Asia-Pacific Media Service Market Report, 2022

—1961-2021—

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Asia-Pacific Media Service Market Report

With the increasing penetration of Internet and cloud technologies in APAC, *Media Service,* **based on the emerging applications on media-related content,   provides comprehensive deployment for the demands of lower technical threshold, costs, etc., thereby driving the development of digital economy**. To offer a more professional and in-depth perspective to industry stakeholders, this report analyses and assesses the development of the *Media Service* market and the competitive landscapes in APAC.

Key Objectives

1

Market Analysis

- **Market Definition, Classification and Value**

- **Macro Background**

- **Market's Value Chain Analysis**

  ✓ Value Chain Overview

  ✓ Upstream Analysis

  ✓ Midstream Analysis

  ✓ Downstream Analysis

- **Opportunity Analysis**

- **APAC Media Service Market Size, 2016-2026E**

- **Market Trend Analysis**

2

Competitor Analysis

- **Competitive Landscape of Media Service Providers in APAC**
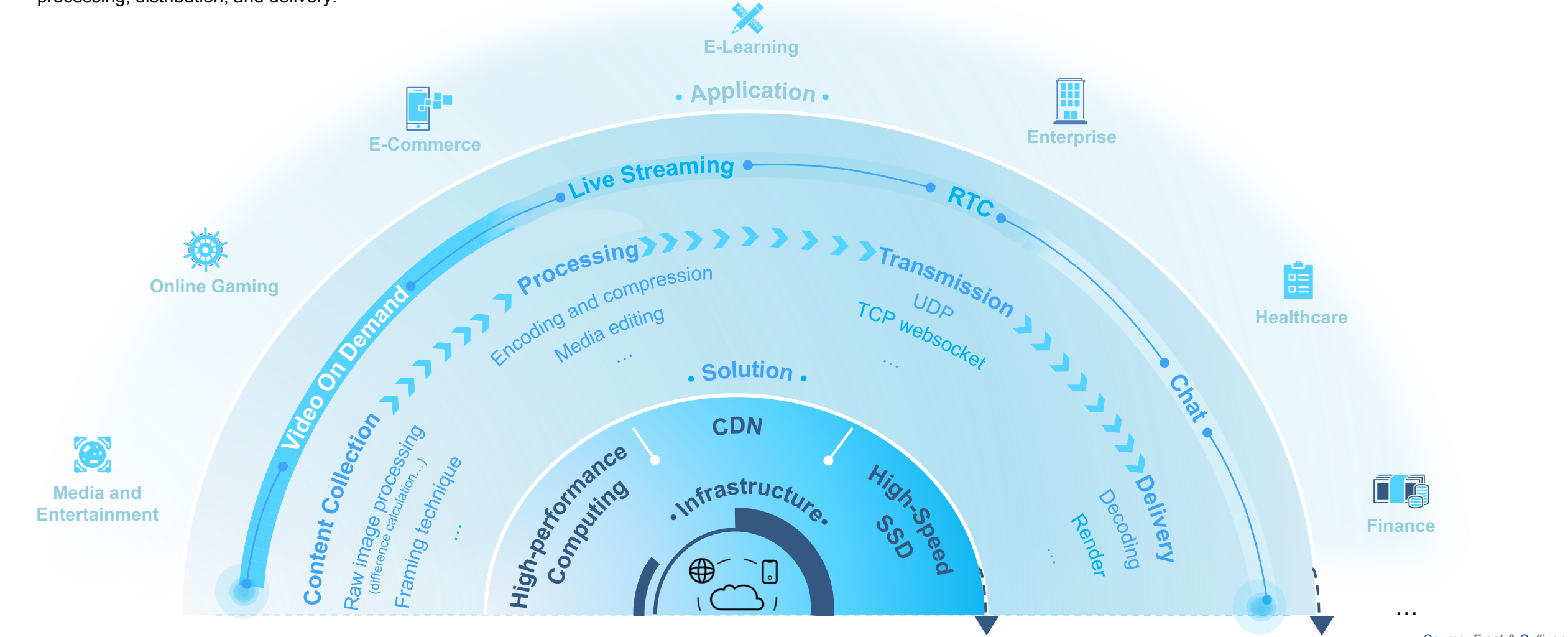
- **Vendor Analysis**

Research Methodology

- **Primary Research:** conducted in-depth interviews, with a mix of industry experts, media service providers, and other industry professionals.

