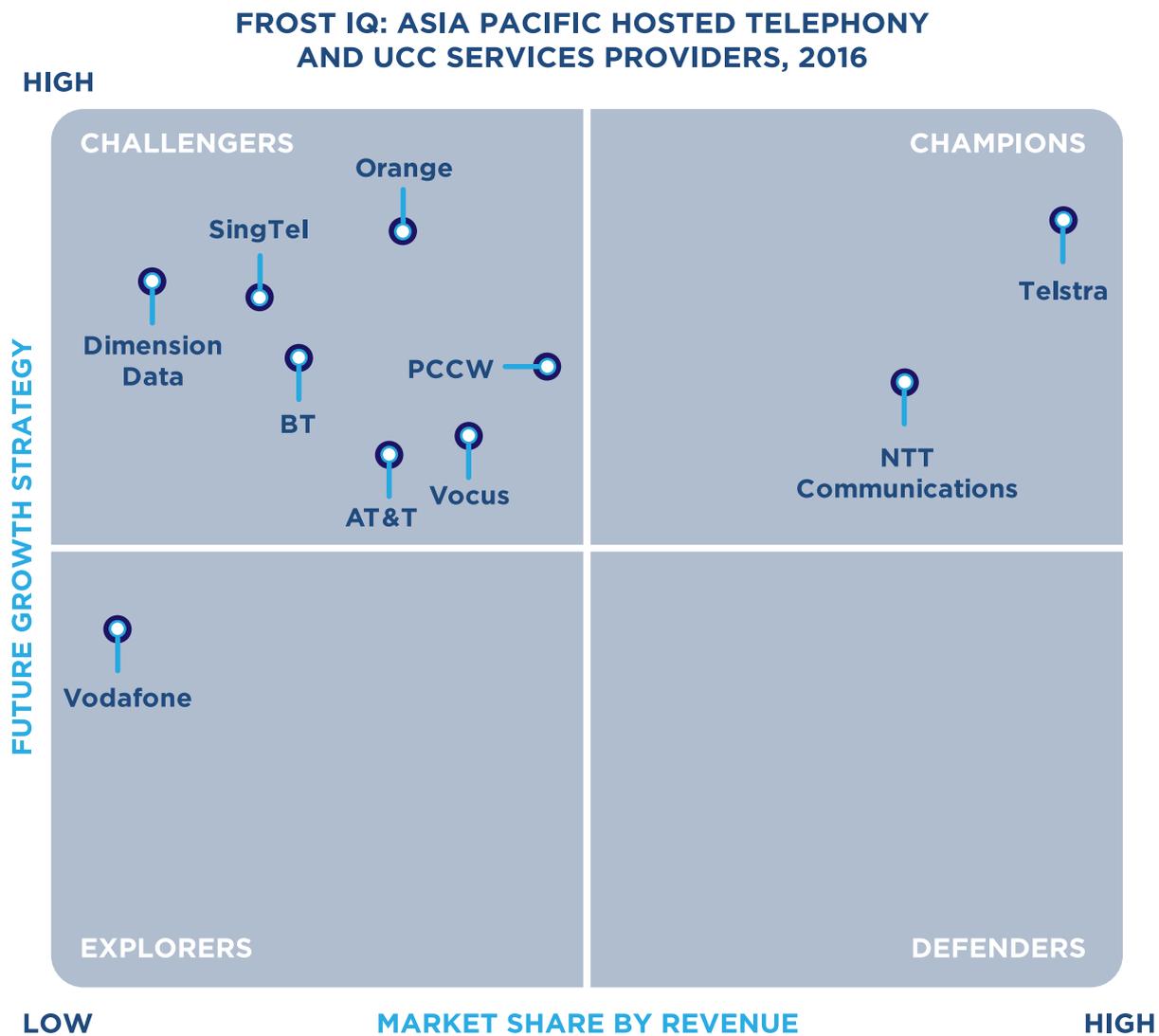
Source: Frost & Sullivan

4 FROST IQ MATRIX: ASIA-PACIFIC HOSTED TELEPHONY AND UCC SERVICES MARKET, 2015

Frost & Sullivan evaluated 10 major service providers in the Asia-Pacific region to identify their position on the Frost IQ Matrix. The key criteria used to evaluate the position of service providers on the matrix are:

