

Building a Fully Connected, Intelligent World



NetX2025 **GUIDE** to the Future Network



Outlook for The Next 10 Years

Technology Driven

Cloud computing

- Penetration: 100% enterprise

AI is becoming mature

- Deep learning, artificial neural network



Business Driven

Service type

- Consumer services → industrial services
- Best effort → controllable assurance

Customer type

- 2C/2H → 2B + 2C/2H

Business and Technology Drive the Evolution of Telco Networks...



SDN/NFV have transformed network productivity

5G drives digital transformation accelerating

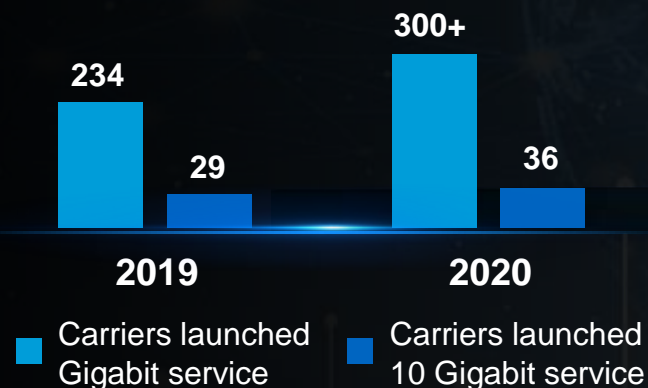
AI promotes the leap from human intelligence to machine intelligence

Services change is the key for target network planning

**Business oriented
target network planning
for the next 10 years**

1 All-scenario Services Lead **Gigabit Anywhere**

Gigabit service is exploding



Source: Omdia

20%
5G connect % in 2025 (1.8Bn)
187 mil.
Gigabit FBB users in 2025

100% coverage: 100Mbps
UL & DL @1Gbps
(Selected areas)

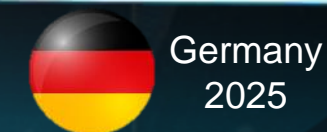
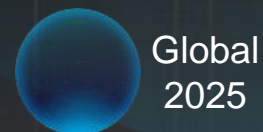
Gigabit Germany
Gigabit on entire
network

Gigabit UK
Gigabit to 15 mil.
users

2021

.....

2025



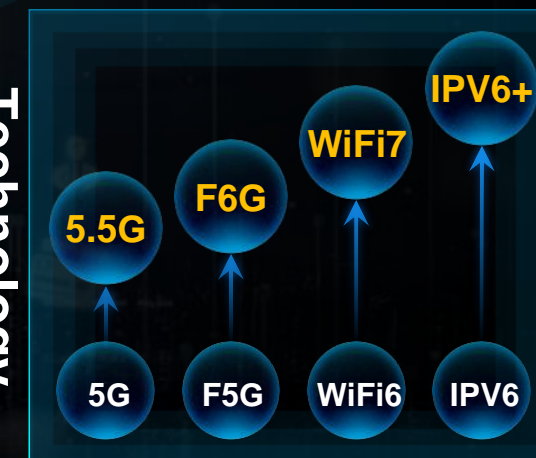
Source: Omdia / DSM 2025



Business Driven

Gigabit Anywhere 2025

Technology Driven



2 BigData & Intelligence Enable **Ultra-Automation**

Ultimate 2B service experience

DIY
service

Second-level
cloud + network provisioning

Cloud-network resource
management and visualization

E2E experience from subscription, usage to payment

Business Driven

2025

Technology Driven

Top 10 strategic technology trends in 2020

Trend No 1. **AUTOMATION**

Target: DTO + AI-driven Decision-making

Digital twin of the organization (DTO)

Gartner

100X

Industry network
connection density with 5G

10000

Number of 5G parameters
to be configured

5G requires ultra-automation
Leave simplicity to people and complexity to AI

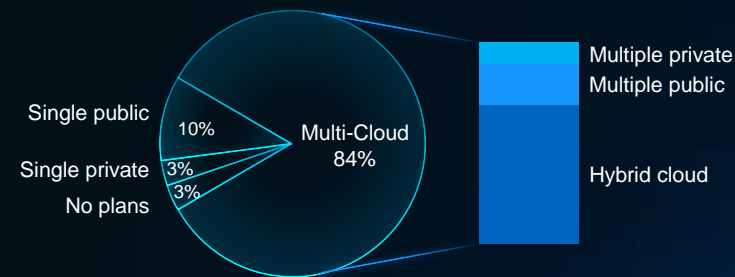
**Ultra-
Automation
2025**

- More accurate planning
- Faster deployment
- Simplified O&M
- More efficient optimization

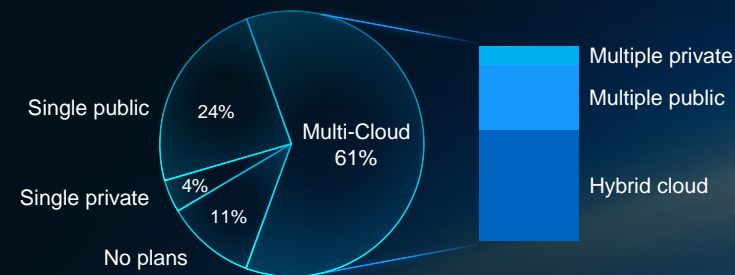
3 Industrial Digitization Requires **Intelligent Multi-Cloud Connection**

