

FMAC2022

3rd Facility Management Asia Conference

IR 4.0 in the New Normal:
The Future of
Facilities Management

13-14
DECEMBER
2022

Le Meridien Hotel
Kota Kinabalu

Shaping a Humane World:
IR 4.0 and the new Society 5.0

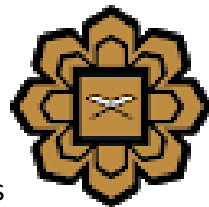
Dzulkifli Abdul Razak



United Nations
Educational, Scientific and
Cultural Organization



UNESCO Chair of Futures Studies
- Anticipation for Sustainability and
Well-being



الجامعة الإسلامية العالمية ماليزيا
INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA
يُؤْتِيهِمُ اللَّهُ مِنْ فَضْلِهِ
Garden of Knowledge and Virtue



GREATER GOMBAK



REGIONAL CENTRE OF EXPERTISE
ON EDUCATION FOR
SUSTAINABLE DEVELOPMENT

ACKNOWLEDGED BY



UNITED NATIONS
UNIVERSITY

an international award-winning Institution for Sustainability

The Fourth Industrial Revolution

Klaus Schwab

Founder and Executive Chairman,
World Economic Forum

“
THE FOURTH
INDUSTRIAL REVOLUTION
WILL AFFECT THE VERY
ESSENCE OF OUR
HUMAN EXPERIENCE.”

KLAUS SCHWAB
FOUNDER & EXECUTIVE CHAIRMAN,
WORLD ECONOMIC FORUM



"The development
of full artificial
intelligence
could spell

**THE END
OF THE
HUMAN
RACE."**

-Stephen
Hawking

Hawking
-Stephen

RACE"

Fourth Industrial Revolution

The Leadership Dilemma

Techno- vs Human-centric

Hi-tech- vs Hi-touch

New vs RE-newed Normal

Dzulkifli Abdul Razak

NO one left behind

Humanity + Planet

Rahmatan lil Alamin

The Humane Experience?



