Chief Company Introduction

Date: Sept. 28, 2021
https://www.chief.com.tw

CHIEF | 是方電訊

I. Company Profile

1. Chief Profile

- **Founded in 1991**

- **Capital NT$704,596,310**

- **Major Products: IDC, Cloud, Data, Voice services**

- Type II Telecom Licenses issued by NCC,and became Telecom operator in Aug. 2021 based on NCC new Telecom Act.
  The services include ISP、VPN、Internet 、ISR、070 VoIP、bandwidth B&S, etc.

- Carrier Neutral IDC：Existing LY、HD、TF three buildings with 30,000 square meters, 4th IDC building expected to be in service in 2023.

- **Included in MSCI Global Small Cap Index**

2. Company History

CHIEF | 是方電訊

1991 Year
Founded

2004 Year
Expand Taiwan China VPN network services

2011 Year
First operator in Taiwan to award ISO 27001 & ISO27011 certifications

2017 Year
- Provide Oracle OCM cloud DB services in May
- Awarded government cloud services contracts in Jul.
- First operator to award ISO27017/ISO27018 in Dec. for cloud services

2019 Year
- Localize GCP and Azure service .
- Direct connect to Ali cloud in HK .
- Provide 200G BW between TPE and HK in Jun.
- Provide IBM cloud service in Sep.
- DCOS certified in Sep.
- TPIX included in national CIP in Oct.

1991 | 1998 | 2000 | 2004 | 2006 | 2011 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021

2000 Year
Set up first IDC to provide TPIX、TPVX、TPCX services

2006 Year
Acquired by CHT (over 70 % shares)

中華電信 關係企業
Chunghwa Telecom Group

2016 Year
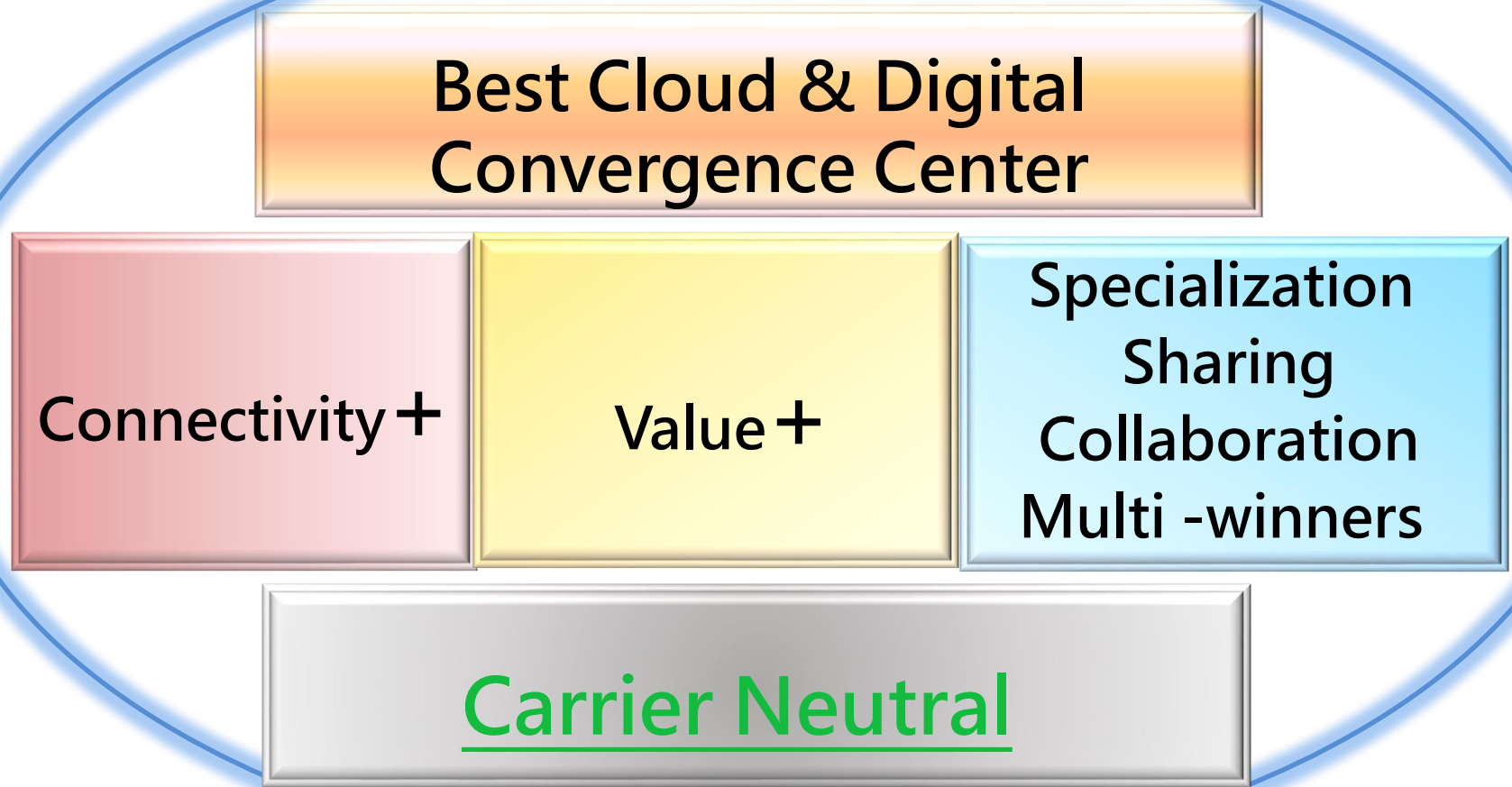- Chief Subsidiary awarded ISP/VPN telecom license in Shanghai

2018 Year
- Provide Microsoft Azure ExpressRoute service in Feb.
- Provide AWS DX service in Mar.
- Work with IBM for Smart Health Cloud service in Mar.
- IPO at Taipei Exchange (TPEx) on June 5

2020 Year
- Newly added 20G network backbone to each of Japan and Singapore in Jan.
- Provide Oracle cloud direct connect to Tokyo in Jul.
- Promote Health Cloud service via CHT-M in Aug. .
- Upgrade international backbone to 300G in Dec

3

Best Cloud & Digital Convergence Center

Connectivity **+**

Value **+**

Specialization
Sharing
Collaboration
Multi -winners

Carrier Neutral
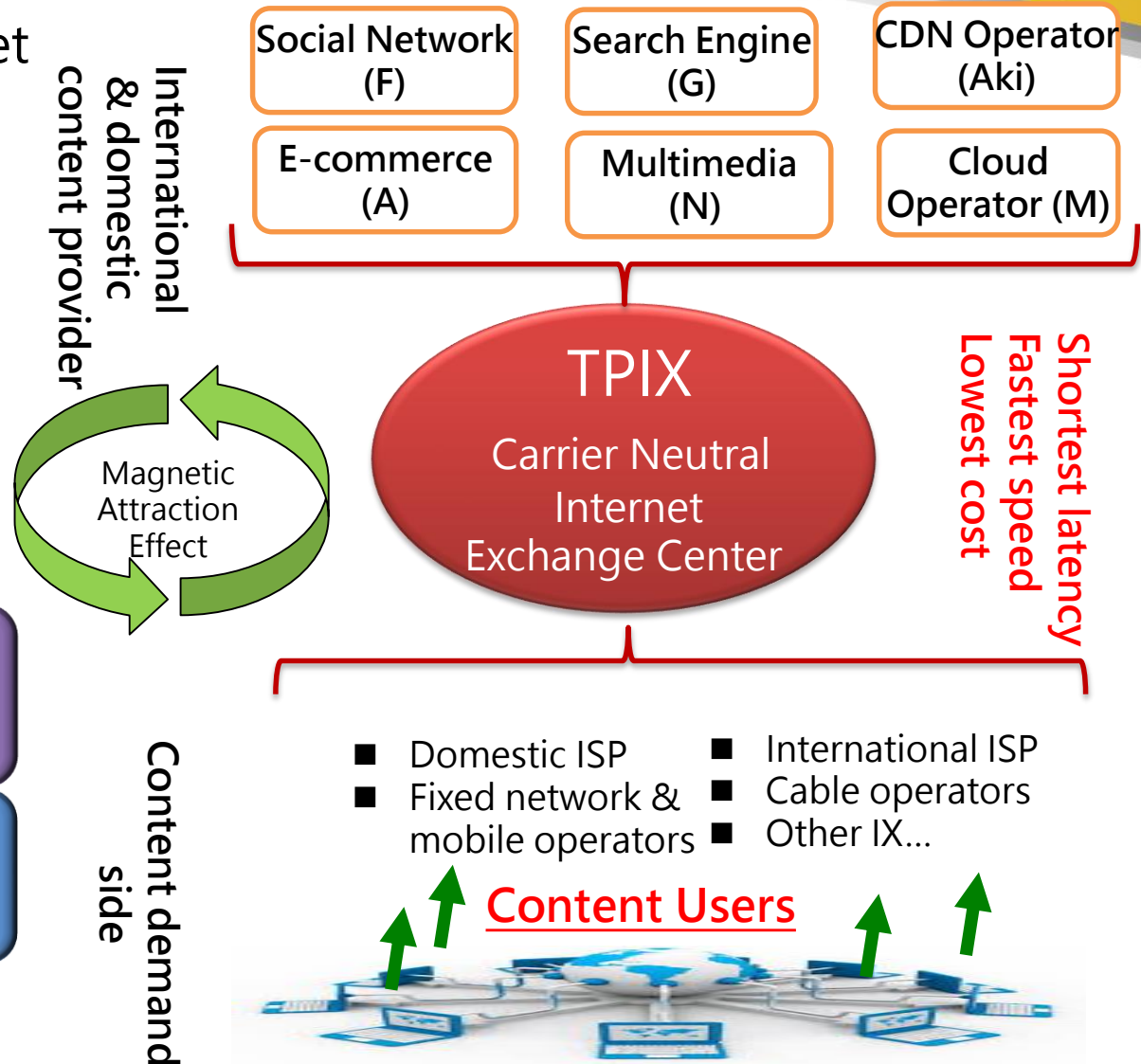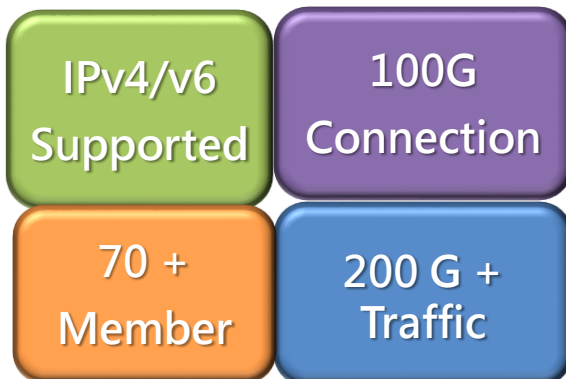
4 . TPCX Taipei Cable Exchange Center

