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NEC

NEC accelerates services business leveraging network strengths under the new brand "NEC Smart Connectivity"

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General Manager, Digital Services Solutions Division

Takashi Sato

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NEC brings together and integrates technology and expertise to create the ICT-enabled society of tomorrow.

We collaborate closely with partners and customers around the world, orchestrating each project to ensure all its parts are fine-tuned to local needs.

Every day, our innovative solutions for society contribute to greater safety, security, efficiency and equality, and enable people to live brighter lives.

Rapidly growing wave of digitization

Number of IoT devices

40.3 billion units

Creating wide ranging connections between people and things

311

241

75

76

World's population

7.7 billion

2016   2018   2020

Source: White Paper on Information and Communications 2018
United Nations Population Forecast

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Services and technologies that are expected to expand in the future

City
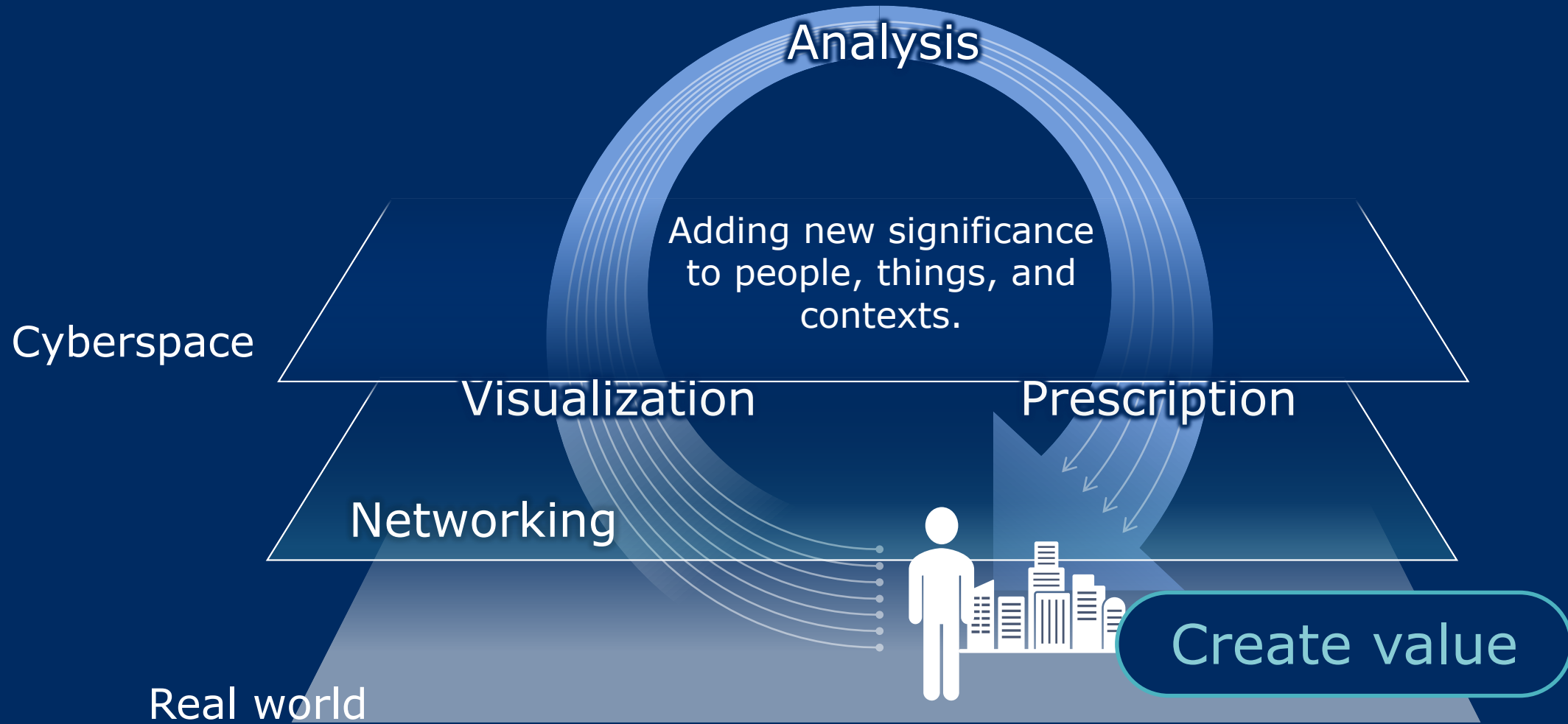
Life

Work

Transport
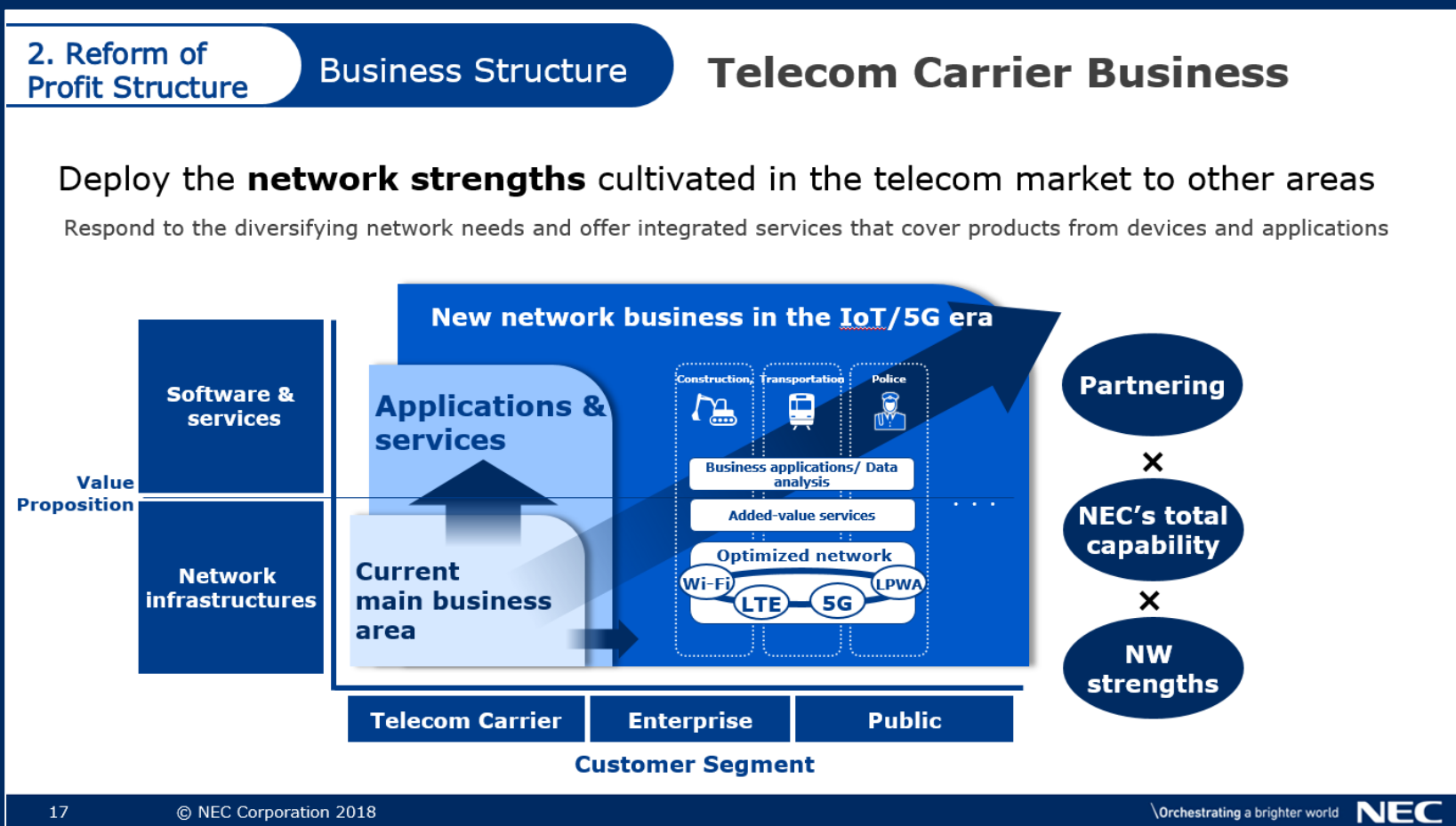
Agriculture

Stadium

Health Tech

Retail Tech

Fin Tech

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Role of the network in the realization of services

Analysis

Adding new significance to people, things, and contexts.