The **First** to Fourth Industrial Revolutions



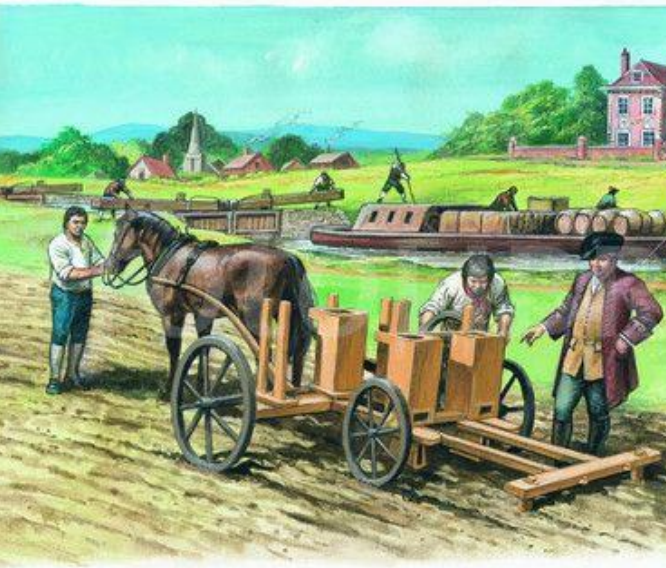
Industry 1.0
Steam

Industry 2.0
Electricity

Industry 3.0
Computing

Industry 4.0
Cyber-Physical Systems

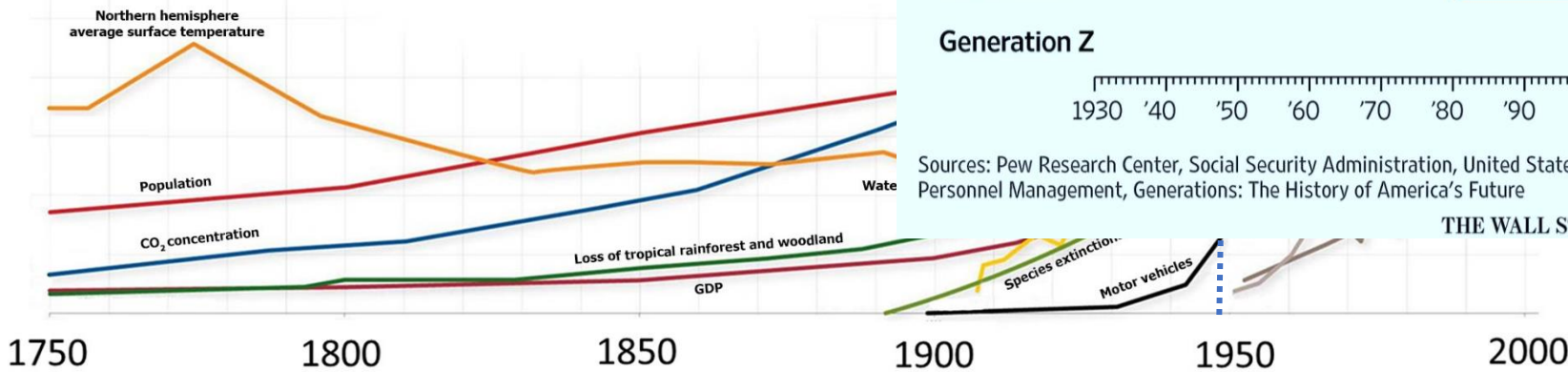
...a human disconnect?...



Measures of the Anthropocene: 1750 to 2000

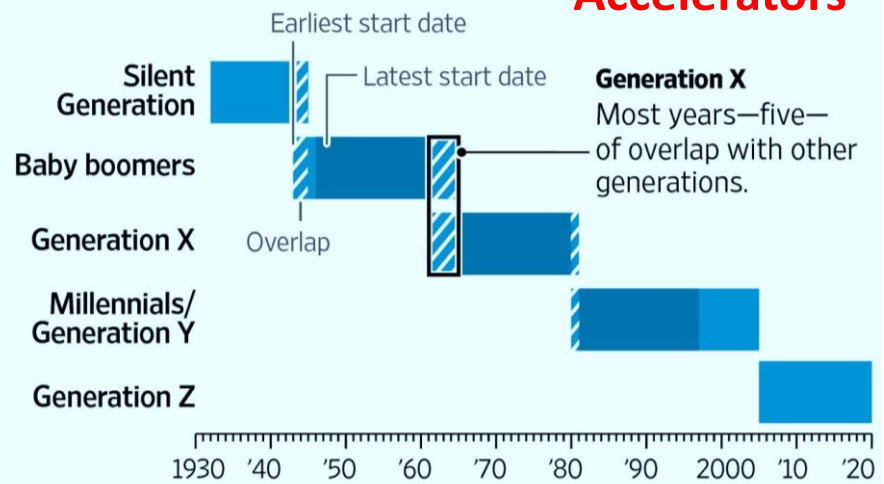
Sources: New Scientist (October 2008);
Global Change and the Earth System (2004),
International Geosphere-Biosphere Program

- Temperature
- Population
- CO₂
- GDP
- Loss of Forests
- Water use
- Species
- Paper
- Motor vehicles
- Fisheries
- Foreign
- Ozone



The Great Acceleration

“Generation Accelerators”



Sources: Pew Research Center, Social Security Administration, United States Office of Personnel Management, Generations: The History of America's Future
THE WALL STREET JOURNAL.

Agricultural Society

IR 1.0

IR 2.0

IR 3.0

IR 4.0



Peter Drucker

**We are becoming aware
that the major questions
regarding technology are
not technical
but human questions**

Source: "Technology Management and Society" (1970), page 76

Massive meta-analysis finds loneliness has increased in emerging adults in the last 43 years

by **Mane Kara-Yakoubian, Jan 17, 2022**

According to a meta-analysis of 345 studies, loneliness levels have linearly increased **between 1976 and 2019**, suggesting loneliness may be of rising concern in emerging adulthood. This research was published in [Psychological Bulletin](#).

The meta-analysis, "[Is Loneliness in Emerging Adults Increasing Over Time? A Preregistered Cross-Temporal Meta-Analysis and Systematic Review](#)", was authored by Susanne Buecker, Marcus Mund, Sandy Chwastek, Melina Sostmann, and Maike Luhmann.



THE
TRANSHUMANIST
PARTY

WHAT WILL YOU CHOOSE?



TRANSHUMANISM



Transhumanism (abbreviated as H+ or h+) is an international cultural and intellectual movement with an eventual goal of fundamentally transforming the human condition by developing and making widely available technologies to greatly enhance human intellectual, physical, and psychological capacities.