- Private cables (NCC licensed Pacnet/Telstra, TIGC, Reach, GCX) and consortium cables are connected in Chief IDC site, most of fixed network operators in Taiwan all set up PoPs in Chief IDC site for submarine cable interconnection.
- Chief TPCX is only one place to leverage Consortium cables and private cables in Taiwan .
- International 、 domestic operators and enterprise customers can get high cost performance network services from Chief.
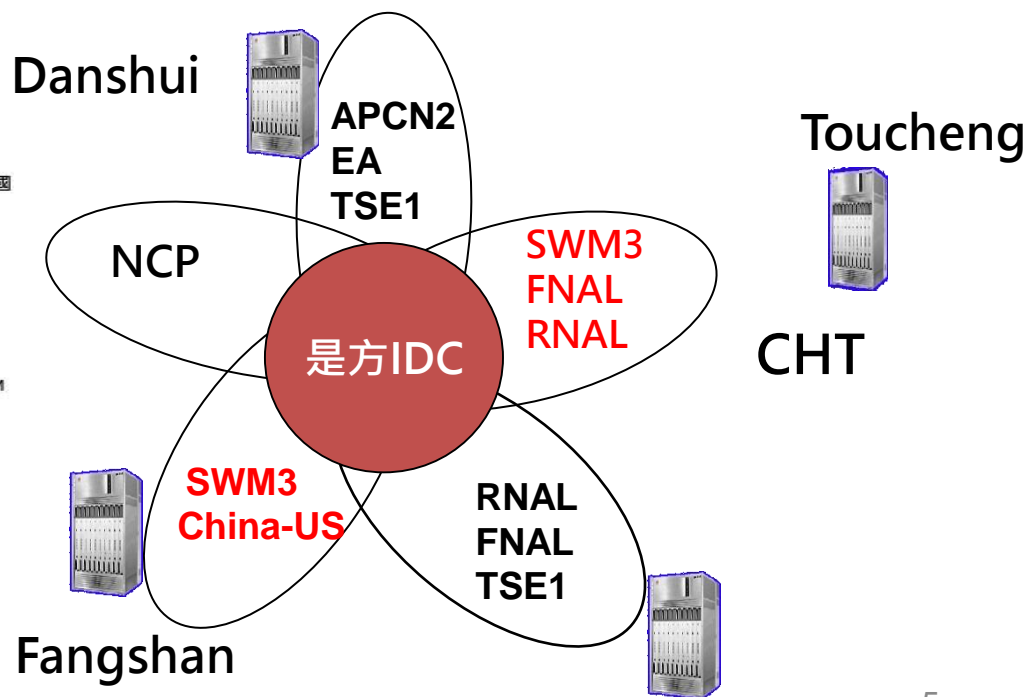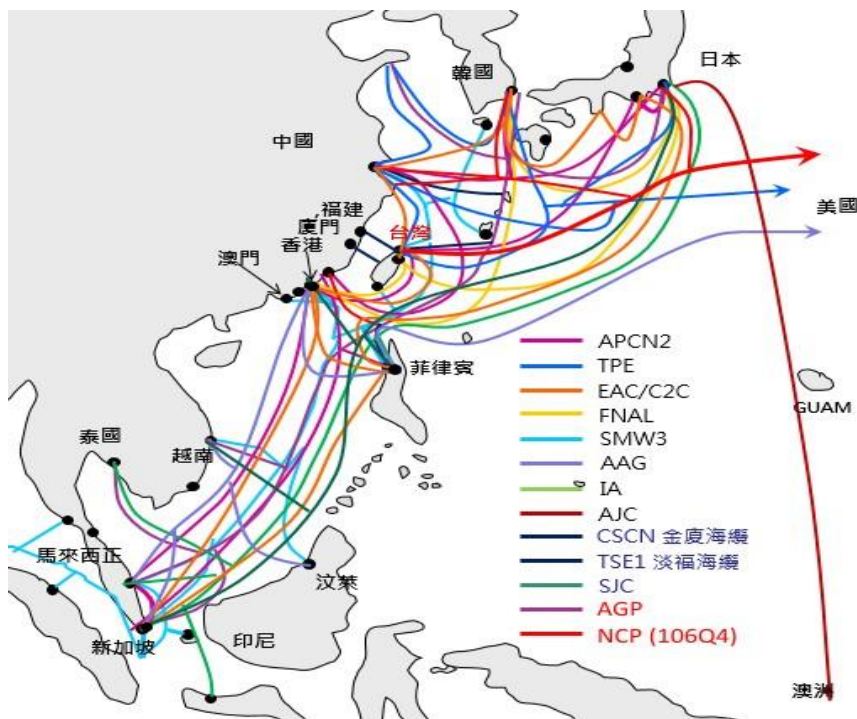
5. Taipei Internet Exchange Center(TPIX)

- TPIX provides internet traffic exchange service for both international and domestic customers. TPIX is an Internet exchange hub.

www.tpix.com.tw

International & domestic content provider

Social Network (F)

Search Engine (G)

CDN Operator (Aki)

E-commerce (A)

Multimedia (N)

Cloud Operator (M)

Magnetic Attraction Effect

TPIX
Carrier Neutral Internet Exchange Center

Shortest latency Fastest speed Lowest cost

IPv4/v6 Supported	100G Connection
70 + Member	200 G + Traffic

Content demand side

- Domestic ISP
- Fixed network & mobile operators

- International ISP
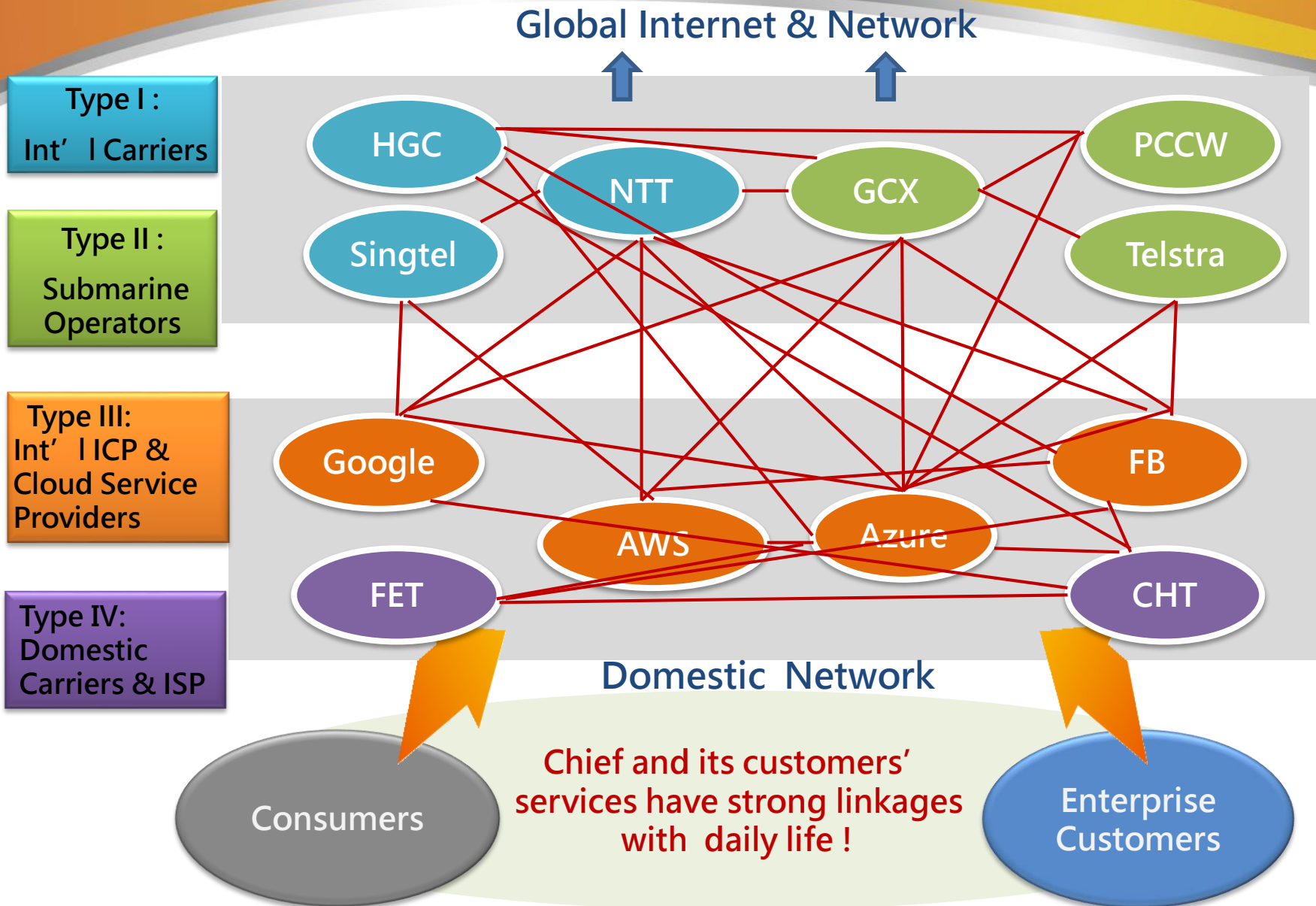- Cable operators
- Other IX…

Content Users

6. Chief Cloud Exchange (CCX)

CCX provides direct connect to global cloud service platform with high security, high speed, and low latency of the private connection quality.

- Transnational、multi-cloud、hybrid-cloud high speed direct connect.
- Service POPs include Taipei 、Hong Kong 、Japan 、and Singapore.
- Provides 500M above bandwidth with AWS direct connect.
- IDC provides direct connect to dual GCP zones.
- Direct connect to global 5 major cloud platforms. The most complete multi-cloud exchange platform (AWS、Azure、GCP、IBM、ORACLE).
- Provide public cloud high-speed upload service: massive data migration, high-speed transmission without traffic jams.