Cyberspace

Visualization   Prescription

Networking

Real world

Create value

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Developing Network Strengths

- Mid-term Management Plan 2020: deploy the network strengths cultivated in the telecom market to other areas
- Leverage partnerships, NEC's total capability and NW strengths

Developing Network Strengths

In collaboration with various enterprise companies and local governments, expand business domains by leveraging strengths

Civil Engineering

Developer & Telecom carrier
Remote control of heavy machinery using 5G

Transport

Subway & Content provider
Signage system combining LTE and Wi-Fi

Security

Local governments
Watch over cities using the LPWA
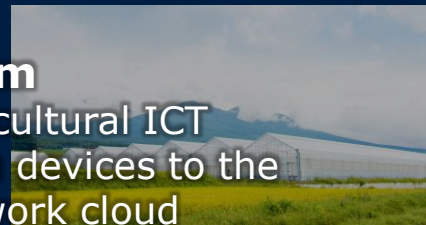
Gas
Improving LP gas delivery and efficiency using LPWA

Retail
Computerization of tax exemption procedures using the cloud

Farm
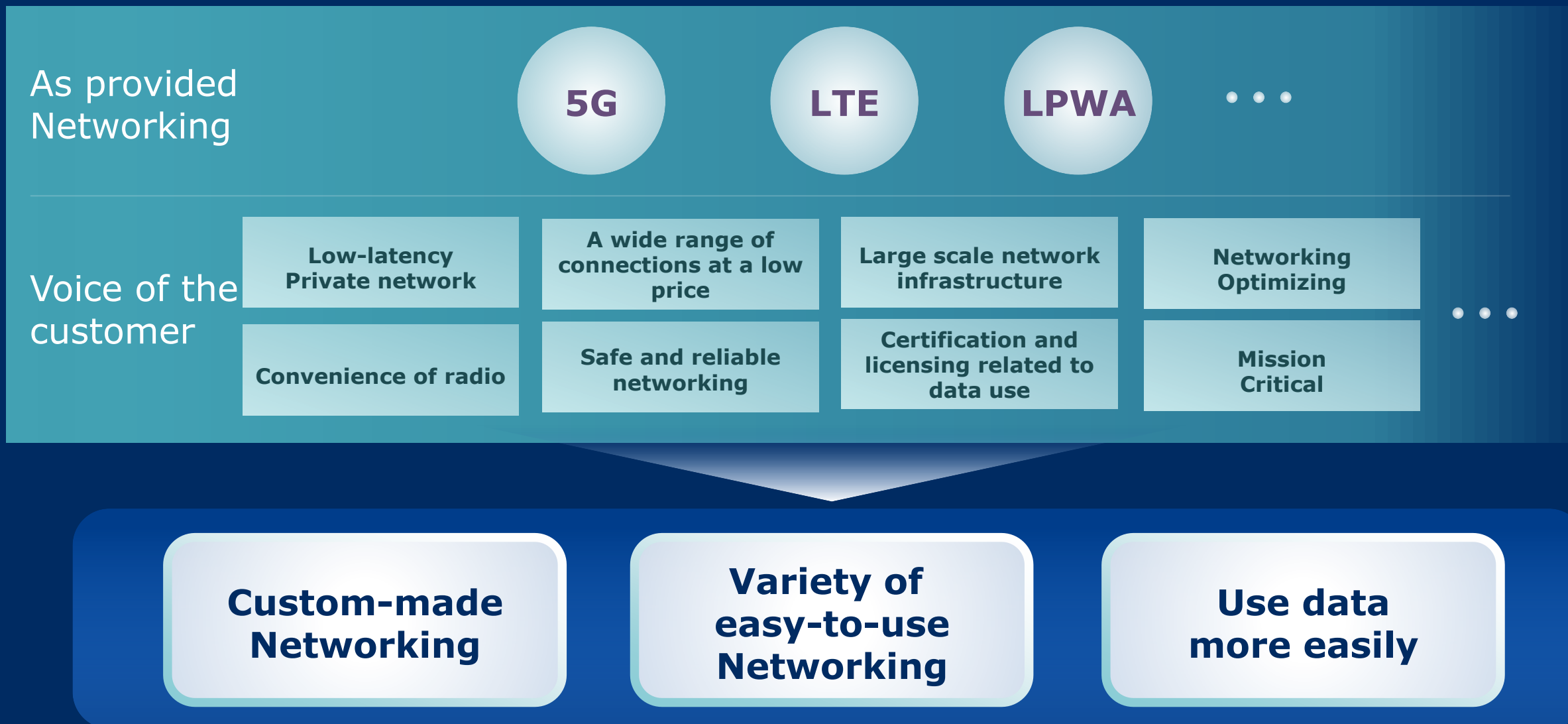Agricultural ICT from devices to the network cloud