- MARKET SHARE
- PRODUCT/SERVICE STRATEGY
- PEOPLE AND SKILLS STRATEGY
- ECOSYSTEM STRATEGY
- REGIONAL BUSINESS STRATEGY

Frost IQ Matrix: Asia-Pacific Hosted Telephony and UCC Services Market, 2015





3 PROFILES OF HOSTED TELEPHONY AND UCC SERVICE PROVIDERS

5.1 AT&T

This US telecom operator is well positioned to leverage its global network infrastructure and expand local presence around the world. Asia-Pacific has always been a focus region for the service provider. As a leading telco, AT&T is a pioneer in deploying network technologies such as MPLS and Software Defined Networks (SDNs), to build a worldwide communications network - both wired and wireless. The telco recently launched AT&T Collaborate, offering a full array of cloud-based hosted voice and collaboration solutions.

STRENGTHS



- Robust growth in both revenue and install base in last 12 months among countries including Australia, Malaysia, Singapore, and China
- Strong presence in large multinational companies with customer success among global chemical and pharmaceutical, manufacturing, and retail industries
- Strong capabilities around designing sophisticated network and integration

CHALLENGES



- Lack of customer success among local large to medium enterprises in Asia-Pacific region

5.2 BT

As one of the few telecom operators that are capable of delivering hybrid UC solutions in the Asia-Pacific region, BT continues to expand its offerings, especially aligning with requirements from the large enterprises. The company offers a broad portfolio of UC services, including BT One Cloud, integration of Skype for Business with Cloud Contact, APIs to third party applications, consulting package for the integration of Cisco HCS with Skype for Business and many more.

STRENGTHS



- Strong hybrid UC consulting capabilities with responsive local implementation services
- Established resell and wholesale network with local service providers in countries such as in China, Australia, and Japan
- Effective branding strategies and improved brand awareness of BT One across enterprise customers

CHALLENGES



- Lack of localized sales and marketing strategy to drive local sales

5.3 DIMENSION DATA

Well-established integration capabilities led Dimension Data to grow in revenue and attain a high growth in the market. The system integrator provides feasible solutions for budget-constrained mid-market and large organizations which are managing multi-vendor communication environment. Dimension Data helps organization maximize the value of their existing infrastructures offering managed services or assisting them to migrate from their legacy systems to UCaaS delivery model.

STRENGTHS



- Strong presence in Australia, New Zealand, China, and Japan with diversified vertical penetration
- Enhanced customer success capabilities in Southeast Asia with the acquisition of Jebsen & Jessen Communications in 2016
- Strategic partnership with Arkadin offers one single-managed collaboration service platform for voice, web, audio, and video
- Strong delivery and customization capabilities for hybrid cloud deployment

CHALLENGES



- Tough market segment with telcos dominating the local market

5.4 NTT COMMUNICATIONS

NTT Communications, ICT solutions and communications leader in Japan, continue to focus on broadening its seamless solution. The company offers in-depth experience and understanding of UCaaS and total flexibility in implementing tangible value added services such as hybrid cloud and private instances. NTT Com has further expanded the strategic partnership with leading platform providers such as Cisco and Microsoft with global network infrastructure.

STRENGTHS



- Wide range of service portfolio to cater the demand of both large enterprises and SMB resulting much success among Japanese-based multinational companies
- Growing customer base of Arcstar Smart PBX among SMBs with less than 500 seats
- Improved brand awareness of Arcstar and its online support initiatives
- A Co-go-to-market strategy with Dimension Data and Arkadin team has led to the prominent services awareness and implementation enhancement across the major countries in the Asia-Pacific region

CHALLENGES



- Brand awareness in UCaaS space is not fully established across the region especially in countries such as Australia, China, Korea, and India



5.5 ORANGE BUSINESS SERVICES

Orange Business Services (Orange) is a France headquartered, global telecom operator, IT solutions integrator and applications developer, which is continuously strengthening its presence in Asia-Pacific market. Orange leverages its global network infrastructure and presence to appeal multinational companies with a distributed regional or global presence. The key offerings include Business Together-as-a-Service (B2GaaS), a cloud-based wide range of UCaaS services including the latest Cisco Spark. The company also launched team collaboration services to enhance its digital workspace solution portfolio “Business Together Sharespace” in 2016.