7. Tele Market Place (Platform+Connectivity)

Global Internet & Network

Type I :
Int'l Carriers

Type II :
Submarine Operators

Type III:
Int'l ICP &
Cloud Service Providers

Type IV:
Domestic
Carriers & ISP

HGC
NTT
GCX
PCCW
Singtel
Telstra
Google
FB
AWS
Azure
FET
CHT

Domestic Network

Consumers

Chief and its customers' services have strong linkages with daily life !

Enterprise Customers

- Chief Telecom is based on **carrier neutral position** to attract **domestic and international carriers, submarine cable operators, content providers and cloud service providers** for colocation in Chief IDC buildings. With the business development model of platform economy and member economy co-prosperity and coexistence, combined with the tele-market and the cloud industry chain, it naturally **forms a customer cluster magnetism effect**.

9. Major Customers

Domestic Carriers

International Carriers

Chief Solutions

Enterprise Customers

Global Cloud Providers

TPIX Members

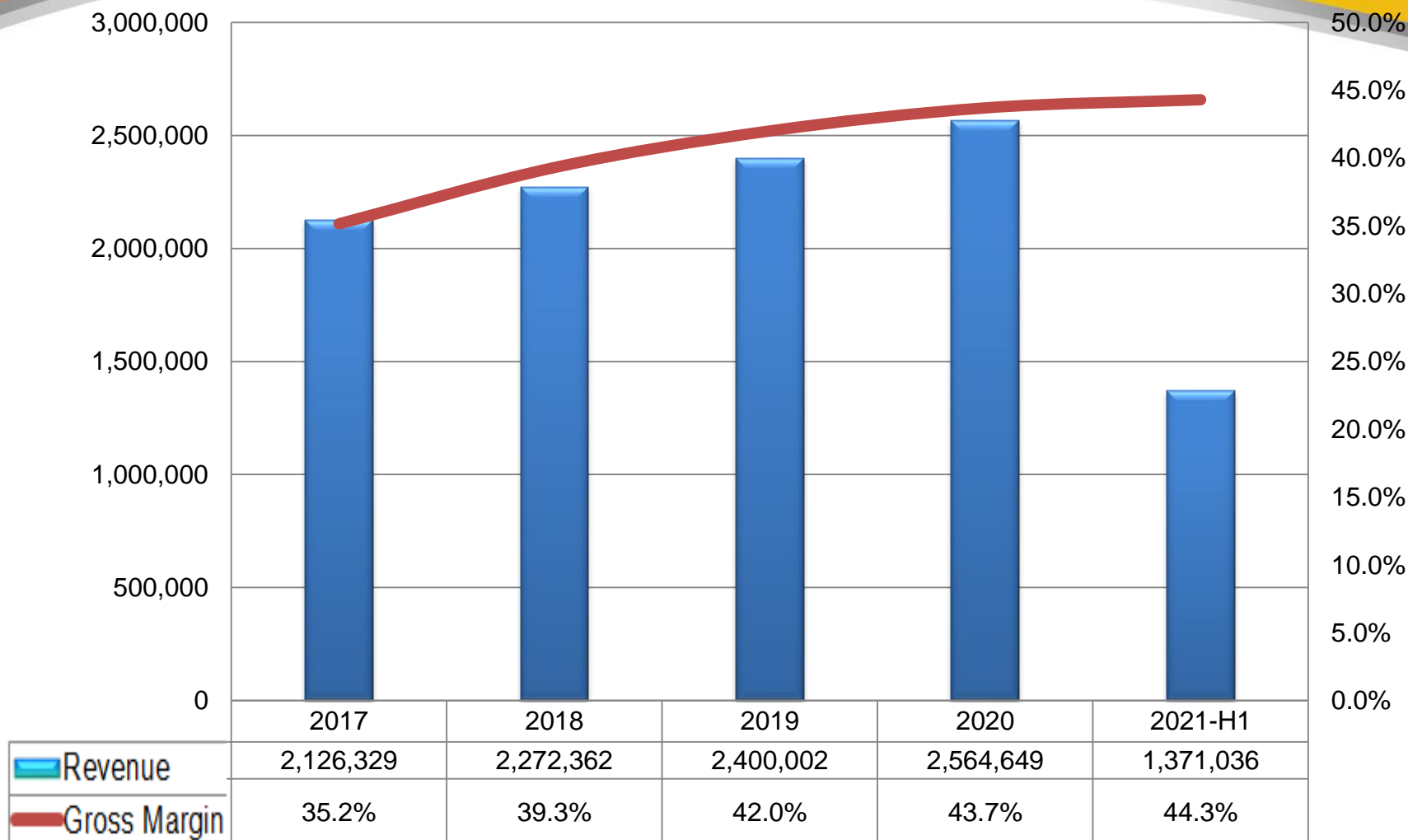# II、 Recent Years Finance Performance

- Revenue & Gross Margin

- Net Margin & EPS

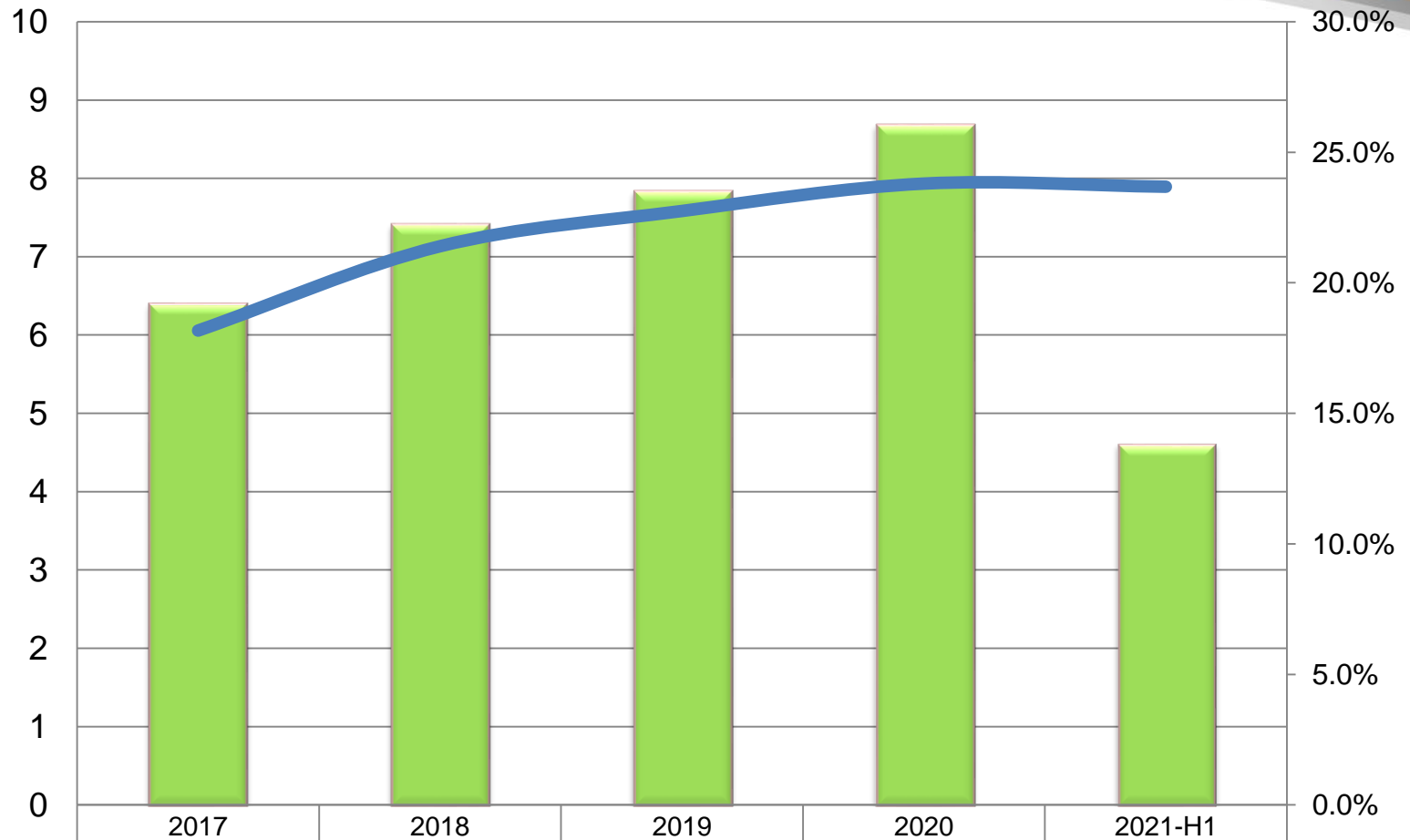- Percentage of Cash Dividends

- Product Service Revenue Percentage
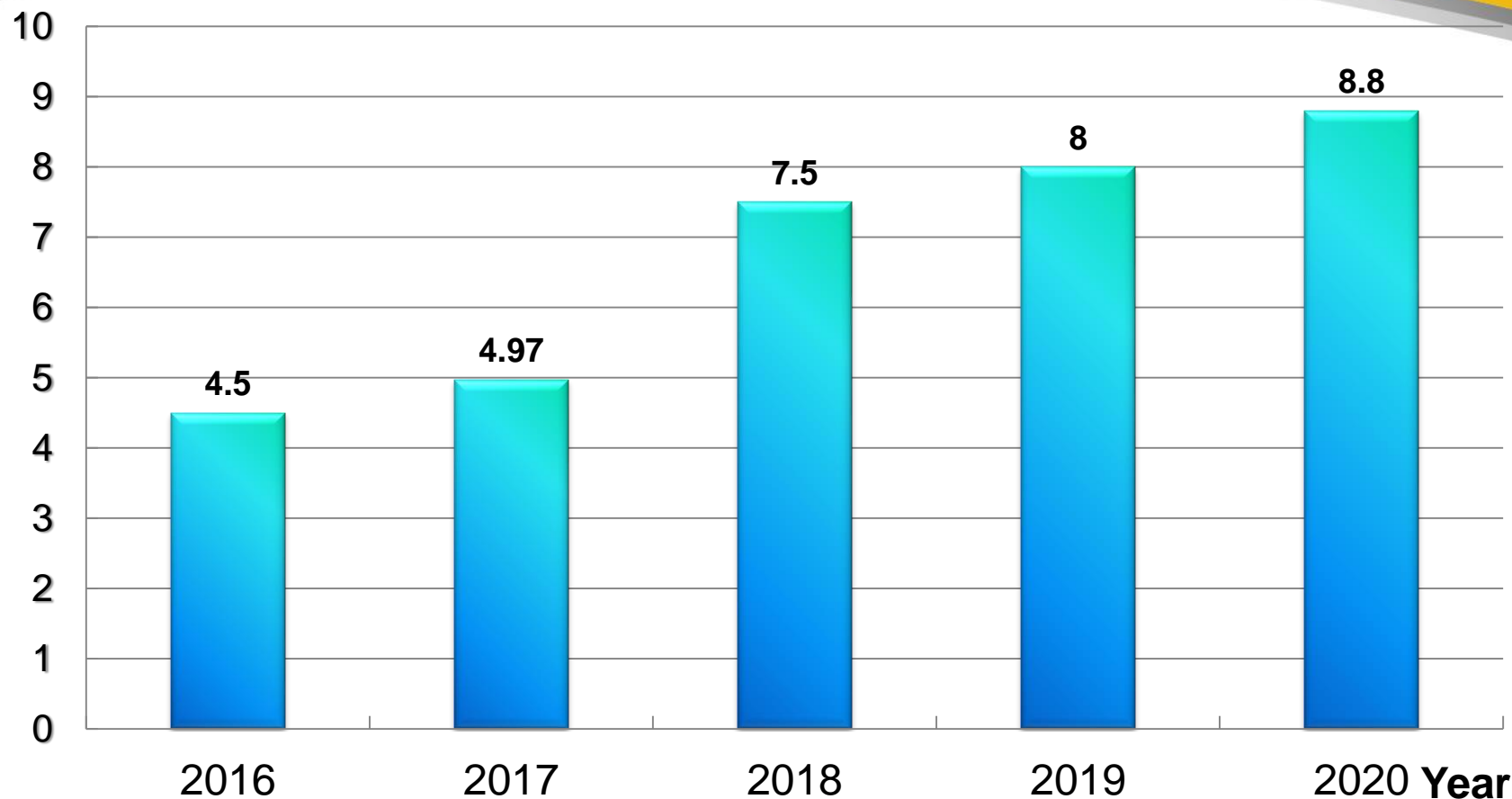
1. Revenue & Gross Margin

Unit: NT$K

	2017	2018	2019	2020	2021-H1
Revenue	2,126,329	2,272,362	2,400,002	2,564,649	1,371,036
Gross Margin	35.2%	39.3%	42.0%	43.7%	44.3%

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2. Net Margin & EPS

Unit：NT$

	2017	2018	2019	2020	2021-H1