TRANSHUMANISM

towards a
“TRIPLE S”
CIVILISATION

- > superintelligence
- > superlongevity
- > superhappiness

Nanotech data storage
memory system

Increased frequency range
parabolic hearing

Smart Skin

Solar protected

Tone - texture
changeability

Internal Layer

In vivo fiberoptic
communications spine

Replacement organs

Turbocharged suspension
flexibility

Metabrain

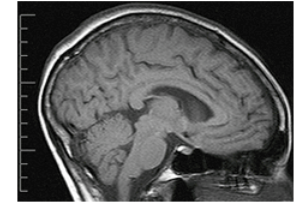
Substrate Autonomous Persons

Brain backup / memory transfer

Error correction device -

instant data relay and feedback

Network sonar sensors map
info onto visual field

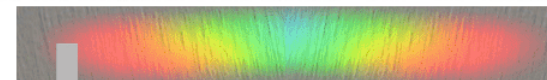
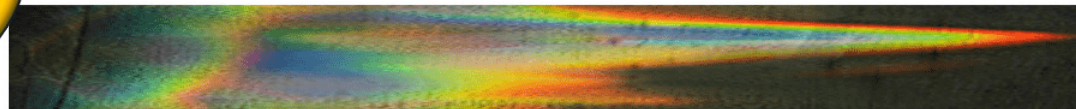