Business Driven

Enterprises embrace multi-cloud



84% large enterprises @ multi-cloud



61% SMEs @ multi-cloud

source: RightScale cloud report 2019

Intelligent Multi-Cloud Connection

2025

Aggregated Clouds Infrastructure

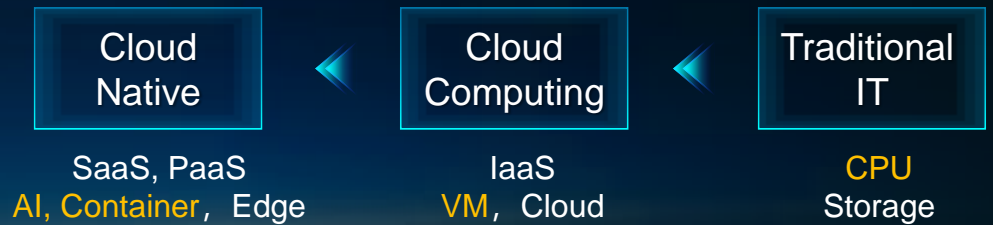
- MEC + Own Cloud + Partner Cloud
- One account for access and self-service

Intelligent Cloud-Network

- One line to multiple clouds
- One-click network and cloud access
- Full mesh between clouds

Technology Driven

Cloud evolution



IP evolution



APN: Application-aware IPv6 networking

4 Demand Diversities Promote **Differentiated Experience** for Monetization

Business Driven

100
Mbps, uplink
20
ms, latency

Huawei southern factory
PCB check @ 5G industry camera

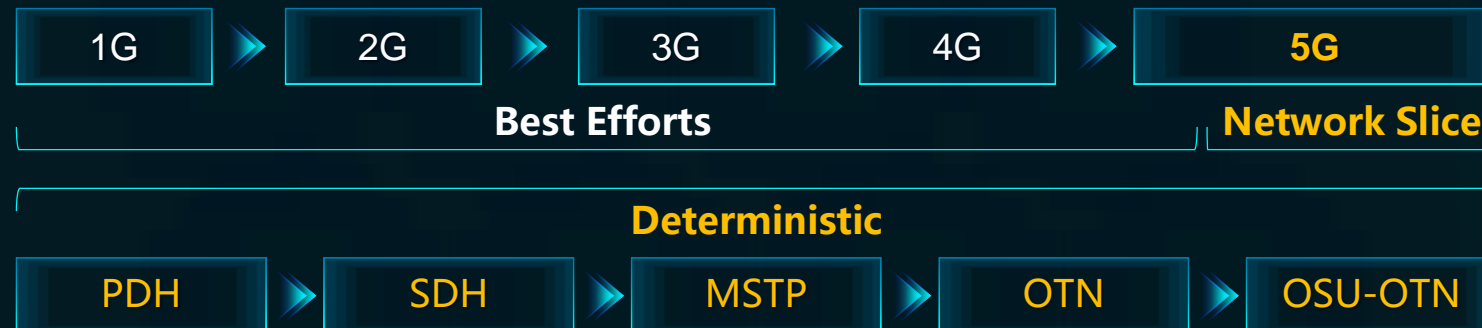
x8
Chinese
operator X

Premium price for 0.6ms latency
private line

10K
Thailand's 3XX

New users of 100ms latency
FTTR service in the first month

Technology Driven



**Differentiated
Experience**

2025

**Base
Tariff**

Best Efforts

2G/3G/4G/5G, PON...

**+ Experience
Premium**

Deterministic
Experience

Slicing, Private line → Network...

(deterministic
bandwidth & latency....)

5 Environmental Harmony for Sustainable Development

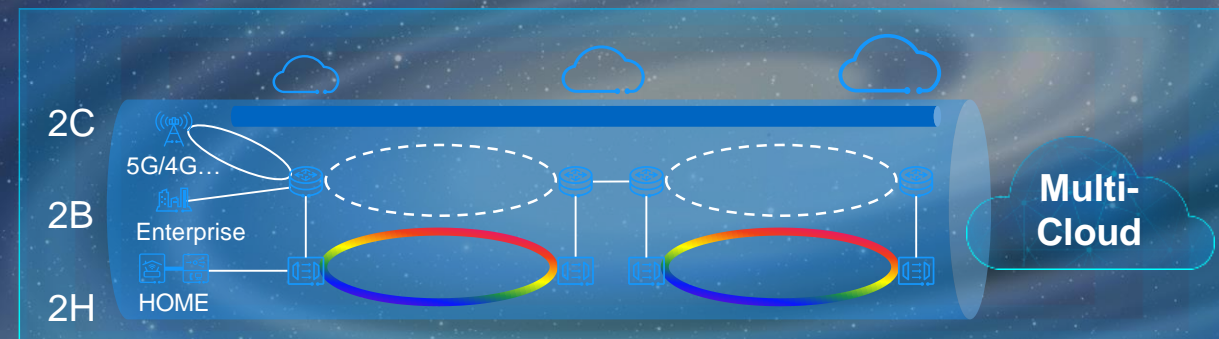


NetX2025, **GUIDE** to the Future Network

All-scenario Services Lead
Gigabit Anywhere

1

For Access



Demand Diversities Promote
Differentiated Experience for Monetization

4

For Business

For Sustainability

Environmental Harmony
for Sustainable Development

5

Industrial Digitization Requires
Intelligent Multi-Cloud Connection

3

For Application

For O&M
BigData & Intelligence Enable
Ultra-Automation

2

Building a Fully Connected, Intelligent World



NetX2025 Technical White Paper

