

EU Industry Week 2021

Orchestrating a brighter world

NEC

# Industrial transition towards digital economy

NEC Corporation  
Chairman of the board  
Dr. Nobuhiro Endo

# Evolution of ICT capabilities (1995~2020)

## Computing Power

(Processing performance of a supercomputer)

2.6M times<sup>\*1</sup>

A process that took 1 year to complete 25 years ago, now takes only 12.1 seconds

## Network

(Mobile network transmission speed)

1M times<sup>\*2</sup>

Time required to send data on 1 CD:  
150 hours -> 0.5 sec

**Human society has acquired the ability to collect large amounts of data instantly and process it instantly.**

(Top500 the List)

(NTT Docomo)

(\*1: Comparing of the processing performance of the world's fastest supercomputers in each year )

(\*2: Comparing 2nd and 5th Generation Transmission Rates in Mobile Communications )

# ICT provides a new "digital infrastructure"



**Security**



**Dynamic**

**AI Software**  
(Application)



9048045321352135485058493580268766  
46879746846900000000000000000000  
74704527021000000000000000000000  
57945368756000000000000000000000  
89795214014000000000000000000000  
0909670346033715090204599059006059  
19378000000000000000000000000000



**Data**  
(Digital Data)

08491870498157000000000000000000  
67827562058000000000000000000000  
48045321352135213521352135213521352  
08460337150000000000000000000000  
05482154528000000000000000000000  
0857485980556875648688754908323701  
33200000000000000000000000000000

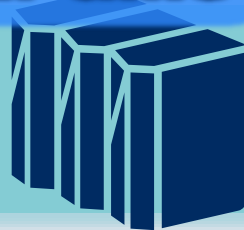


**Remote**



**Physical Systems**  
(Network & Computer)

**Real-time**



# Covid-19 Upended Lifestyle

how we communicate, connect and create?

Release from location constraints  
Remote function (ICT)

Release from time constraints  
Real Time function (ICT)

Remote Work



“Creating values in a **distributed company**”  
more control over place and time