Platform diverse system External Layer

Biosensors externally
stimulate atmospheric tension

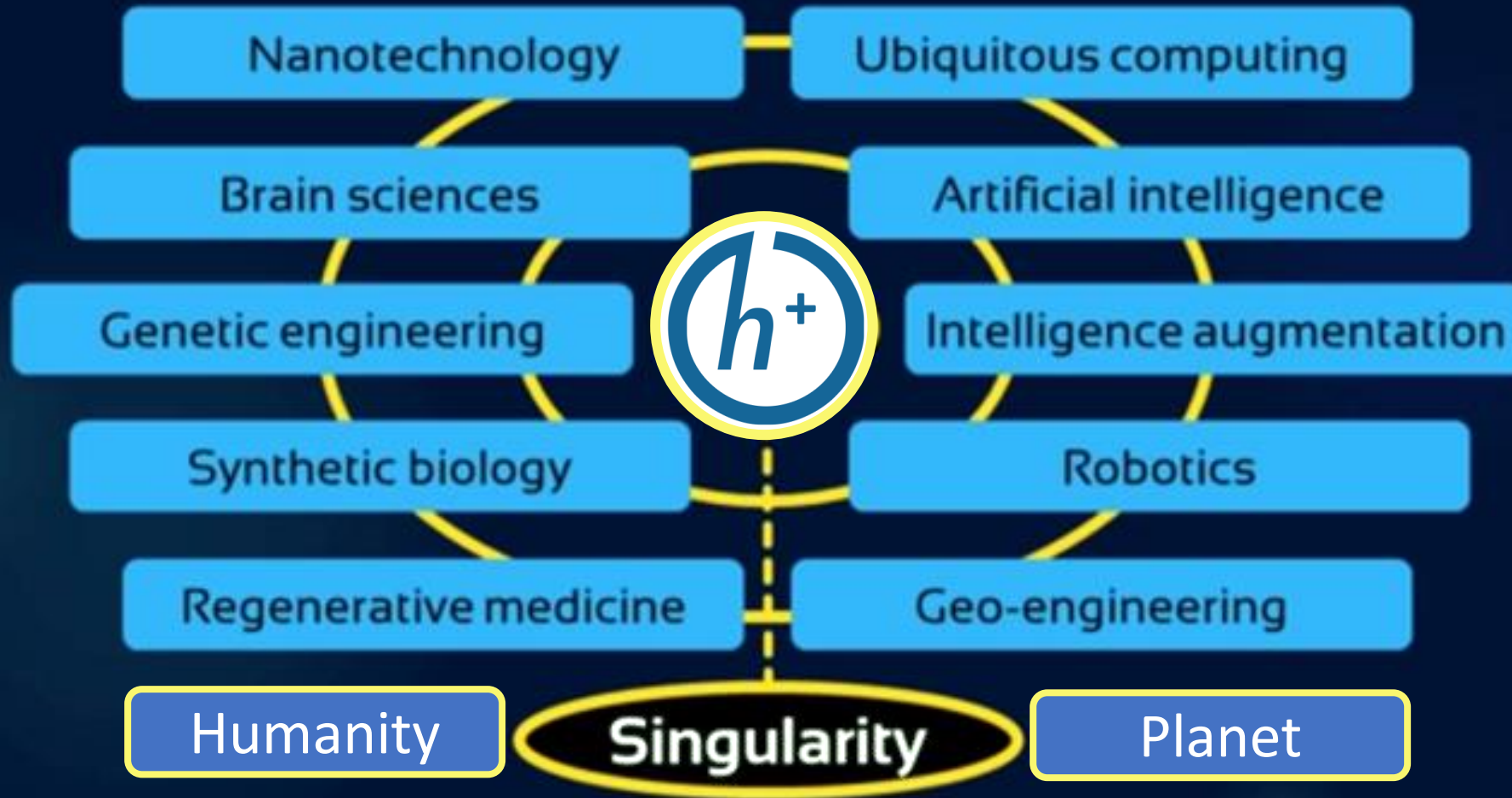


Internal wholebody
navigational grid



transhuman

Technology convergence



Humanising technology



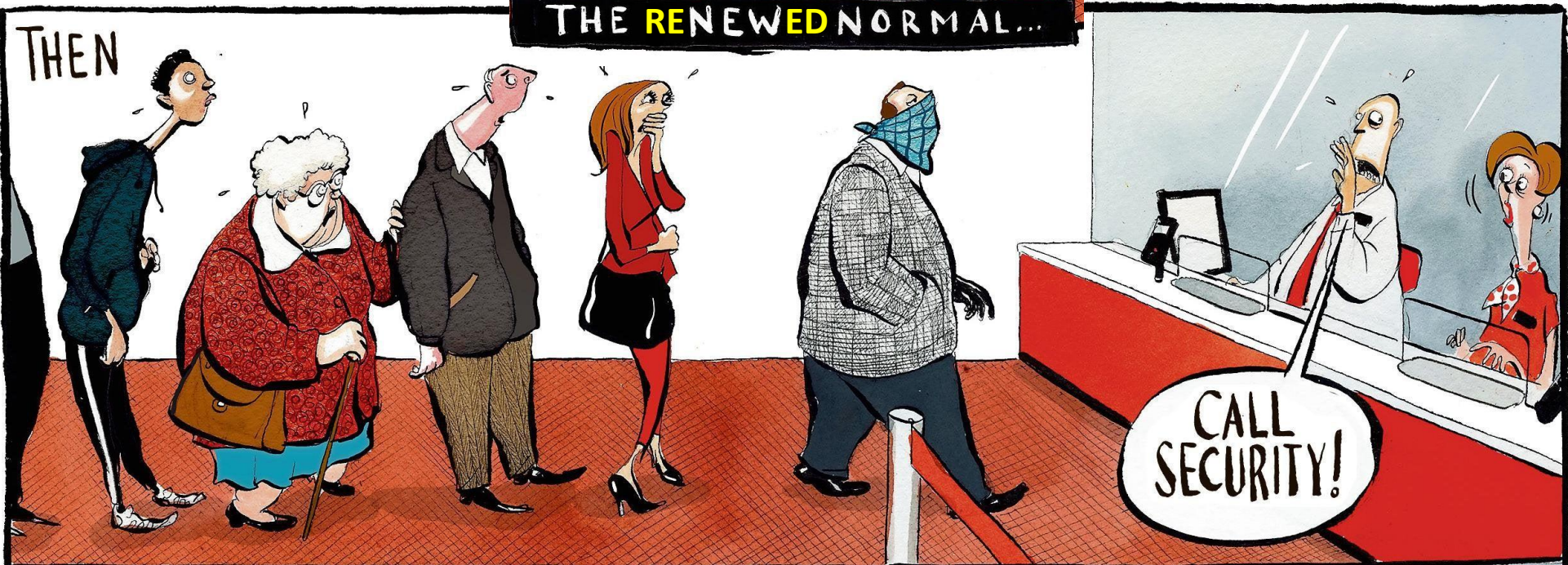
Over time, technology might start changing our DNA, our behaviour and “domesticate humans” completely. Therefore, the need of the hour is to take a step towards **humanising technology**.

RENEWED NORMAL



THEN

THE RENEWED NORMAL...