- **Secondary Research:** reviewed and analyzed the information in public domain, such as annual reports, press releases, news articles, etc.

- **Measurement Models:**

  - **Market Sizing Model for Market Forecast**: F&S original market size measuring and forecasting model for market sizing.

  - **Competence Model of Key Players**: F&S original competence analysis model for measuring competitive prowess of each players.

- *Notes*:

  - *This study analyzed market size of media service in APAC based on data available as of Dec 31 2022 with forecast period from 2023 to 2026.*

  - *Geographic scope refers to APAC, which includes Greater China, South Korea, Japan, India, Malaysia, Thailand, Singapore, Indonesia, and Philippines.*

Market Definition of Media Service

Media Services refer to integrated services that deployed on cloud, and be applied into varying industries to enable content creation, processing, transmission, etc.

- **Infrastructure:** High-performance computing, CDN and high-speed SSD are included. It offers on-demand access to a shared pool of configurable, computing and networking resources which can be instantaneously deployed and easily scaled.
- **Solutions:** By types of media, solutions can be divided into video on demand, live streaming, RTC and Chat. By media production stage, solutions can be divided into content collection, processing, distribution, and delivery.

E-Learning

Application

E-Commerce

Enterprise

Live Streaming

RTC

Online Gaming

Processing

Transmission

Encoding and compression

UDP

Media editing

TCP websocket

…

…

Healthcare

Video On Demand

Solution

Media and Entertainment

Content Collection

Raw image processing
(difference calculation…)

Framing technique

…

High-performance Computing

CDN

Infrastructure

High-Speed SSD

Chat
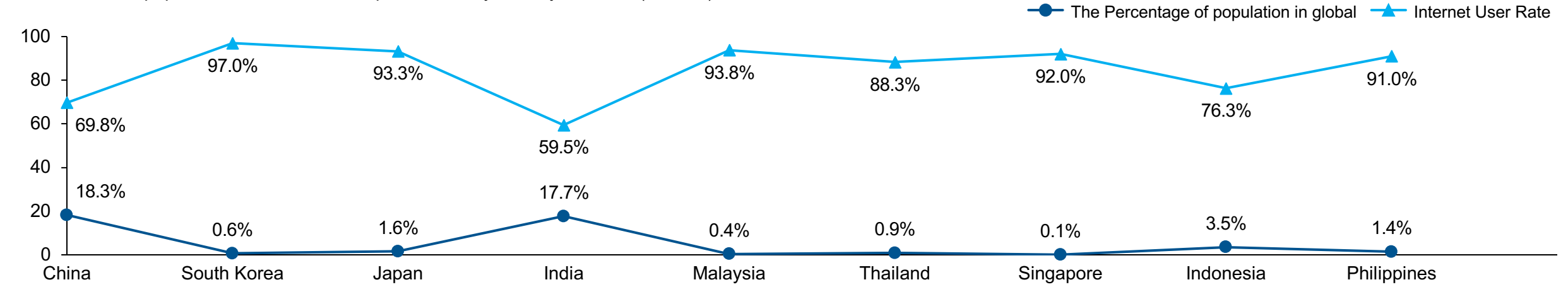
Delivery

Decoding

Render

…

Finance

…

Source: Frost & Sullivan

APAC provides enabling macro environment for media service market in policies, economy, society and technologies

- APAC has provided a favorable environment for the media services market in terms of economic, social, and political aspects, followed by technological improvements in infrastructure and talent to accelerate the development of media services.

Politics
- APAC countries have introduced **policies** to support the development of the digital economy and cloud computing, thereby providing policy support for media services.
- Strategic and commercial partnerships have been established between APAC countries on media services.

Economy
- APAC countries' total GDP has grown by 27.2% over the past five years, driving a recovery in the consumer demand of the media market.
- The Covid-19 has driven the rapid growth of e-commerce in APAC, with Southeast Asia becoming the fastest-growing region in the world over the past five years.