EPS	6.4	7.41	7.83	8.67	4.61
Net Margin	18.2%	21.4%	22.75%	23.80%	23.68%

3. Percentage of Cash Dividends

NT$

	2016	2017	2018	2019	2020
NT$	4.5	4.97	7.5	8	8.8

Year

Note：Year 2020 with NT$8.8 cash dividend including NT$1 additional paid in capital

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4. Product Revenue Percentage
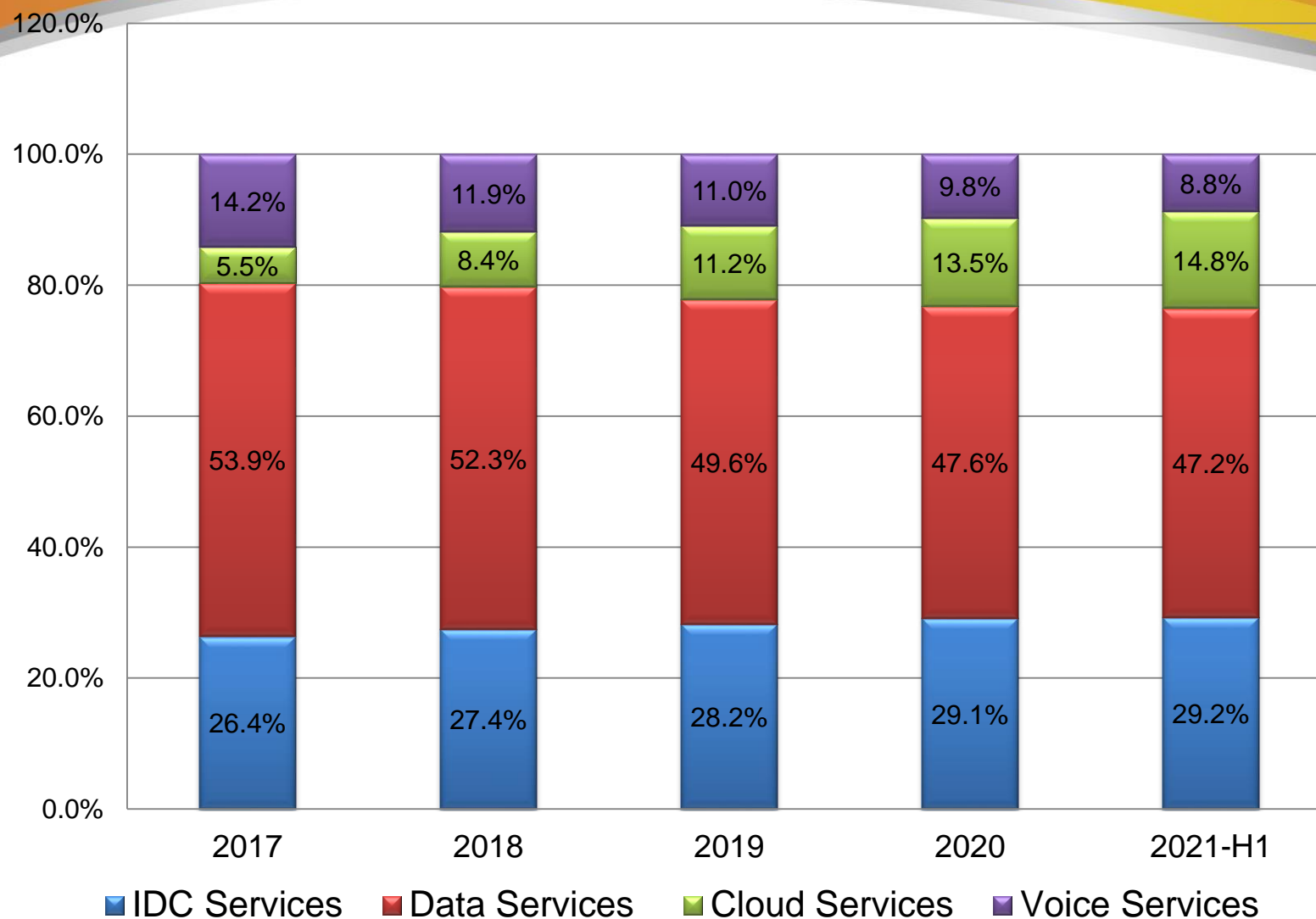
III、 **Product Line Introduction**

- Company Introduction: https://www.youtube.com/watch?v=3Mnji-3_d6Q

- ISO Information Security Quadruple Certification (27001, 27011, 27017, 27018) , DCOS-4 Certification

1. IDC Colocation Services – Carrier Neutral

- **World-class carrier neutral IDC to provide high quality IDC services**
  - World-class IDC SLA
  - Customized design and deployment
  - 99.999% power system design
  - Dual-loop UPS system and cooling system
  - Fire detection and suppression system
  - 7X24hrs NMC
  - ISO & DCOS certified

- **Rich domestic/international network & internet resources – 1st choice of PoP site set up for vender**
  - Fiber ring around three buildings to provide ultrahigh speed bandwidth
  - TPCX Cable Exchange Center
  - Richest resources for local loop access
  - Global VPN services
  - Taiwan largest TPIX Internet Exchange Center
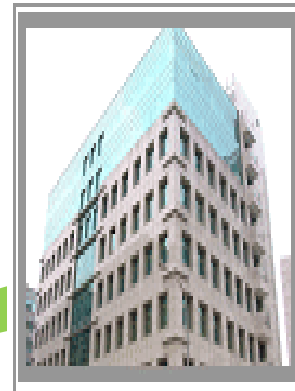 - CCX Cloud Exchange Center

Similar foreign IDC service providers:
  - Equinix, Coresite, Qts, Sakura, 21Vianet, Digital Reality, GDS

T.F.

Fiber Ring

L.Y.

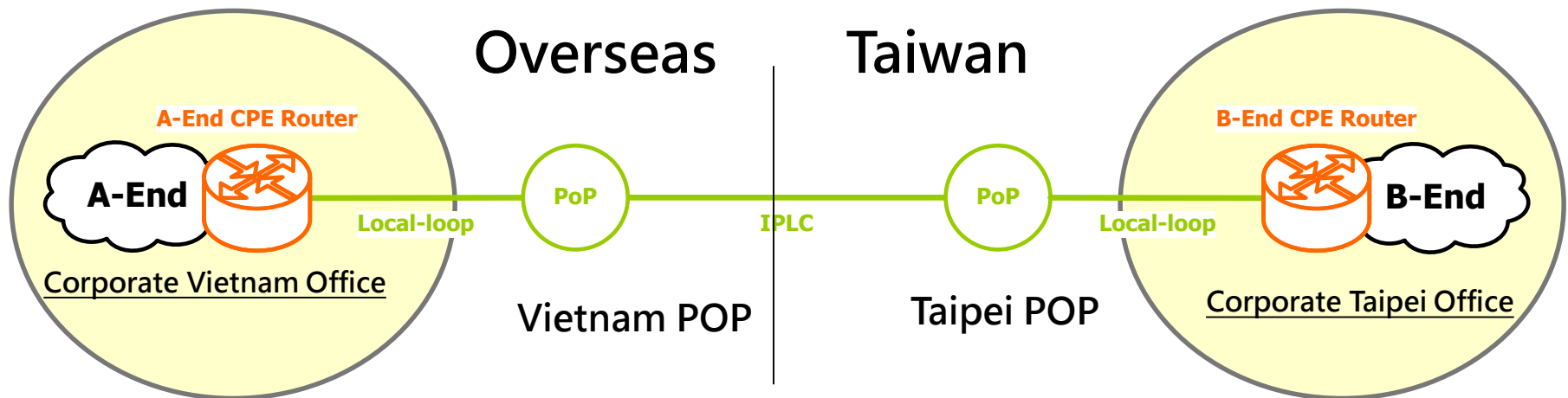**H.D.**

4th IDC (LY2 ;Y2023 H2)