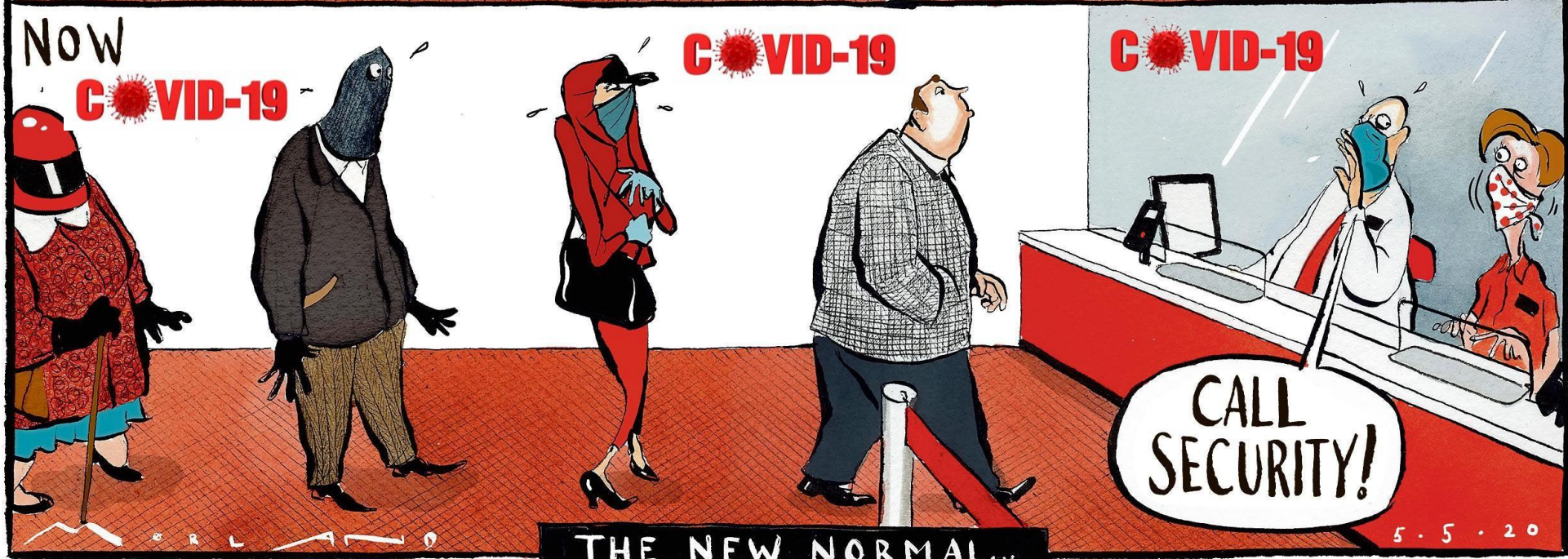


NOW

C^oVID-19

C^oVID-19

C^oVID-19



THE NEW NORMAL...

5.5.20

Professor Harayama Yuko

Professor Emeritus at Tōhoku University

Creator of Society 5.0 concept



- With Society 5.0, digitization is a means, but **we humans must remain central actors**. Traditionally, innovation driven by technology has been responsible for social development, but in the future, we will reverse our way of thinking, **focusing on how to build a society that makes us happy and provides a sense of worth**. That is why we focus on the word “society” as the foundation for human life.

"A major turning point in the history of humankind."

The initial concept of society 5.0 was announced to the world by former Japanese Prime Minister Shinzo Abe in a famous speech entitled "Hannover Declaration" delivered at the CeBIT 2017 in Hannover, Germany. Society 5.0 concept was developed in Japan's 5th Science and Technology Basic Plan by the Council for Science, Technology and Innovation.

Former Japanese Prime Minister Shinzo Abe said back then:

"A major turning point in the history of humankind has arrived."

*In prehistoric days, we ventured **into the forest to hunt**. If that is the first chapter of human history, then the second is when we succeeded **in securing a stable number of food calories** in the form of rice and wheat.*

*The curtain rose on chapter three as **waves of industrialization** arrived in what we call modern times; chapter four saw **telecommunications and computers fuse**, opening a new door.*