Society
- APAC has a huge population, which accounts for 43.3% of the world's population, with considerable stock and incremental media service users.
- APAC accounts for more than 40% of the world's Internet users, with an Internet penetration rate of 68.8%, offering a solid user base for the development of media services.

Technology
- APAC countries are actively improving their data center, server, and other infrastructure, which now has 1,123 data centers to provide basic facilities for media services.
- APAC is actively recruiting and training ICT employees, such as Singapore's Tech for Public Good program to accelerate the recruitment and training of technology talents.

Global share of population size and internet penetration by country in APAC (2021/%)

Legend: ● The Percentage of population in global ▲ Internet User Rate

Country	Internet User Rate	The Percentage of population in global
China	69.8%	18.3%
South Korea	97.0%	0.6%
Japan	93.3%	1.6%
India	59.5%	17.7%
Malaysia	93.8%	0.4%
Thailand	88.3%	0.9%
Singapore	92.0%	0.1%
Indonesia	76.3%	3.5%
Philippines	91.0%	1.4%

Source: Wind, Data AI, Internet World Stats, Frost & Sullivan

Comprehensive media service providers develop media service offerings and evolve across the value chain, hosting a wide variety of industry applications on top of the infrastructure resources

Upstream — Midstream — Downstream

Subscription Billing / Usage-based Billing / One-time Deployment — *Annual or Monthly Subscription Billing / Usage-cased Billing*

- Infrastructure -

Chip
GPU/CPU...

Server...

Necessary infrastructure required to provide media service, such as chips and servers, etc.

Key Players

1 Traditional Infrastructure Providers

HUAWEI   inspur   IBM
China Mobile   CHINA TELECOM   China unicom

2 Emerging Infrastructure Providers

Tencent Cloud   JD Cloud
BAIDU AI CLOUD   Alibaba Cloud   aws

- Media Service Provider -

Comprehensive Provider

Provide media services to meet diverse demands, leveraging their own platforms and resources to provide one-stop service offerings including both infrastructure (e.g CDN) to integrated solutions.

Tencent Cloud   BAIDU AI CLOUD
UCLOUD   Alibaba Cloud   WWW.KSYUN.COM   aws
Azure   JD Cloud   HUAWEI CLOUD

Exclusive Provider

Provide exclusive solutions to meet specific demand of clients in niche scenarios. Some of them may provide infrastructure or solutions only, or focus on dedicated service sector.

AVAYA   poly   CISCO   AnyChat   BAIJIAYUN
agora   Fsmeeting.com   RONGCLOUD
ZEGO   Fsmeeting.com   KEDACOM

- Clients -

Media & Entertainment

Online Gaming

E-learning

E-commerce

Healthcare

Enterprise

...

Clients

Flow of Payment

Source: Frost & Sullivan

Key players in the upstream provide necessary infrastructure required to provide media service

GPU market growth in APAC

Continuous optimization of GPU design and construction support the rapid development and improvement of the overall infrastructure of media service in APAC

Video Industry	Demand Analysis of GPUs	Intensity
Multi-screen Video Services	• High concurrency for multiple terminals • Low bit rate codec	
Ultra HD Business	• High quality 4k transcoding, high performance image processing	
Film Special effects	• High quality GPU rendering capabilities • Improved processing speed for special effects	
Cloud Games	• Game computing needs to be done in the cloud, requiring high GPU rendering	

Development of network connectivity

The bandwidth is influenced by the needs of different downstream industries with different technical parameters to meet the needs of different scenarios

Traditional video industry demand：

	Resolution	Framerate	Colour depth	Average bitrate	Bandwidth demand
General 4k	3840*2160	30P	8bit	H.265	22.5Mbps
Standard 4k	3840*2160	60P	10bit	H.265	45Mbps
4k+	3840*2160	120P	12bit	H.265	75Mbps
General 8k	76800*4320	30P	8bit	H.265	90Mbps
Standard 8k	76800*4320	60P	10bit	H.265	180Mbps
8k+	76800*4320	120P	12bit	H.265	300Mbps