STRENGTHS



- Customer success among various verticals including travel & hospitality, mining and resources, manufacturing, and construction sectors
- Strong delivery capability of SIP trunking services in Asia-Pacific region
- Simplified and user-friendly self-service web portal and IT admin portal to reduce the product/services complexity

CHALLENGES



- Difficult to further expand the market share in highly competitive markets such as Australia, Japan, and Korea

5.6 PCCW

PCCW Limited (PCCW) is one of the leading providers of telecom services in Hong Kong. With PCCW Global, the company established global infrastructure and successfully expanded its business into other Asian countries. In 2015, PCCW Global acquired Syntelligence, which owns Voxclever and Weavesys, to boost its UC portfolio. Syntelligence’s service platform delivers integrated voice, video, and collaboration solutions using the cloud. Post this acquisition, PCCW global launched nTwine as the new brand for UCaaS services.

STRENGTHS



- Operational efficiency by timely launches and upgrades
- Global delivery capabilities with presence in key Asian countries including China, Hong Kong, Singapore, Japan, and Korea
- Extensive wholesale and resell network
- Fast-growing customer base among enterprises in FMCG, retail, and hospitality sectors

CHALLENGES



- Brand and service awareness of nTwine yet to be established among enterprise customers
- Offering in Hong Kong and China markets not integrated with the offering in PCCW Global, leading to confusion among customers

5.7 SINGTEL

Singtel Group is the largest telecom operator in Singapore. It also fully owns Optus, the second-largest telecom operator in Australia since 2001. The group made significant investments on strengthening its UCaaS offerings. The main offering in the portfolio now includes Singtel Business Line (i-Phone Net) and Enterprise PBX. Cisco powered enterprise PBX was launched in 2016 primarily in ASEAN region, while Optus also started offering Cisco and Microsoft solutions in Australia in 2016.

STRENGTHS



- Established branding and customer base in the SMB sector in ASEAN and Australia
- Strong position in domestic market in Singapore and Australia
- Improving upselling capability among existing customer base
- Growing enterprise cloud capabilities to position itself as total ICT solution provider including UC&C, cyber security, IT services capabilities.

CHALLENGES



- Presence in some Asian countries such as China, Hong Kong, India, and Japan is yet to be established
- Lack of effective sales and marketing strategy for Enterprise PBX

5.8 TELSTRA

Telstra continued to be one of the leaders in the Asia-Pacific UC services market for the past 12 months, with significant install base and revenue generated from a few well-developed platforms such as Broadsoft, Cisco, and Microsoft. In June 2016, Telstra acquired Inabox Group's Hosted Collaboration Solutions business resulting in expanded base for hosted IP telephony into the government sector. In January 2016, Telstra acquired Kloud, which specialize in offering professional and managed services across Asia-Pacific for various cloud services, including Microsoft's Skype for Business.

STRENGTHS



- Continued innovation on service portfolio, such as the roll-out of UC One on TIPT and the value enhancement on Cloud Collaboration, Cisco Powered, leading to customer success
- Established branding power in Australia with significantly strengthened brand and market presence across Asia-Pacific, expanding into Southeast and North Asia
- Effective sales strategy and responsive customer support
- Strong footprint and solution customization capabilities among key verticals such as BFSI, government, healthcare, education, and oil and gas

CHALLENGES



- Local telecom regulations in Indonesia and China, posing immediate difficulties for Telstra to offer full-fledged services and establish branding in these countries



5.9 VOCUS

Vocus is an Australia-based telecom operator founded in 2008, and the company owns a significant amount of fiber network across Australia and New Zealand. In recent years, the company achieved prominent inorganic growth through a few acquisitions. For example, it extended the business into the UC space with the acquisition of Amcom in 2015 and continued its partnership with Broadsoft, Cisco, and Microsoft. In 2016, the company further expanded the customer base in the SMB sector with the acquisition of M2.