2.1 Data Service – Global Internet Services

• Important Internet service hub in Taiwan with complete Internet resource, including diverse domestic ISP connections and international bandwidth.
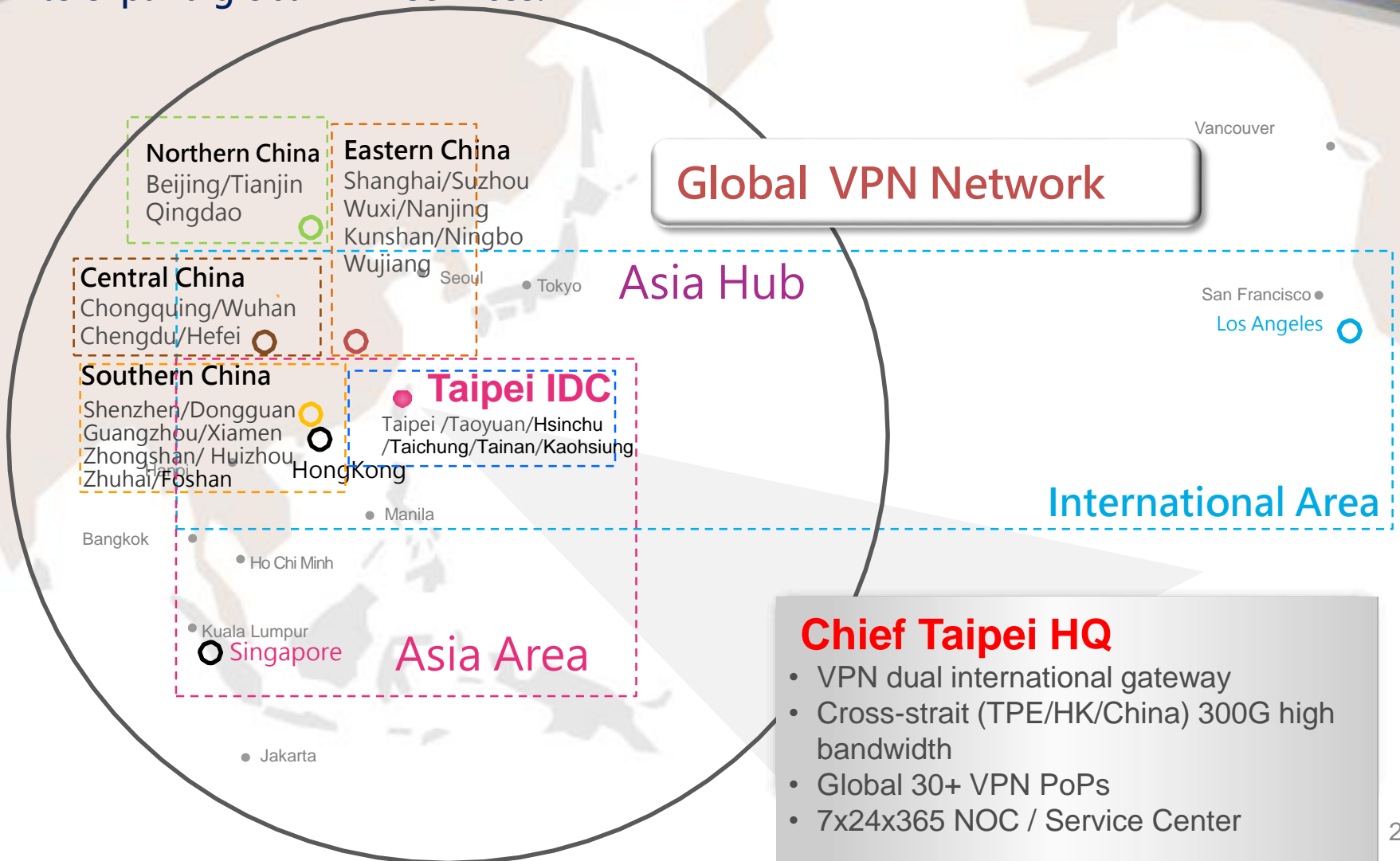

International Carriers & Submarine Cable Operators

Domestic ISP and Type II Operators

International & Domestic IX Centers
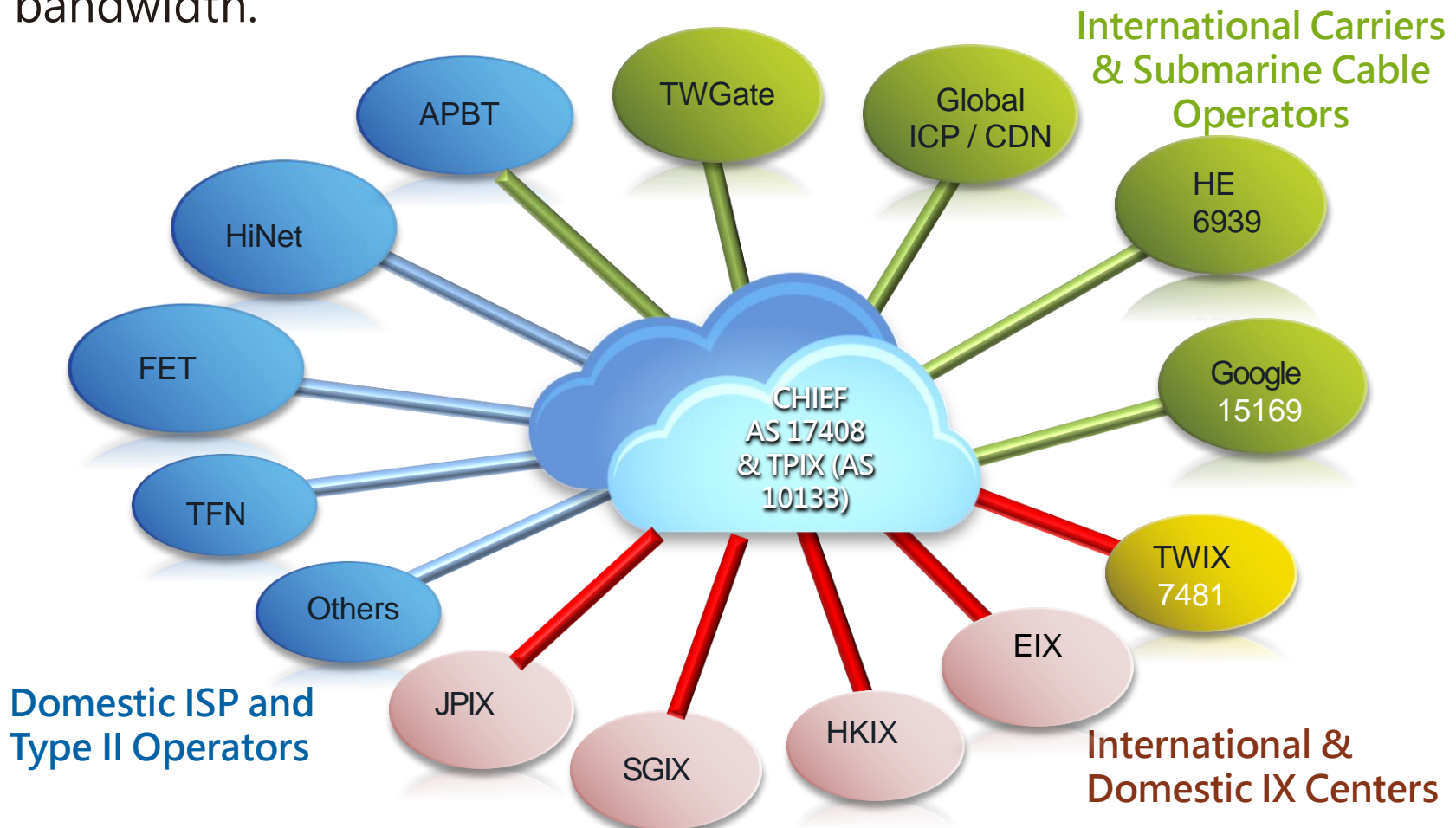
2.2 Data Service_ **IPLC**

- IPLC can be used as an **end-to-end physical transmission path for important branches of multinational enterprises.**

- With stable and high-performance **dedicated fixed bandwidth services** to provide customers with various commercial applications of the actual transmission requirement.

- Suitable for applications with **high sensitivity of transmission delay** (video/voice), or applications with **high transmission security.**

Overseas | Taiwan

A-End CPE Router

A-End

Local-loop

Corporate Vietnam Office

PoP

IPLC

Vietnam POP

PoP

B-End CPE Router

Local-loop

B-End

Corporate Taipei Office

Taipei POP

2.3 Global VPN (virtual private network) Service

With forward-looking network deployment and complete enterprise solutions to expand global VPN services.

Global VPN Network

Asia Hub

International Area

Asia Area

Northern China
Beijing/Tianjin
Qingdao

Eastern China
Shanghai/Suzhou
Wuxi/Nanjing
Kunshan/Ningbo
Wujiang

Central China
Chongquing/Wuhan
Chengdu/Hefei

Southern China
Shenzhen/Dongguan
Guangzhou/Xiamen
Zhongshan/ Huizhou
Zhuhai/Foshan

Taipei IDC
Taipei /Taoyuan/Hsinchu
/Taichung/Tainan/Kaohsiung

HongKong

Singapore

Seoul
Tokyo
Manila
Bangkok
Ho Chi Minh
Kuala Lumpur
Jakarta
Vancouver
San Francisco
Los Angeles

Chief Taipei HQ
- VPN dual international gateway
- Cross-strait (TPE/HK/China) 300G high bandwidth
- Global 30+ VPN PoPs
- 7x24x365 NOC / Service Center

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3.1 Comprehensive Cloud Solutions

- **IaaS (Infrastructure as a Service) Solution**

- **CCX (Chief Cloud Exchange) service & Hybrid Cloud Solutions**

- **Common Cloud Applications**
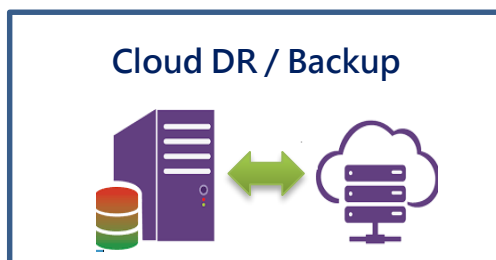 Security、syslog analysis and management、email box and audit、e-form、file storage and sharing、CRM、HRM