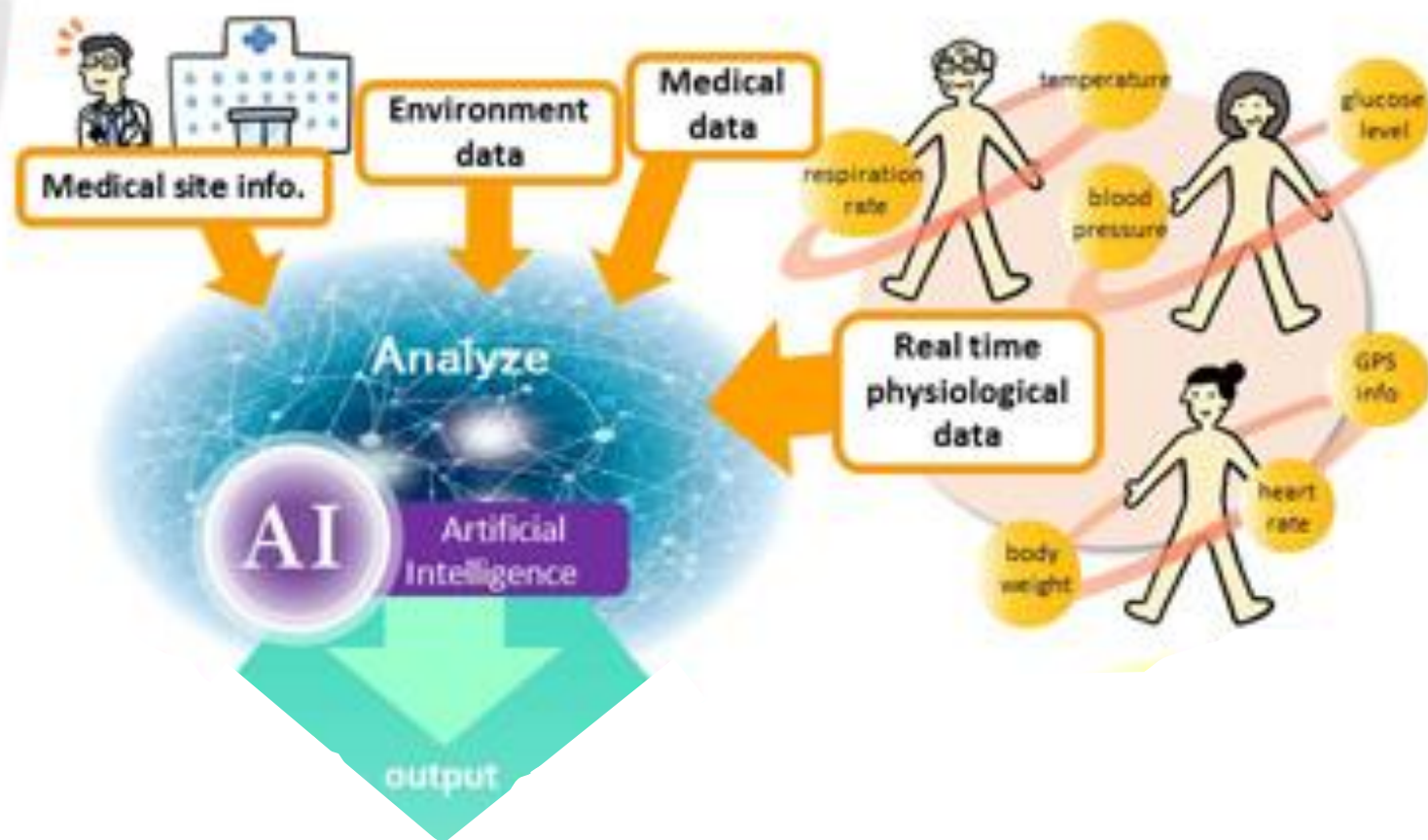
A Human-Centred Society

In Society 5.0, new value created through innovation will **eliminate regional, age, gender, and language gaps** and enable the provision of products and services finely **tailored to diverse individual needs and latent needs**. In this way, it will be possible to achieve a society that can both promote economic development and **find solutions to social problems**.

Society 5.0 is about **augmenting humanity** with super intelligence & constant conversation between the best of academic research, science a new dawn of evolution, powered by tech innovation, & all agents in society.

Problems

I want to know before symptoms worsen.
I want to live happily alone even in need of nursing care.



Benefit everyone regardless
of age and gender



Everyday life is happy and fun



Comfort

provide goods and services
that granularly address
manifold latent needs
without disparity

advance fusion of
cyberspace and physical
space



Society 5.0

Vitality

High-
quality
Lives

to balance economic advancement with
the resolution of social problems

Liberated from cumbersome work
effectively using time



More convenient, safe
and secure life

Society 5.0 for **SDGs**

Keidanren
Policy & Action

Society 5.0 offers a new growth model with a view of “solving social issues” as well as “creating a better future”, which contributes to the achievement of **SDGs**



Keidanren supports the SDGs



SOCIETY 5.0 a research education short film by Dinis Guarda

SOCIETY 5.0



a new vision for a smart society
where humans, nature & technology create a data
**enhanced sustainable
balance.**