TV & Telecom carrier
AR swimming games using 5G

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Need for Future Networks

As provided Networking	**5G**	**LTE**	**LPWA**	. . .

Voice of the customer	Low-latency Private network	A wide range of connections at a low price	Large scale network infrastructure	Networking Optimizing	. . .
	Convenience of radio	Safe and reliable networking	Certification and licensing related to data use	Mission Critical	

Custom-made Networking	**Variety of easy-to-use Networking**	**Use data more easily**

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NEC Smart Connectivity

Changing Network Common Sense

With the spread of 5G and IoT, the volume of data flowing through networks
continues to increase. It becomes more complex.

NEC therefore considered innovative data distribution.
The network itself possesses "intelligence" and assesses the other party or situation
All data is judiciously connected.
With technologies that connect everything from the seafloor to space,
Freely control the network.

Connect unconnected data to the world.
The door to new business is now open.

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NEC Smart Connectivity

1 Flexible and Safe

2 Simple and Fast

3 The right information for the right people and things
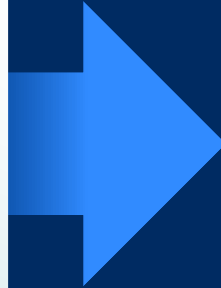
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1 Flexible and Safe

Combine expertise in various industries and communications technologies to meet large-scale needs
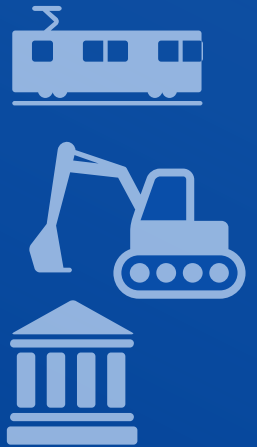Providing flexible, secure, custom-made connectivity

Strength

- Expertise in various industries
- Knowledge of communications
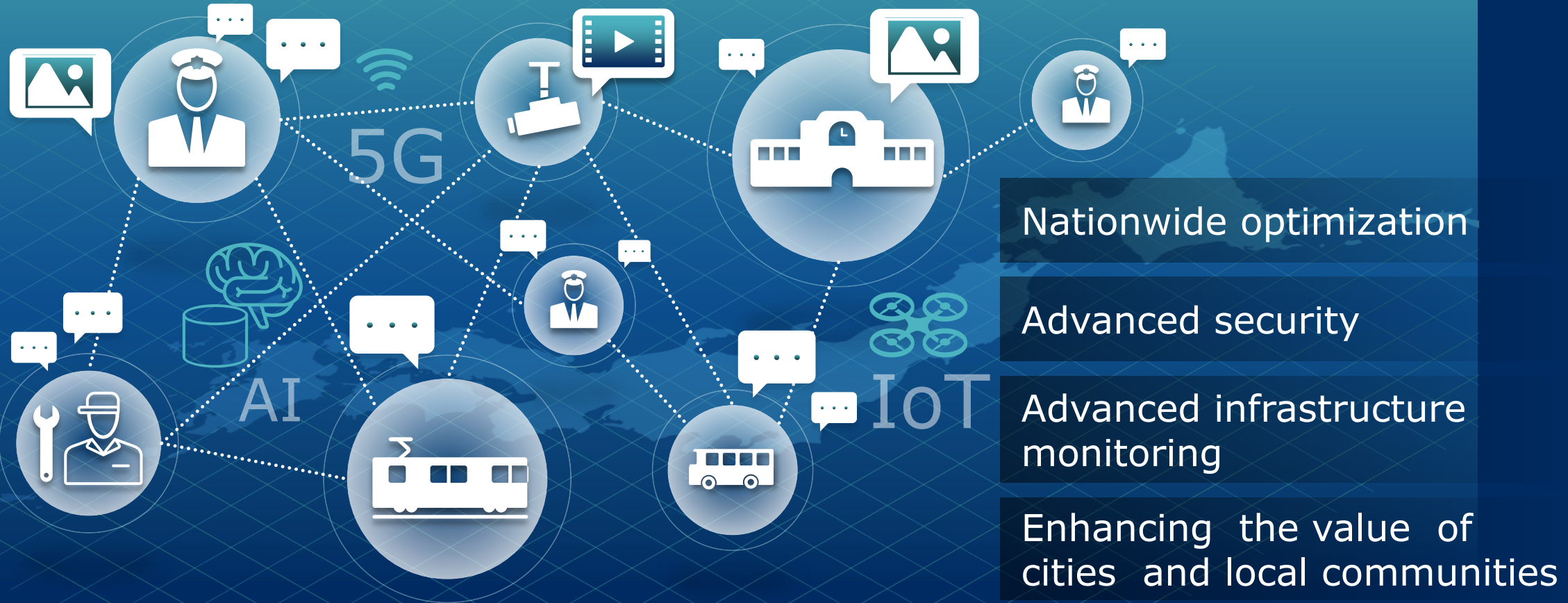- Success building large-scale network infrastructure