- **Industry Type Cloud Applications**
  Intelligent manufacturing、warehousing and supply chain management、IoT、B2B、O2O marketing、social media big data analysis、VR/AR applications
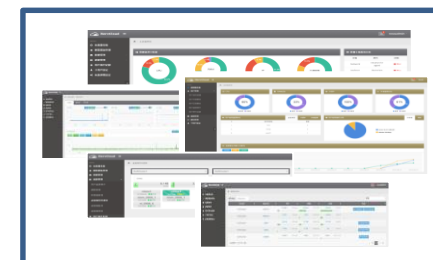
Enterprise CCX Multi-cloud / Hybrid Cloud

Enterprise Cloud Backup

Customer Service Portal

Hybrid Cloud Private Public

Cloud DR / Backup

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3.2 Cloud IaaS Solution

- Cloud data are stored in country and meet the requirements of information security and auditing (cloud data landing principle)
- Passed ISO27017/27018 cloud information security and public cloud personal information protection international certification

PaaS Level

Integrate Oracle、 Azure etc. external public cloud resources

SaaS Level

CHIEF **APP CLOUD**

Industrial Applications

- Enterprise Business Applications
- Big Data、EC
- IoT Applications
- VR/AR Computing Applications
- Digital Content Hosting, Cloud Multimedia Convergence

IaaS Level

Cloud Computing VM	Cloud Storage Data Sharing	Cloud Security Detection &Defense	Network Integration SLB	Customer Self-management Service

Cloud Application Service Deployment System

Cloud Resource and Service Management System

Cloud OS	System Platform Software	Cloud Storage System

Chief Cloud Data Center L.Y. / H.D.

3.3 CCX _Multi Cloud、Hybrid Cloud Direct Connect

High Speed、Safety、Compliance

Public Cloud

CHIEF | 是方電訊 CHIEF TELECOM

IDC

CLOUD STORAGE

aws

Google Cloud

CHIEF | 是方電訊 CHIEF TELECOM

IBM

ORACLE CLOUD

Azure

CCX Direct Connect Secure Channel

CCX

Public Internet Congestion & Security Risks

Data Localization

Enterprise Data Center

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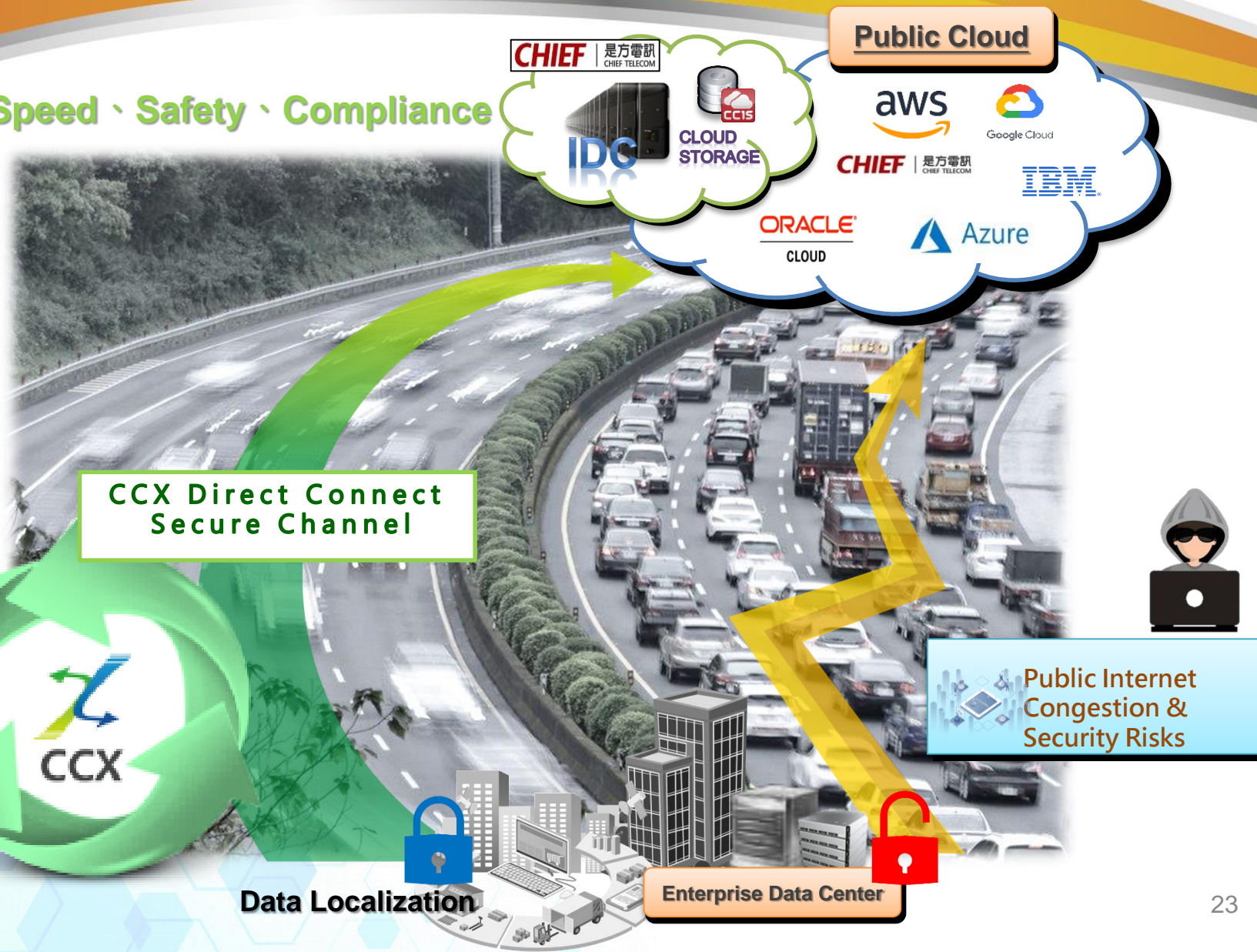
3.4 Cloud SaaS (Software as a Service)

- Smart Manufacturing
- Green environmental protection factory cloud

- Sentiment Monitoring System
- O2O Sales Marketing

Smart Manufacturing

Sales Marketing

Smart Health

AR/VR

企業商務BI

- Cloud Computing Farm
- AR/VR Applications

CHIEF APP CLOUD

CHIEF

雲端運算平台
Cloud Computing Platform

IOT
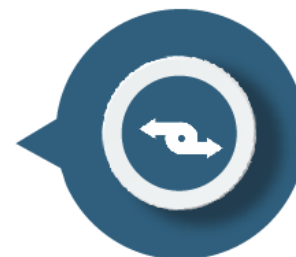
- Logistics warehousing management

- **Commercial E-Approval forms**
- **Cloud file management**
- **Cloud secured mail box**

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4. 070 Cloud PBX UC Services

070 VoIP: 1st choice for Cloud PBX Service

Cross-Operator/Network/Platform/Device
- NCC E.164 Numbers for worldwide use
- Support PC 、NB、Pad、Mobil phone
- Support mobile、ADSL、 VPN 、 Wi-Fi

Cloud IP-Centrex

Provide IP-Centrex services

Business Applications

070 business applications, UC services, 100-party video conference, recording, whiteboard, file sharing, etc.

Chief 070 Applications

Management Center

Customer web portal to manage voice services and check CDR

System Integration

Work with service providers to provider integrated solutions, such as Microsoft Teams, car parking management services, etc.
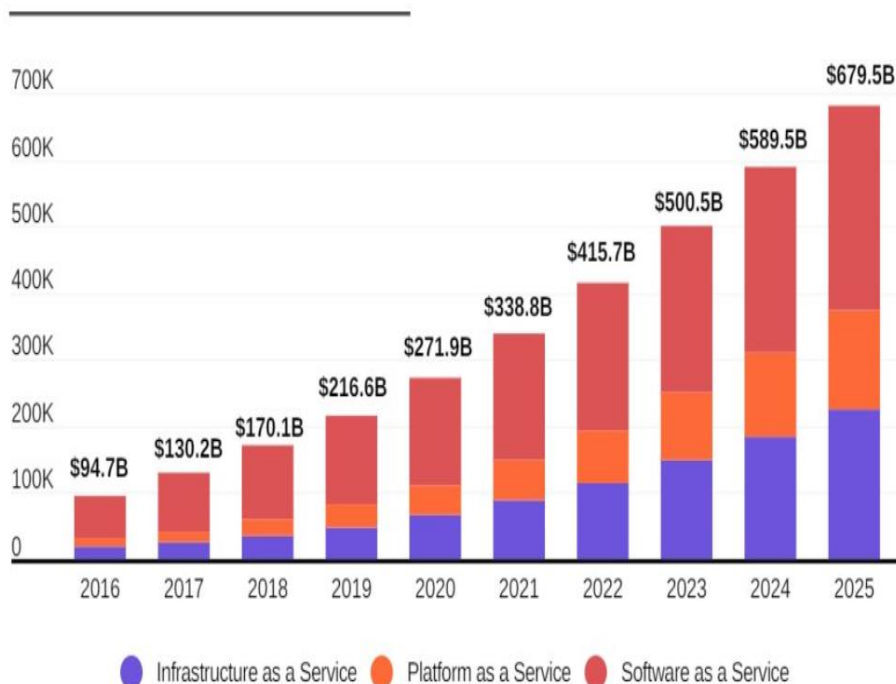
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1. **Industry Trend**

2. **Future Business Focus**

Public cloud revenues by segment, from 2016 to 2025 (in million U.S. dollars)

- $94.7B (2016)
- $130.2B (2017)
- $170.1B (2018)
- $216.6B (2019)
- $271.9B (2020)
- $338.8B (2021)
- $415.7B (2022)
- $500.5B (2023)
- $589.5B (2024)
- $679.5B (2025)

Infrastructure as a Service ● Platform as a Service ● Software as a Service

Source: Statista (Forecast adjusted for the expected impact of COVID-19), January 2021

VERIFIED MARKET RESEARCH

Global Data Center Market

2021-2028

$ 49,926.48 MILLION (2020) — CAGR 10.99% — $ 1,12,465.55 MILLION (2028)

Note 1: Amazon(32%)/Microsoft(18)/Google(6)/IBM(5)/Alibaba top 5 CSPs account for 2/3 public cloud market. 2020~2025 CAGR 20% for global cloud market in 2020~2025.