E-commerce



E-education /  
E-healthcare

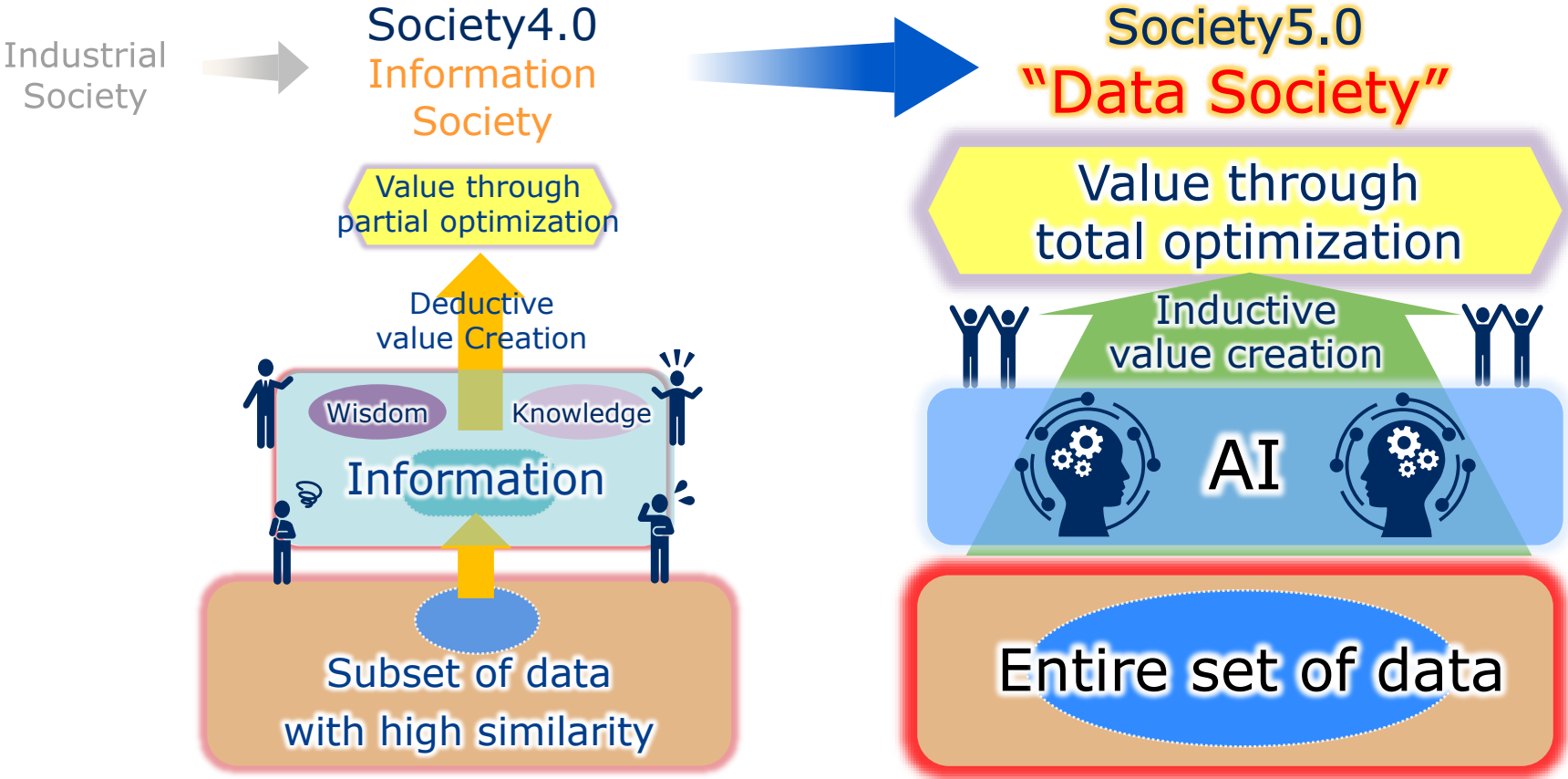


**Proactive value creation**  
**Importance of Autonomy**

Remote  
manufacturing



# Changes in the sources of value and in the value creation process



# Total optimization creates higher value

## Smart city



Energy



Energy Plant



Supply Chain



Vehicle



Healthcare



Hospital



Industry



Factory Workplace



Global Environment



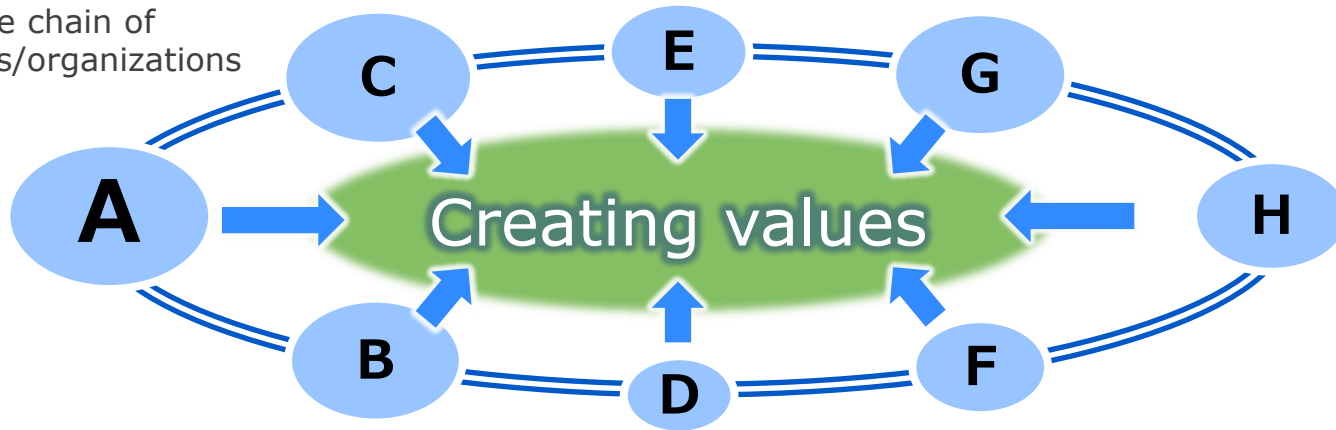
Local Climate

# Value Chain Collaboration

Maximizing professional competitiveness

Maximizing contributions in value chain

Value chain of companies/organizations



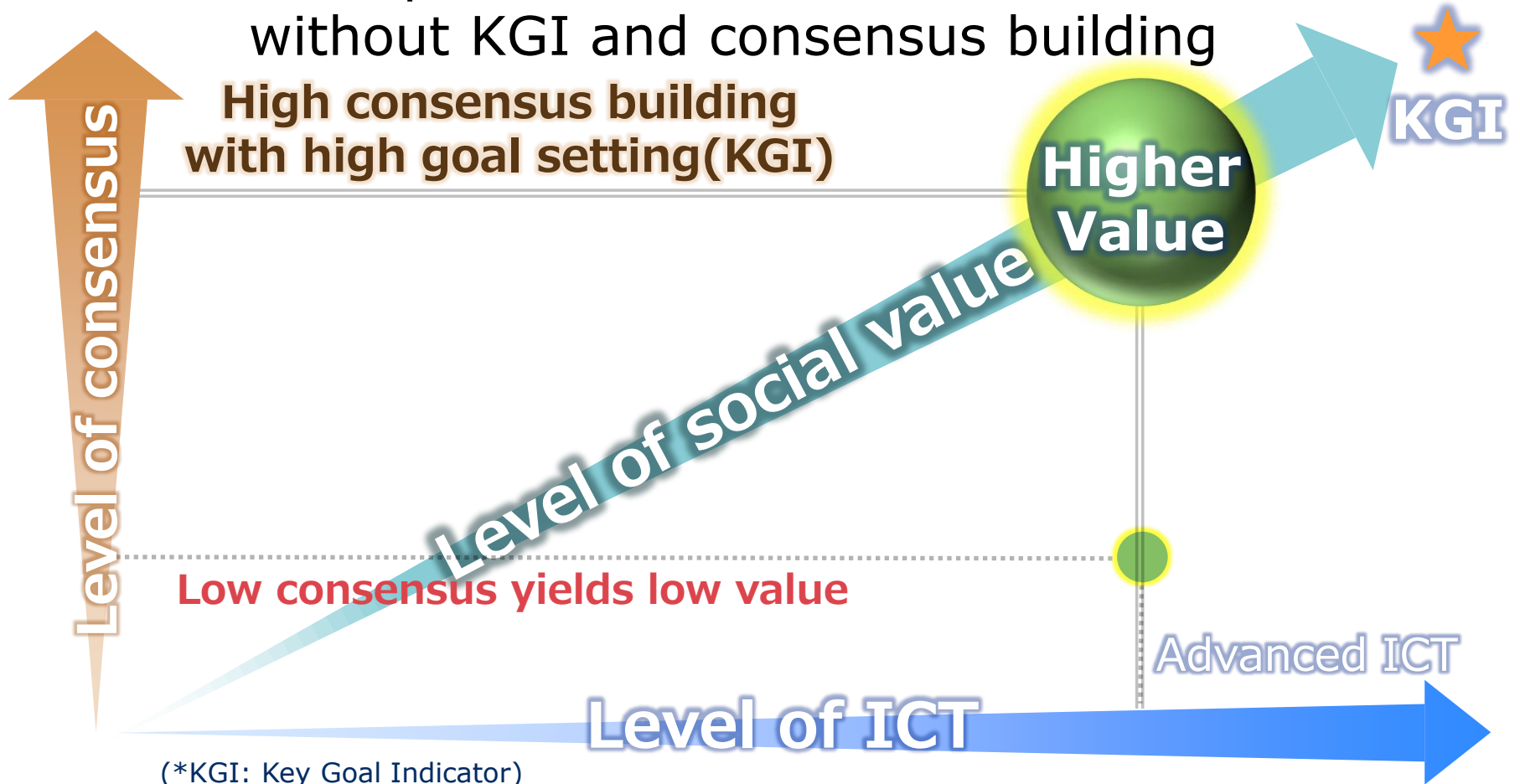
**Fundamental Strength of the Chain**

Maximizing the use of advanced ICT

Aligning ICT capabilities higher in the value chain

Total optimization cannot be achieved without KGI and consensus building

High consensus building with high goal setting(KGI)



(\*KGI: Key Goal Indicator)



# NEC's Social Value Creation by ICT

## Orchestrating a brighter world

### The Seven Themes for Social Value Creation

-  Sustainable Earth
-  Safer Cities & Public Services
-  Lifeline Infrastructure
-  Communication
-  Industry Eco-System
-  Work Style
-  Quality of Life

### SDGs



**Real time**

**Dynamic**

**Remote**

Computing

Network

Software & Data

# New value creation with digital technology

## Finger Print Authentication for children



Immunization

World's first scalable child fingerprint identification solution (1-5 years old)



Scanner / Application

Child fingerprint engine

**simprints**  
every person counts



Orchestrating a brighter world

**NEC**



## India Logistics Data Services

For NICDC

(National Industrial Corridor Development Corporation Limited)

\*formerly known as DMIC

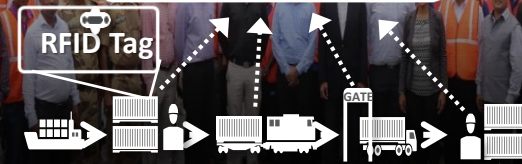


Sharing the tracking information



Reduction of leading time

Inventory Reduction



Real Time Tracking

Orchestrating a brighter world

**NEC**

# Two sides of the same coin



Companies play an essential role in the design of society's long term vision

 **Orchestrating** a brighter world

**NEC**