Economic advancement

- The demand for energy is increasing
- The demand for foodstuffs is increasing
- Lifespan is becoming longer, and the aging society is advancing
- International competition is becoming increasingly severe
- Concentration of wealth and regional inequality are growing

Resolution of social problems

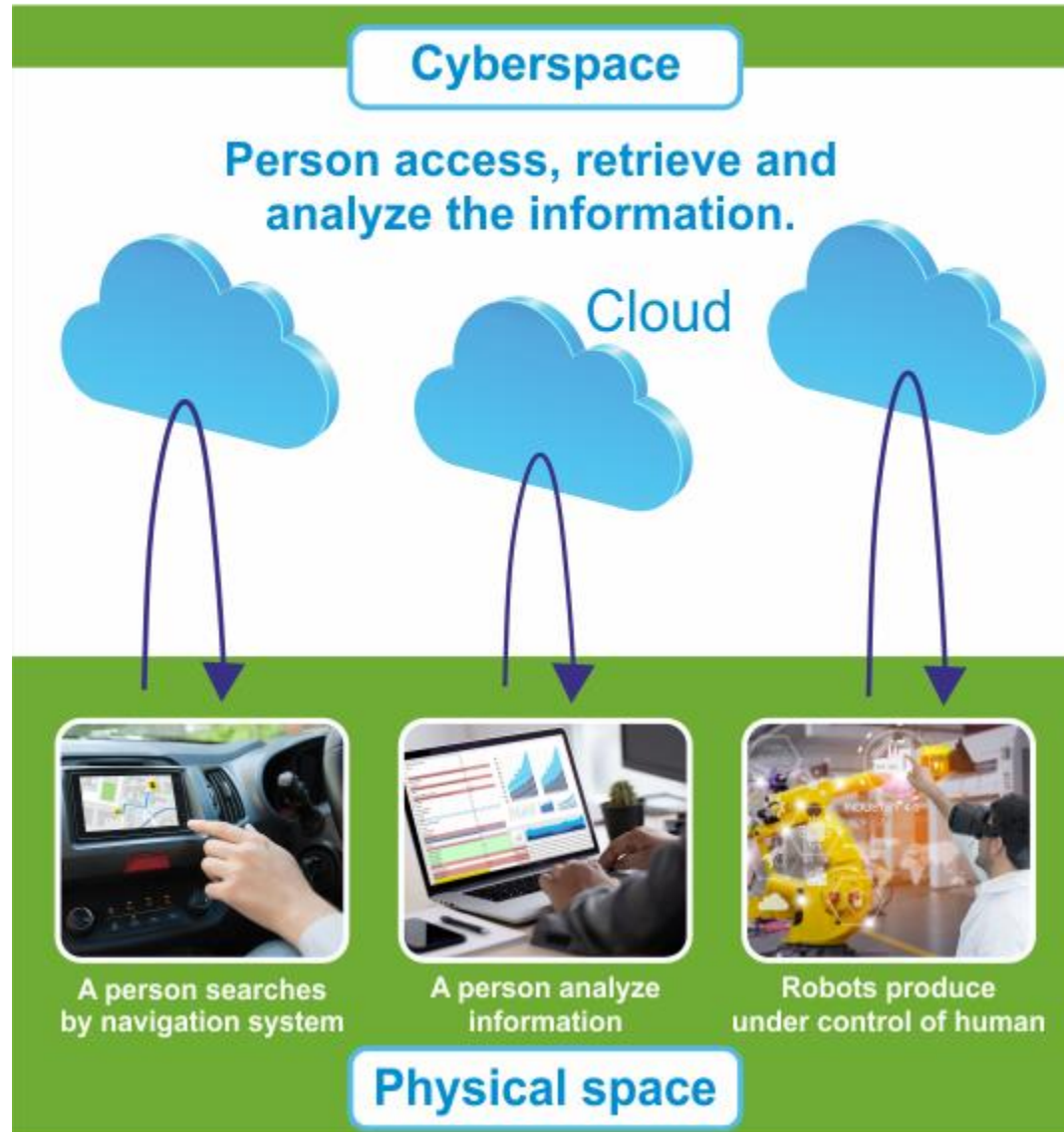
- Reduction of GHG emissions
- Increased production and reduced loss of foodstuffs
- Mitigation of costs associated with the aging society
- Promotion of sustainable industrialization
- redistribution of wealth, and correction of regional inequality