Note 2: CAGR 11% for global IDC market in 2020~2028.
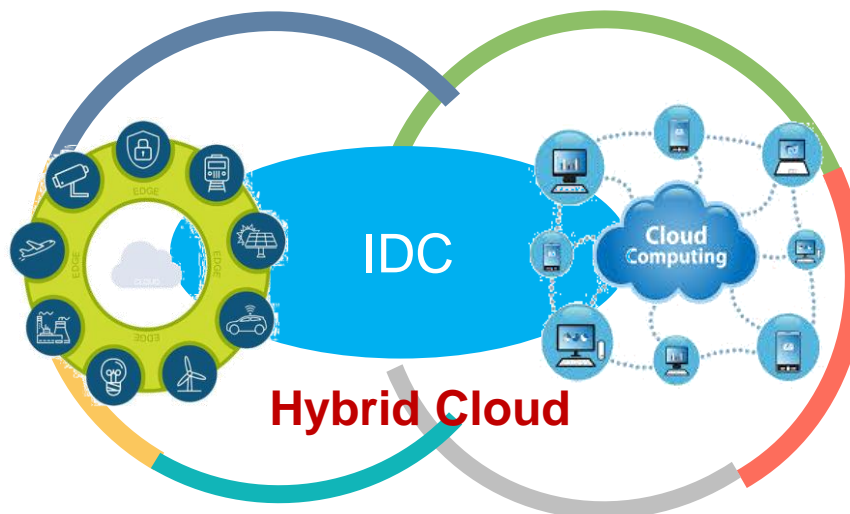
1.2 Cloud、AI、VR/AR Industry Trend

IT Infrastructure
Digital Transformation

Edge Computing

Multi Cloud

01

Big Data
Machine learning
Modeling、Tagging

IDC

Cloud Computing

AI

Hybrid Cloud

Smart Device

Smart Device

Internet of Things
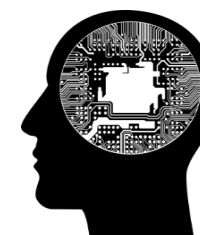
VR/AR

Popularization of 5G (speed is more than 10 times faster than 4G)
Optical fiber high-speed access is getting more popular

2.1 Future Business Focus

01 投資興建第四棟IDC機房
Investing in building the fourth IDC

02 擴大國際骨幹海纜頻寬
Expanding Submarine Cable Backbone

03 深耕東亞網路業者之合作
Cultivating the partnership with network service providers in East Asia

04 建置環島高速寬頻網路
Building island-wide high-speed broadband network

05 推展智慧健康雲服務
Promoting smart health cloud services

06 充實是方應用雲平台
Enriching Chief App Cloud

07 延伸CCX功能
Extending CCX functions

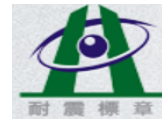**08** 東亞服務超過10個國家
Partnering over 10 countries in East Asia

2023 H2 Commercial Service

16,500 sqm Floor Area

20 MW Power Capacity

LRB Seismic Isolation Design (A series magnitude 7.0 earthquakes)

Floor Loading 2,000 kg/m²

Green/Smart Building Design

L.Y.2 Data Center 內湖舊宗路

2.3 Attract Global Service Providers to Set up Regional Data Service Center at L.Y.2

Google & Microsoft already Set up Regional Data Centers in Taiwan

4th IDC L.Y.2

Attract Global Service Providers to Set up Regional Data Service Centers at L.Y.2
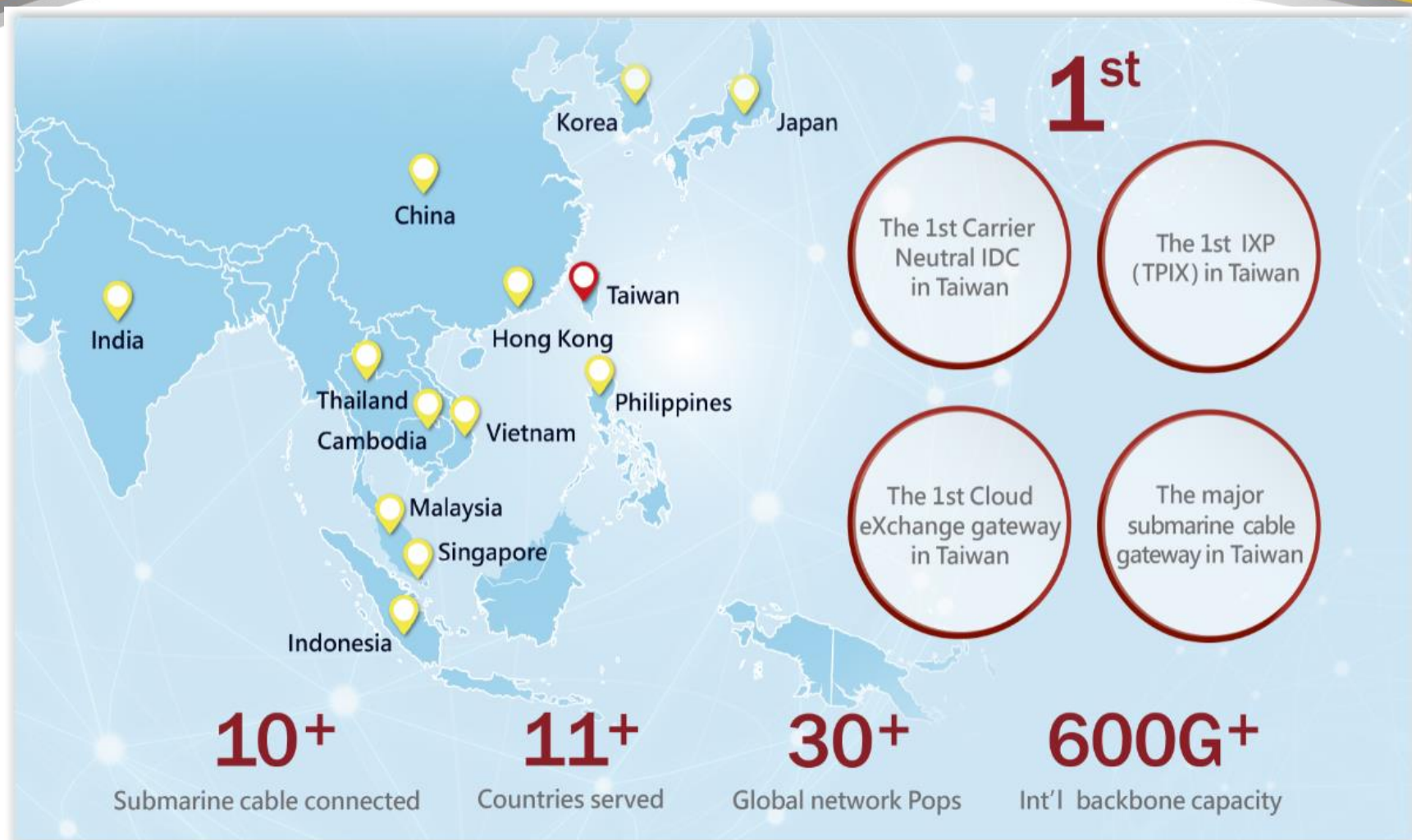
2.5 Three Rings for Service MAP
(Sufficient Domestic and Foreign Fiber Optic Cable Resources)

- Carrier Neutral IDC: All major domestic fixed-network operators have set up service PoPs in the IDC buildings.

- Optical fiber connecting 4 IDC buildings to support ultra speed bandwidth.

- Optical fiber connecting domestic 6 major cities to support ultra speed bandwidth.

- Ultra speed bandwidth to connect to Tokyo, Hong Kong and Singapore.

- Main ITMC: Taiwan's consortium and private cables Telecom building, which can directly connect to various submarine cable stations, connecting the USA, Europe, East Asia and China.

China
North-east Asia
South-east Asia

Japan

Hong Kong

Taipei

Danshui Station

Bali Station

USA
Europe

Touncheng Station

Taipei

Singapore

Taoyuan

Hsinchu

Taichung

Metro-network

Tainan

Kaohsiung

Fangshan Station

North-east Asia
South-east Asia
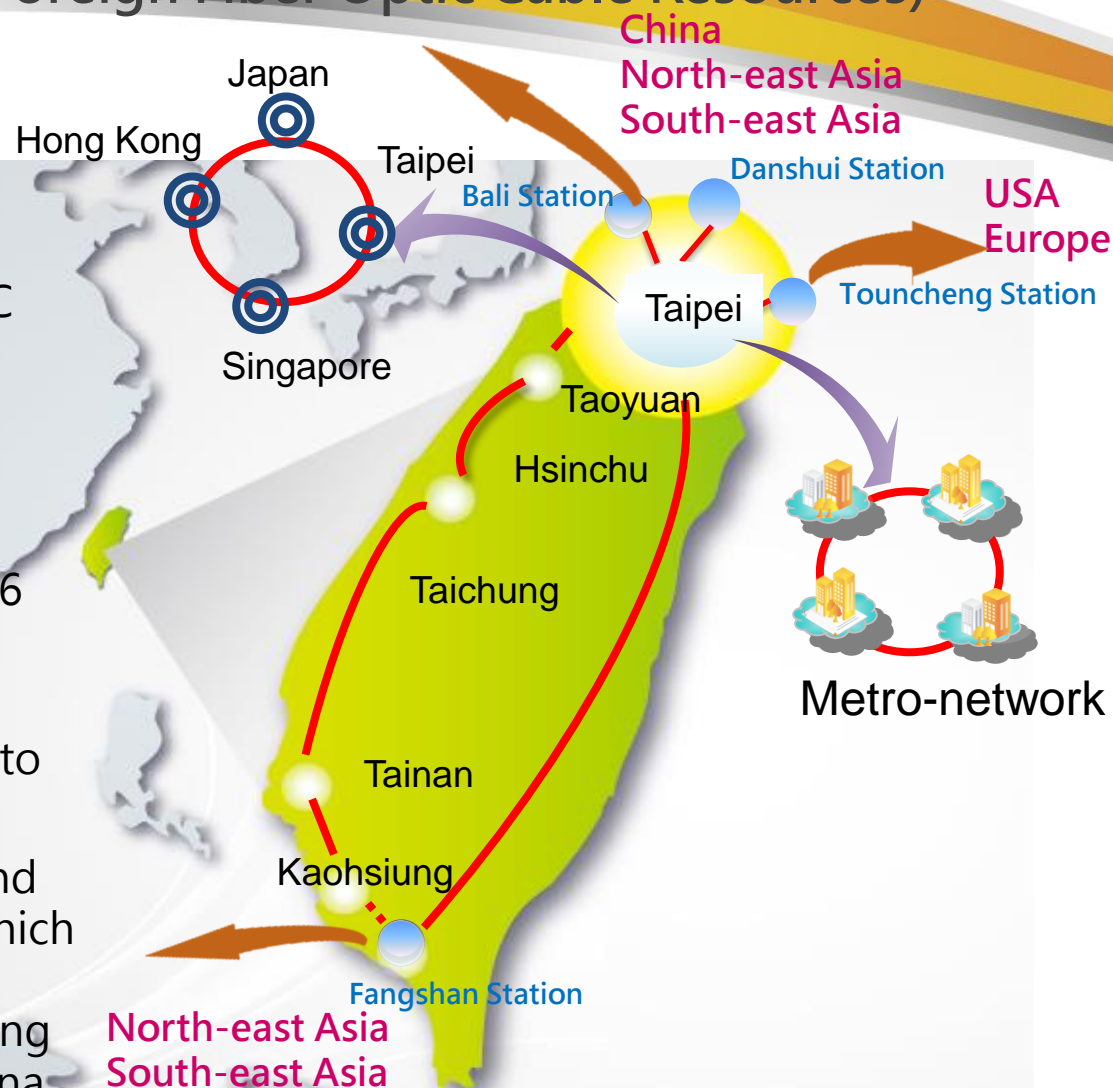
2.6 Smart Health Service「 Chief i Health App」