Market

Infrastructure market

- Railway
- Civil Engineering
- Local government

etc.

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Use case: Transportation

Provide custom-made connectivity to nationwide transportation and telecommunications networks by leveraging large-scale construction expertise and expanding applications

5G

AI

IoT

Nationwide optimization

Advanced security

Advanced infrastructure monitoring

Enhancing the value of cities and local communities

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2 Simple and Fast

Providing Services as "Multiconnectivity"
through a wide variety of communication methods

Strength

- Knowledge of the properties of a wide range of networks
- Networking can coordinate and operate platforms and human resources

Market

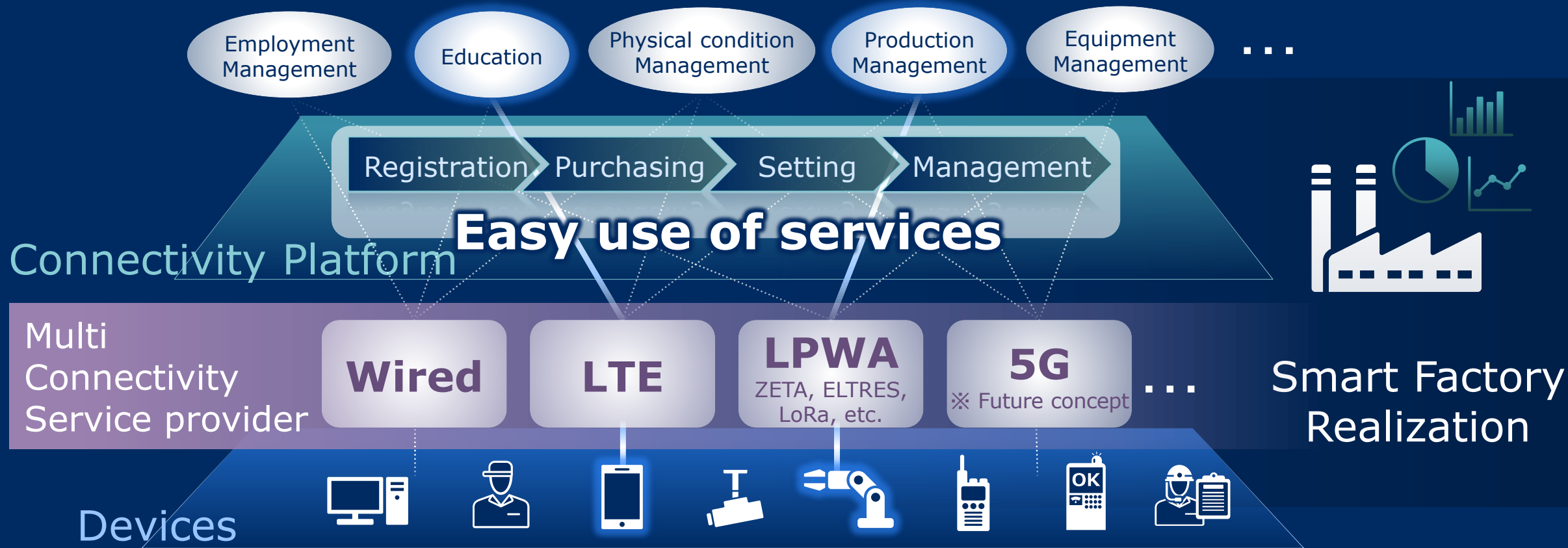- Retail
- Manufacture
- Local government
- Civil Engineering