Emerging technology industry demand：

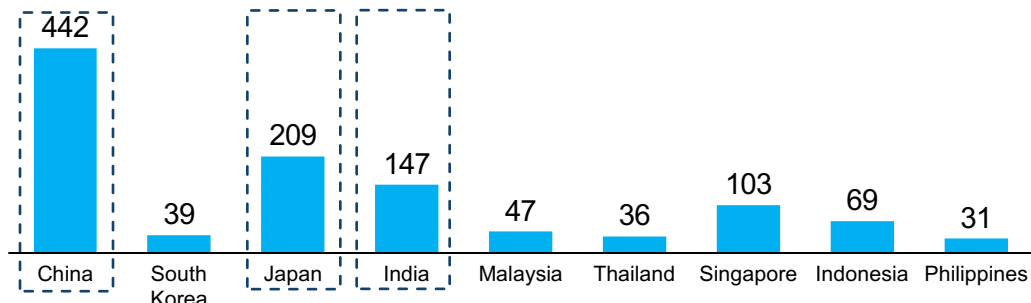|	Discerning thresholds	MTO time delay	Application Network	Bandwidth demand
EI	Full-view 4K 2D	<40ms	4G&5G	20-50Mbps
PI	Full-view 8K 2D	<30ms	4G&5G	20-50Mbps
DI	Full-view 12K 2D	<20ms	5G	200Mbps-1Gbps
FI	Full-view 24K 2D	<10ms	5G	2-5Gbps

(EI: Elementary Immersion, PI: Partial Immersion, DI: Deep Immersion, FI: Full Immersion)
Note: The above represents the various types of immersive experiences in VR/AR

Improvement of infrastructure

Quantity of IDCs in APAC：

China	South Korea	Japan	India	Malaysia	Thailand	Singapore	Indonesia	Philippines
442	39	209	147	47	36	103	69	31

■ The scale of data centers of APAC regions are increasing, which may bring greater economies of scale and reducing network latency for applications in various media service industries.

Key Findings

▪ The development of GPU market is boosting the improvement of media service market in APAC.

▪ Thanks to the growing investment in data centers and cloud services, network connectivity continues to improve, which may allow fast data transmission, elastic computing resource, great interconnectivity and control of devices, therefore creating demand for media services.

▪ Favorable government policies further boost the development of media services in APAC. Governments in APAC have established a large number of data centres in recent years.

▪ With the optimization of the underlying data center, it will provide more efficient, more stable and more energy-efficient computing services for the upper layer of cloud computing services and drive the industry as a whole

Source: Cloud Scene, ASKCI, IDC, Huaon, Frost & Sullivan

Future Opportunity: Integrated Technologies, one-stop service offerings, low-code platforms and enterprises going global are future opportunities for media services providers

Embrace Integrated Technologies to Improve Streaming Quality

Emerging technologies, such as AI, ML, open caching, etc., are being integrated into media service market to enhance content recommendation, improve customer experiences, and boost monetization.

Context and Definition

- ✓ Demand for high-definition video and enhanced customer experience is increasing substantially nowadays.
- ✓ The new demands of the younger generation on the scene require the integration of technologies such as AI, AR/VR in media service

- Call to action -

- ✓ Media service providers must leverage technologies to develop innovative features and make the customer experience more immersive and interactive.
- ✓ Media service providers should partner with technology service vendors to deploy solid video content creation, transition and protection measures.

One-Stop Service Offerings to Add Value for the Clients

One-stop service offerings add value for clients and help their business remain competitive by the integration of infrastructure and solutions, cloud and endpoints, etc. One-stop service is a complete media service solution for the various demands of downstream scenarios, providing added value with cutting-edge technology.

Context and Definition

- ✓ Providing one-stop service offerings alleviates the technical pressure for joint test adaptation.
- ✓ The comprehensive and diverse range of services can provide clients with a wider choice of purchases

- Call to action -

- ✓ By adding innovative technologies and service offerings, services become more appealing to clients and reduce customer churn.
- ✓ Media service providers must integrate downstream demands and technologies to provide easy-to-use and comprehensive services

Use Low-code Platforms to Integrate Solutions

Low-code platform is a development platform that can quickly generate applications without codes or with a small amount of code. **The emergence of the low-code platform makes up for the shortcomings of the past model, allowing clients to reduce development costs and compress development cycles, while still being able to take the initiative in development.**

Context and Definition

- ✓ In the past, the delivery model had defects such as high development cost and long development cycle, while low-code platform can help with development cost and development efficiency.