CHIEF | 是方電訊

Vertically Enrich Product Lines, Horizontally Multi-Platform, and Cross-border Strategic Layout

TPIX網際網路交換中心

CHIEF APP CLOUD
是方應用雲服務中心

Solutions
企業ICT 解決方案

國際級電信旅館

企業VPN網路服務運營商

CCX
是方雲端交換中心
雲端資料交換中心

Carrier Neutral
- **Local data storage**

TPIX
- **High speed internet**

Global VPN
- **Cross country secured private network**

APP Cloud
- **SaaS applications**

Cloud Center CCX
- **Direct connect to top 5 international CSPs: Google、AWS、Azure、Oracle、IBM**

- **Multi-cloud/Hybrid cloud solutions**
- **Complete ICT solutions**

ISO 27001 27011 27017 27018 **DCOS**

TREND MICRO **f5**

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2.8 Chief Telecom Flywheel

CHIEF | 是方電訊
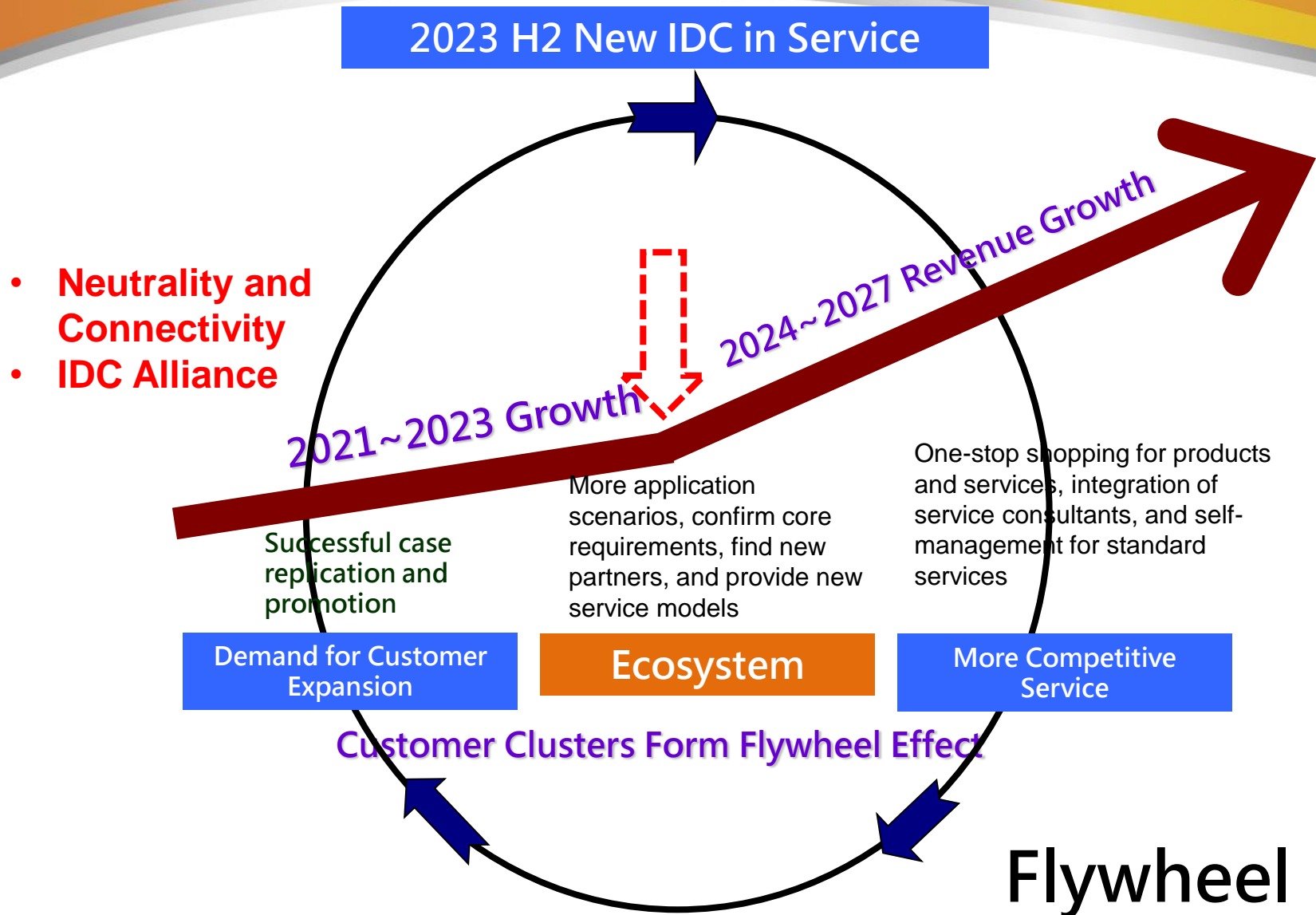
Become East Asia Digital Convergence and AI、Cloud Business Application Center
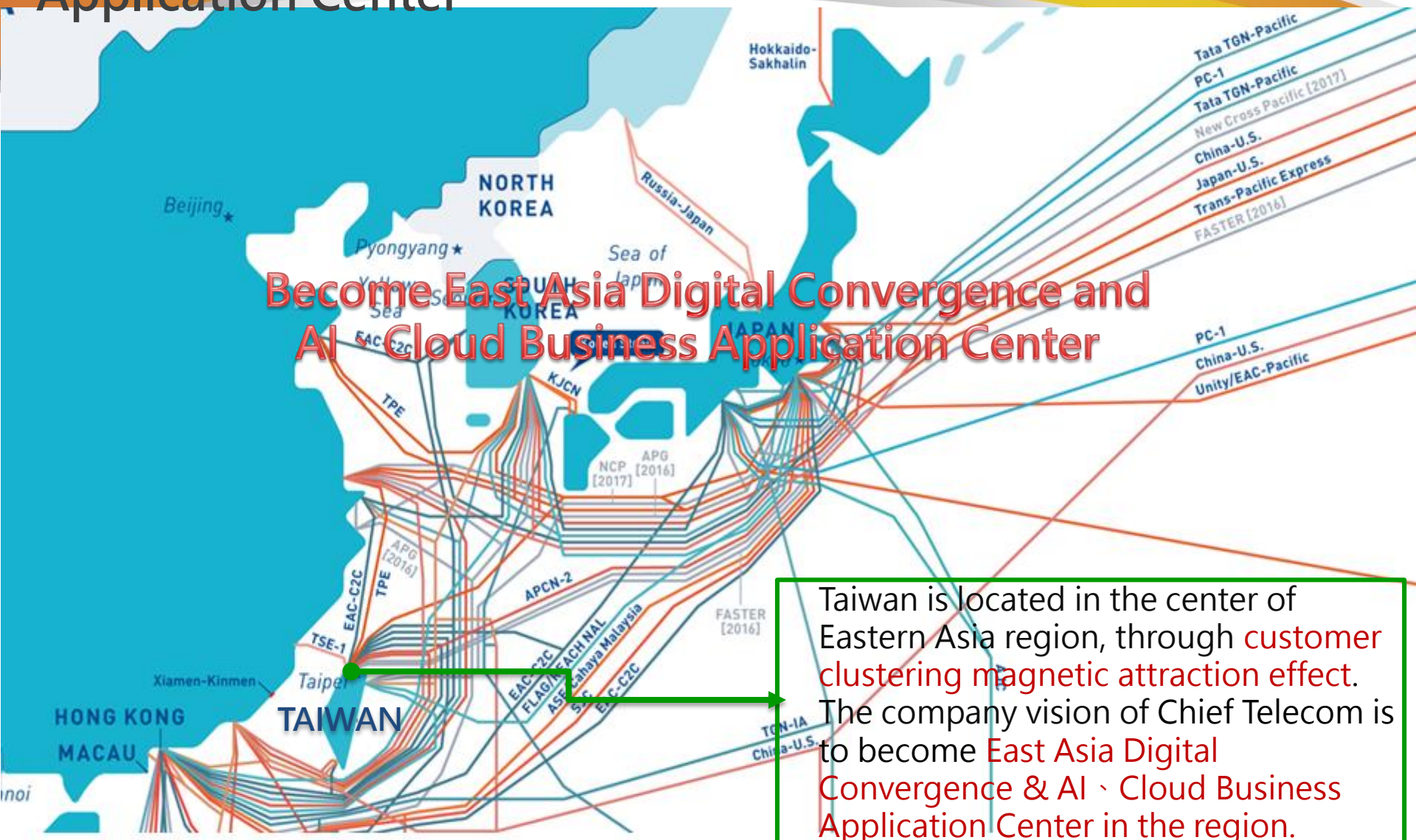
Taiwan is located in the center of Eastern Asia region, through customer clustering magnetic attraction effect. The company vision of Chief Telecom is to become East Asia Digital Convergence & AI、Cloud Business Application Center in the region.

Thank You

https://www.chief.com.tw