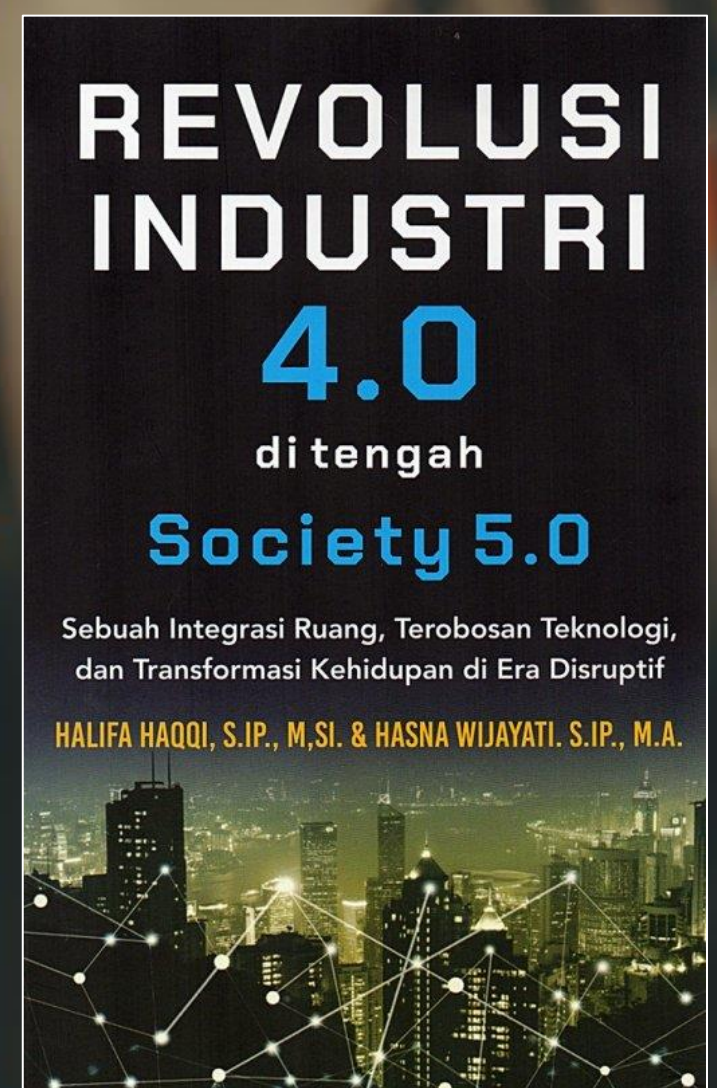
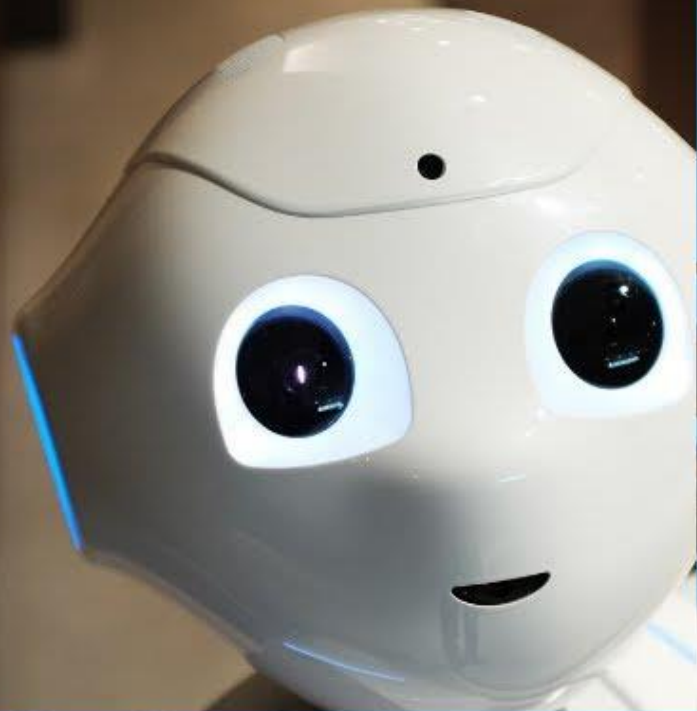
Incorporating new technologies such as IOT, robotics, AI, and big data in all industries and social activities, provide goods and services that granularly address manifold latent need without disparity

to balance economic advancement with the resolution of social problems



Society (4.0)





SOCIETY 5.0 &

BUDAYA ORGANISASI

thank
you.

Acknowledgement & Disclaimer

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