- Call to action -

- ✓ Media service providers should invest on the low-code platform, in order to satisfy their clients business needs, and to achieve cost reduction and efficiency.

Explore the Incremental Opportunities of Going Global

As Chinese companies actively expand their overseas business, and Chinese media service providers have more advantages in end-to-end and integrated solutions than overseas providers, more and more companies are choosing Chinese providers for their overseas business, because of **faster development of domestic audio and video applications**.

Context and Definition

- ✓ Chinese companies have conducted overseas business and are expecting cloud services to help them achieve business innovation.

- Call to action -

- ✓ Media service providers need to have a global vision and the ability to operate locally, while needing to strengthen security compliance in different regions, and innovating products, services and experiences around customer needs.
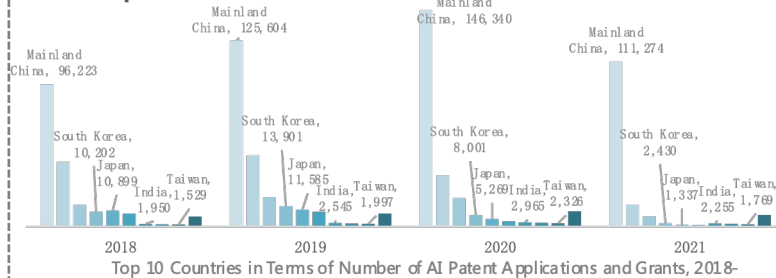
Source: Frost & Sullivan

Media service will tend towards application of AI, improvement of supplier capabilities, and go-global business for traditional and internet companies in the future

Degree of Applying Cutting-edge Technologies Deepens

As cutting-edge technologies can decrease the cost, efficiency, intelligence and experience of media services, integration of APAC media services and emerging technologies is becoming deeper.

- **Reduce Costs and Increase Efficiency:**
  AI, big data and other emerging technologies, realize content audit & analysis, and scenario-based integration, and other services, to reduce cost, efficiency, and accuracy of manual audit.

- **Enable Intelligence:**
  Intelligent O&M and intelligent product can be achieved through cutting-edge technologies, including AI, big data, etc., to enhance service experience.

APAC becomes the leading place in the number of AI patents filed and received from 2018 to 2021

Mainland China, 96,223 ; Mainland China, 125,604 ; Mainland China, 146,340 ; Mainland China, 111,274

South Korea, 10,202 ; South Korea, 13,901 ; South Korea, 8,001 ; South Korea, 2,430

Japan, 10,899 ; Japan, 11,585 ; Japan, 5,269 ; Japan, 1,337

India, 1,529 ; India, 2,545 ; India, 2,965 ; India, 2,255

Taiwan, 1,950 ; Taiwan, 1,997 ; Taiwan, 2,326 ; Taiwan, 1,769

2018 ; 2019 ; 2020 ; 2021

Top 10 Countries in Terms of Number of AI Patent Applications and Grants, 2018-2021

Capability of Media Service Providers' Offerings Improves

As the scope of clients expands and their own needs diversify, the importance of comprehensive and parallel services of providers, become more apparent.

- **Improvement of Diversification Capability :**
  Media service providers are continuously improving their diversified service capabilities to meet the various needs of clients in different industrial application.

- **Development of Integration Capability :**
  Provide clients with a simpler and more unified service based on the integration of technology and ecological resources to promote cost reduction and efficiency.

Integration Capability Features of Providers

- **Technology integration:**
  Help clients reduce costs and increase efficiency through the use and integration of technology resources, such as Tencent Cloud reusing and optimising the infrastructure of the three underlying networks and building individual SDK access terminals

- **Resource integration:**
  Combining our resources and ecological advantages of the Internet and other fields, we integrate the resources required for media services

Keywords of Integration Capability Features Launched by Media Service Providers

## Go-global Business for Chinese Companies Increases

The boom of video and Apps further influences the future development of media services as traditional companies and internet companies gradually develop their go-global business.

- **Internet Enterprises:**
  As Internet enterprises with audio and video as their main business carriers gradually go global, the service opportunities for media service providers increase.

- **Traditional Enterprises:**
  As Chinese enterprises in traditional industries, such as manufacturing, transportation, and energy, develop their going-global business, such enterprises become target clients in the future.