etc.

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Use case: Smart Factory

-We offer a variety of connectivity in one-stop, including 5G, LTE, and LPWA
-Comprehensively provide everything from consulting to installation and operation
-Supporting optimized use of connectivity

Employment Management

Education

Physical condition Management

Production Management

Equipment Management

...

Registration ➤ Purchasing ➤ Setting ➤ Management

Easy use of services

Connectivity Platform

Multi Connectivity Service provider

Wired

LTE

LPWA ZETA, ELTRES, LoRa, etc.

5G ※ Future concept

...

Smart Factory Realization
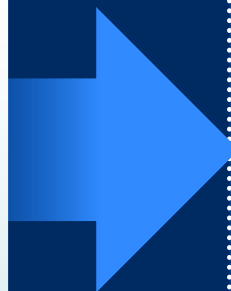
Devices

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3 The right information for the right people and things

Extract necessary data from a large amount of data.
Providing connectivity and enhancing the value of information.

Strength

- Achievements handling large amounts of data
- AI
- Biometric authentication /Security

Market

- Retail
- Finance
- Local government

etc.

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3 Use case

With authentication and identity collaboration as the cornerstone, NEC will newly connect large amounts of data and extract valuable data from big data

Connecting the data from various companies and local governments

Creating safe, secure communities

Connecting IDs with data from multiple stores, including e-commerce

Improvement of purchasing experience

| Authentication and identity collaboration | Data linkage | API collaboration | Anonymized | Block chain |

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Reinforcing business promotion structure

Accelerate business

Consolidate communications assets

Device
SI
Multi Connectivity
Software

Strengthen NEC group synergies

500 people

Integrated 500 member NEC Smart Connectivity team

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Co-creation Initiatives

New social value through joint creation
and promotion of creative communities

Establishment of the
"NEC Smart Connectivity Lab"