STRENGTHS



- Strategic marketing and sales implementation to accelerate the time-to-market of services such as online ordering and provisioning services, digital marketing, and analytic tools
- Strong customer base in the mid-market and SMB sectors with improved customer churn rate
- High brand visibility among SMB customers

CHALLENGES



- Lack of business presence in countries other than Australia and New Zealand
- Less customer references across large enterprises

5.10 VODAFONE

Vodafone offers a strong IP telephony and unified communications portfolio, offering hosted Cisco and Microsoft platforms, significant legacy/on-premises capabilities and a native IP Centrex-style hosted voice solution designed for SMBs alongside a strong FMC flavor born from Vodafone’s capabilities as a mobile network operator. Vodafone one Net is the primary communication and collaboration solution, available in India, Taiwan, Malaysia, and the Philippines. VONE-C (Cisco-based services), VONE-M (Microsoft-based services), and Google G suite are the key service portfolios.

STRENGTHS



- Strong mobile-oriented service delivery and FMC capabilities
- Focus on the simplicity of services delivery and user experience, with intuitive digital interface, that speeds up the services provision and improves customer experience
- Integrated portfolio of services across Cisco, Microsoft, and Google platforms which can help customers address voice communication and business productivity seamlessly
- Increasing sales force and technical support in key countries of the Asia-Pacific region such as India, New Zealand, Singapore, and Hong Kong

CHALLENGES



- Brand awareness of Vodafone One Net among Asian enterprises not well established yet
- Lack of effective sales and marketing strategy to compete with local incumbents and emerging OTT participants

6 ANALYST'S WORD

Regional service providers such as Telstra and NTT Communications are in the Champions quadrant because of their extensive customer base, service portfolio innovation, and outstanding performance in 2015. The companies are positioned in this section due to their significant revenue and install base in the industry, and future growth strategies across the Asia-Pacific region. With growth-oriented services, these service providers have implemented robust sales and marketing activities to boost the brand and service awareness across key countries in the Asia-Pacific region, and not only in the home-country.

Service providers in the Challengers quadrant are composed of both global and regional service providers, including Verizon, BT, Singtel, Vocus, PCCW, AT&T, Dimension Data, and Orange. While these companies demonstrate huge growth potential by expanding their product portfolios, they are in this quadrant due to their limited business presence in the region. Singtel, Vocus, and PCCW are Asia-based telecom operators with core offerings present only in their respective home countries. In case of Verizon, AT&T, BT, and Orange, local delivery capabilities and understanding of local customers have become a key barrier to grow in business across Asian countries.

Vodafone is recognized in the Explorer quadrant as it is still developing its services portfolio in the Asia-Pacific region. The company in this quadrant has demonstrated its dedication in serving Asian customers and is looking to expand and innovate in the ecosystems.

7 FROST IQ METHODOLOGY

The focus of Frost IQ is to provide a balanced assessment of selected markets. These markets have been tracked rigorously by Frost & Sullivan's analysts for a particular period of time. Data collected/estimated, such as companies' revenue/install base, is scrutinized and forms part of the input for the Frost IQ matrix. Information on companies has been collated from various sources and interviews with over 15 companies.

The study approach provides a mix of quantitative and qualitative assessments. The Frost IQ matrix has two major attributes: Market Share and Future Growth Strategy.

1. MARKET SHARE

Market share information is derived from Frost & Sullivan's research programs which include market trackers and syndicated research reports. Based on regular research studies conducted quarterly, semi-annually or annually intervals, analysts build a strong revenue database of key participants in the market.

According to the Frost IQ Matrix, the X-axis measures the share on a percentage scale. The divide line on the matrix is set at 50 percent of the market share of the leading player in that market.

2. GROWTH STRATEGY

Frost & Sullivan considers 4 main components in the growth strategy assessment of Frost IQ. The guiding principle is that these components and their subcomponents follow the MECE (Mutually Exclusive and Comprehensively Exhaustive) test. The proposed components are as follows:



PRODUCT/SERVICE STRATEGY



PEOPLE AND SKILLS STRATEGY



ECOSYSTEM STRATEGY



REGIONAL BUSINESS STRATEGY

There is equal weightage given to all the components with measurement on a 10 point scale. The dividing line on the Y-axis is at the mid-point, i.e., a weighted score of 5 on a 10-point scale. Analysts provide feedback on industry participants on the above parameters based on their expertise in the industry. Details of the sub-components are available, if required.

NEXT STEPS

 [Schedule a meeting with our global team](#) to experience our thought leadership and to integrate your ideas, opportunities and challenges into the discussion.

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