Types of Business for Internet and traditional companies going global
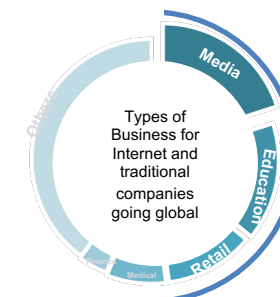
Internet companies
- Long video platforms
- Social platforms
- Short video platform
- E-commerce platforms

Internet Industry

- Multinational logistics companies

Traditional Industry

Traditional companies go global, such as central state-owned enterprises
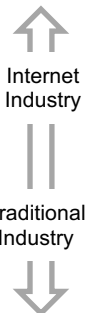
Source: Tencent Digital Ecosystem Summit, China Netcasting Services Association, Frost & Sullivan

A 3-step approach is employed to analyze APAC media service market, score and prioritize key players

## APAC media service market overview and competition landscape is evaluated through 3 step mapping approach

Step 1
Category key players in media services industry and conduct in-depth interviews with industry experts

Industry Experts	# of Samples
Media service competitors	20
Infrastructure providers	10
Industry associations	5
downstream clients	20
Academic institutions	5
Total	**60**

- In step 1, interviewees are selected based on criteria including working experience and familiarity with media service industry
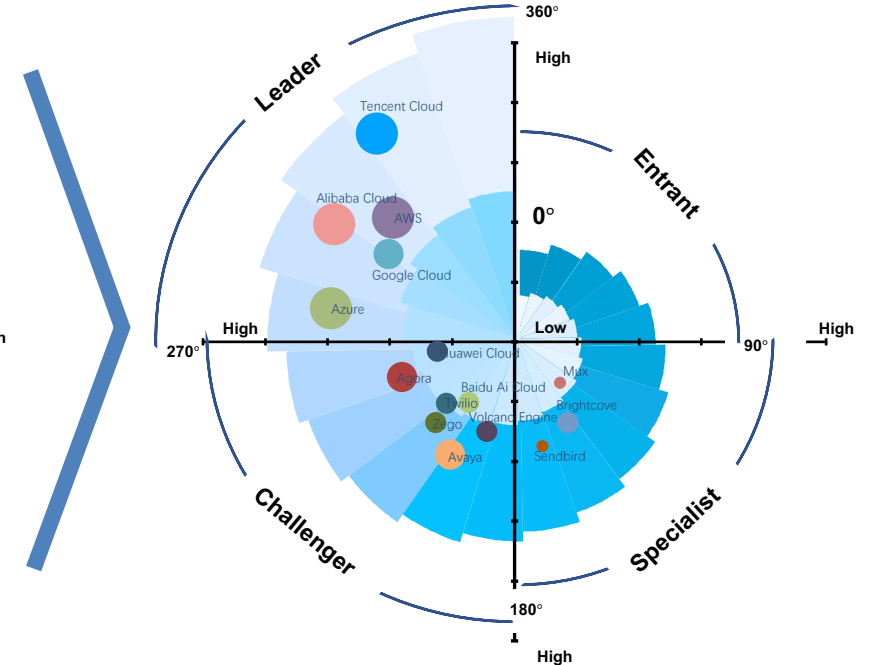
Step 2
Certain criteria will be chosen as the cut-off points for four quadrants respectively
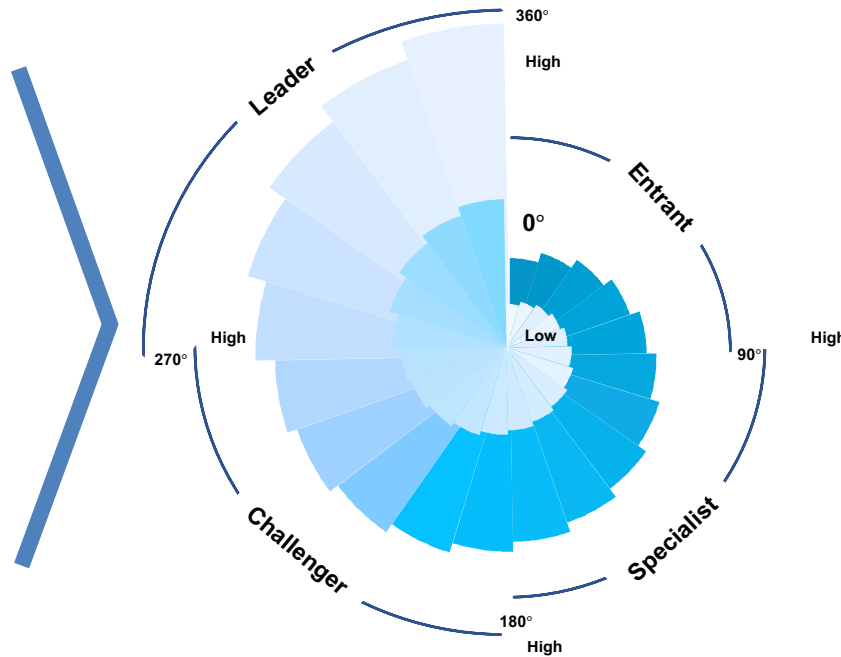
- Then, level of performance of each key players will be evaluated by industry experts