5G Co-Creation Working
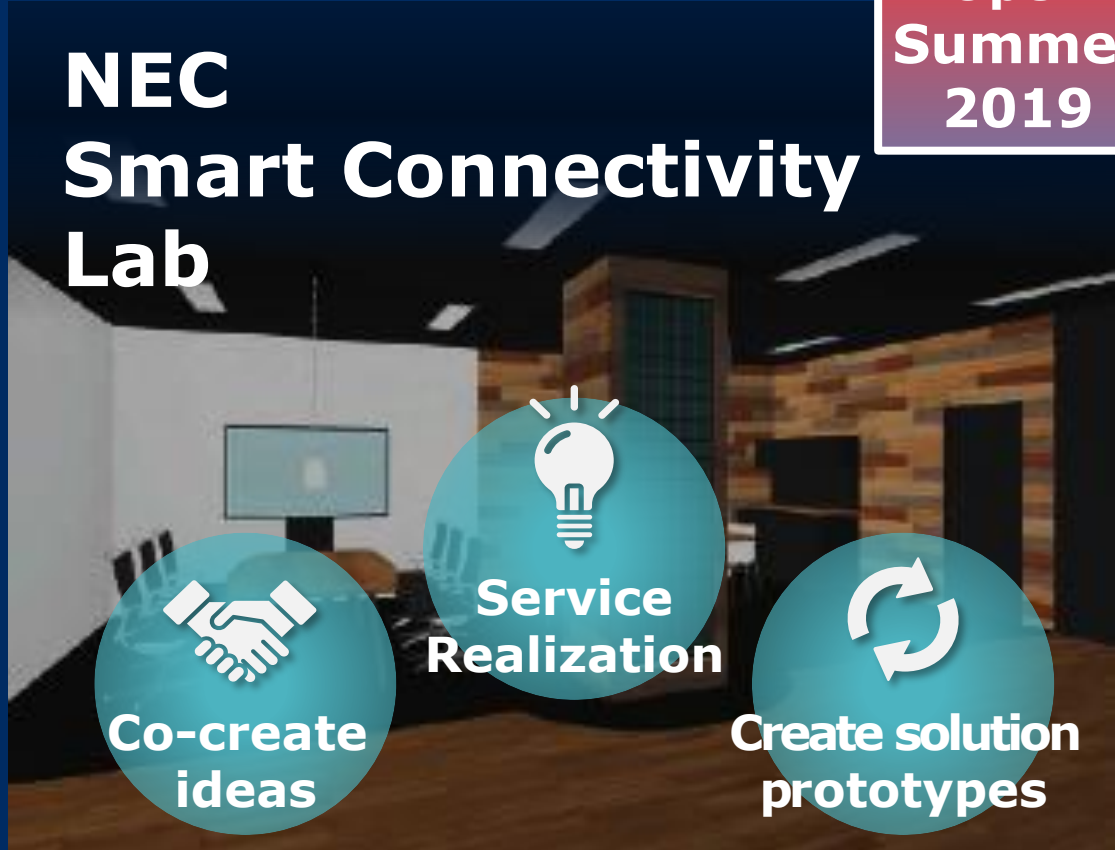
Since 2018 Autumn

Construction WG

Transportation WG

Retail WG

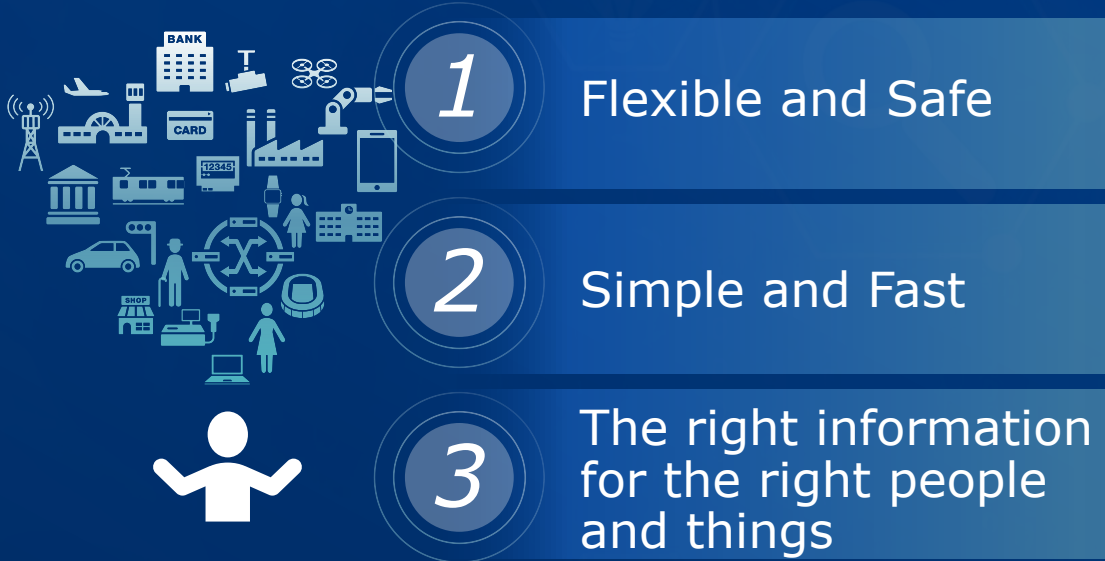**NEC Smart Connectivity Lab**

Open Summer 2019

Co-create ideas

Service Realization

Create solution prototypes

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Summary

Three Value Provisions

1. Flexible and Safe
2. Simple and Fast
3. The right information for the right people and things

NEC Smart Connectivity Market Expansion

500 people

Joint Innovation Activities

NEC aims to achieve net sales of **100 billion** yen from NEC Smart Connectivity related business in **FY 2021**

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