Step 3
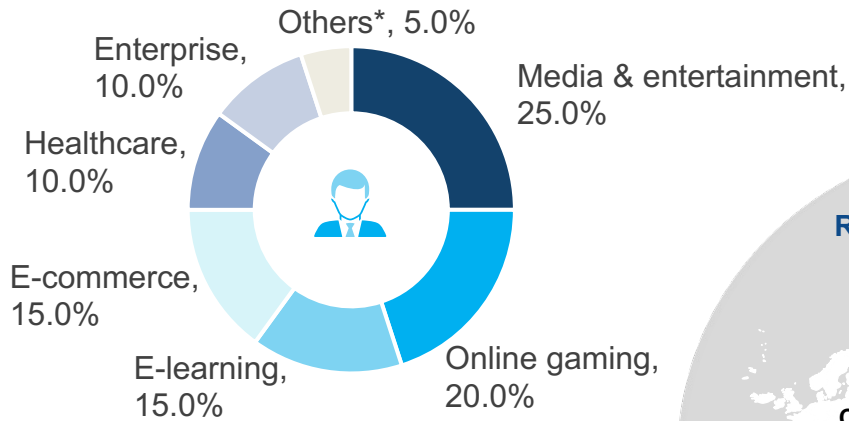Score, segment and prioritize media service providers based on key evaluation matrix

- Adjust ranking of different key players through competitiveness evaluation
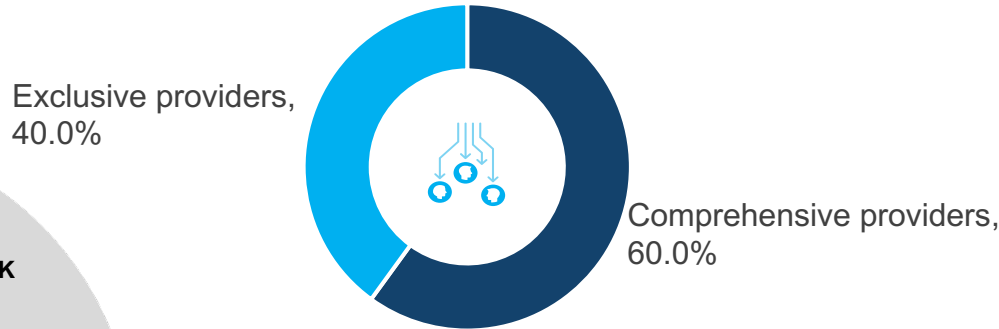
Primary research, secondary research, and the measurement of market size and competitiveness are primarily included in this report

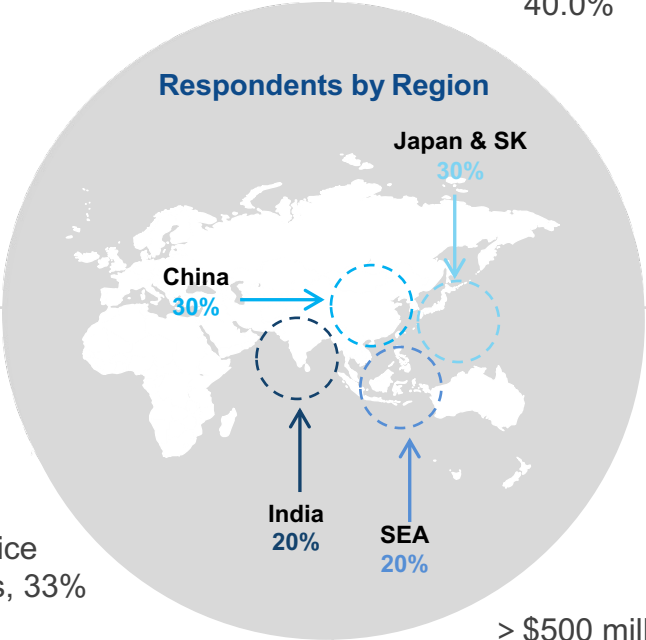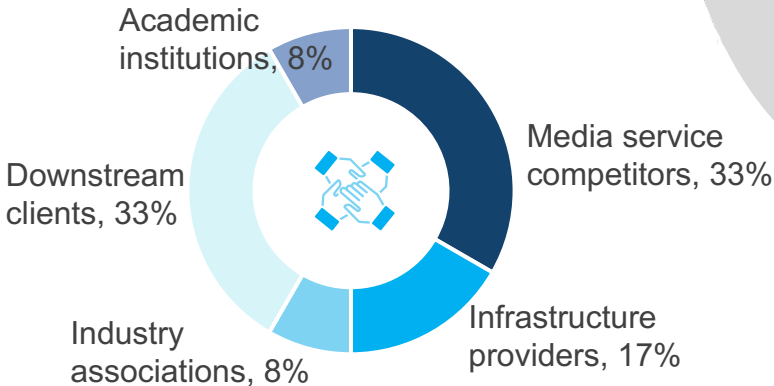## Sector by Clients

- Others*, 5.0%
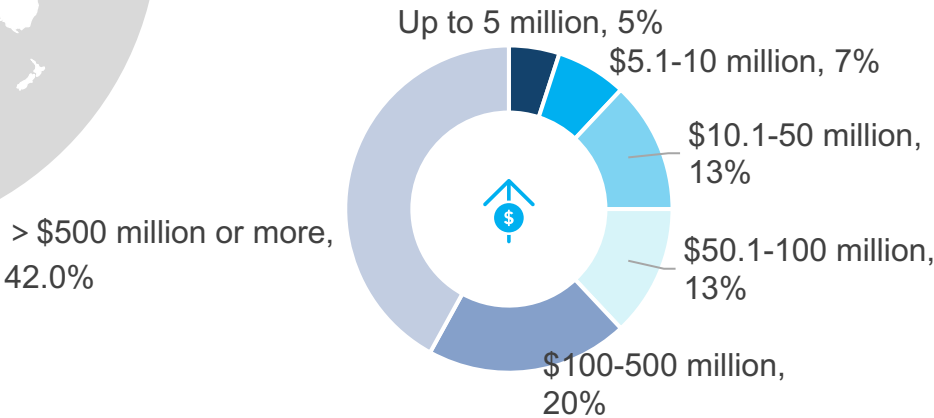- Enterprise, 10.0%
- Healthcare, 10.0%
- E-commerce, 15.0%
- E-learning, 15.0%
- Online gaming, 20.0%
- Media & entertainment, 25.0%

Sector by Competitors

- Exclusive providers, 40.0%
- Comprehensive providers, 60.0%

Respondents by Region

- Japan & SK 30%
- China 30%
- India 20%
- SEA 20%

Sector by Organisations

- Academic institutions, 8%
- Downstream clients, 33%
- Industry associations, 8%
- Infrastructure providers, 17%
- Media service competitors, 33%

The Scale of Respondent Company

- Up to 5 million, 5%
- $5.1-10 million, 7%
- $10.1-50 million, 13%
- $50.1-100 million, 13%
- $100-500 million, 20%
- > $500 million or more, 42.0%

*Others include industrial sector and other industries
SK—South Korea; SEA—South East Asia

Source: Frost & Sullivan

THANKS!

P.S. Sincere thanks to Tencent Cloud in assisting our research by providing relevant data and cases in media services.