GISC2021
Global ICT Standards Conference

디지털 플랫폼과 대전환

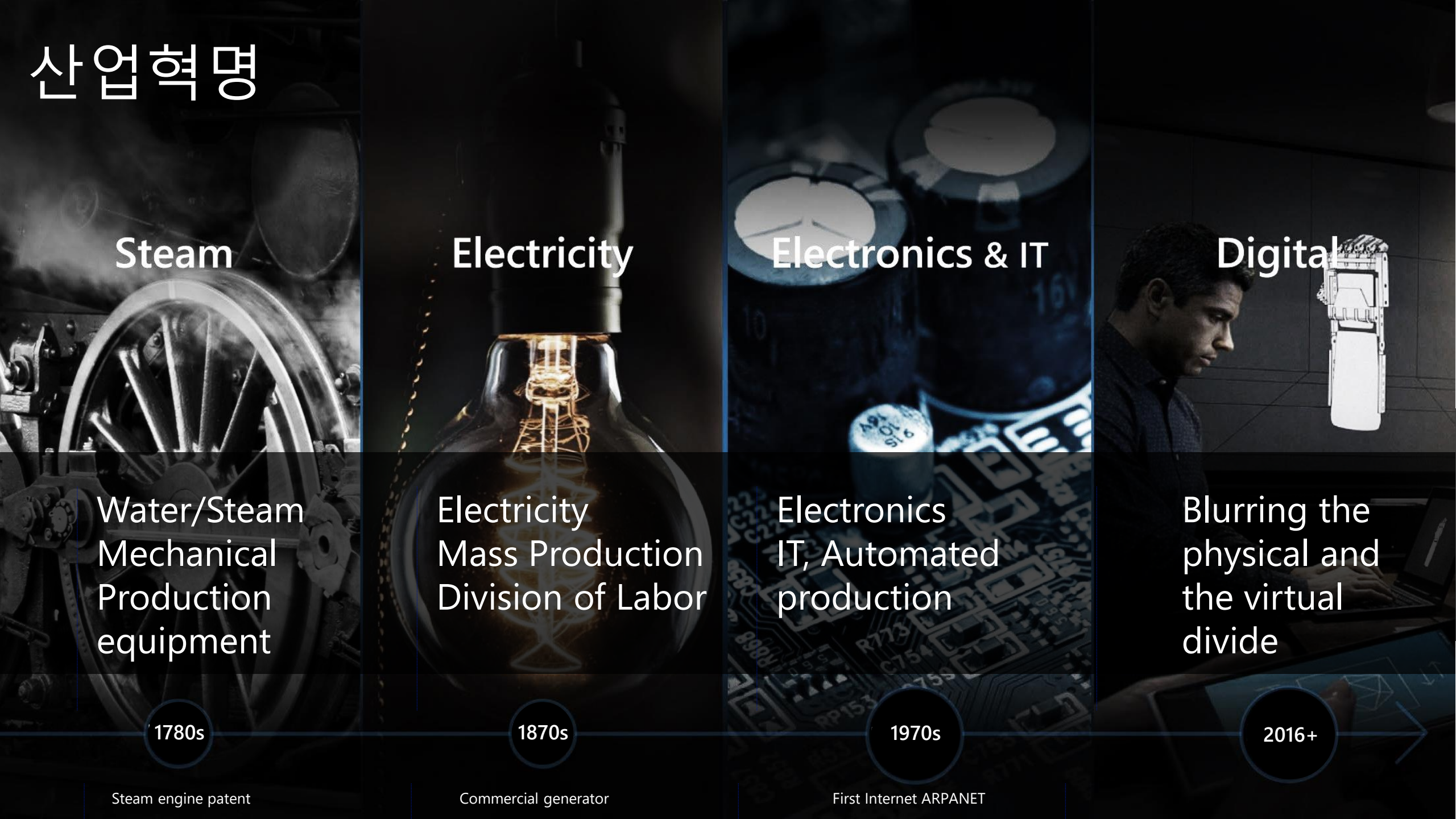
Digital Platform & Societal/Industrial Transformation

함상범

Standards Officer, AI Standards Architect

Microsoft

산업혁명



Steam

Water/Steam
Mechanical
Production
equipment

1780s

Steam engine patent

Electricity

Electricity
Mass Production
Division of Labor

1870s

Commercial generator

Electronics & IT

Electronics
IT, Automated
production

1970s

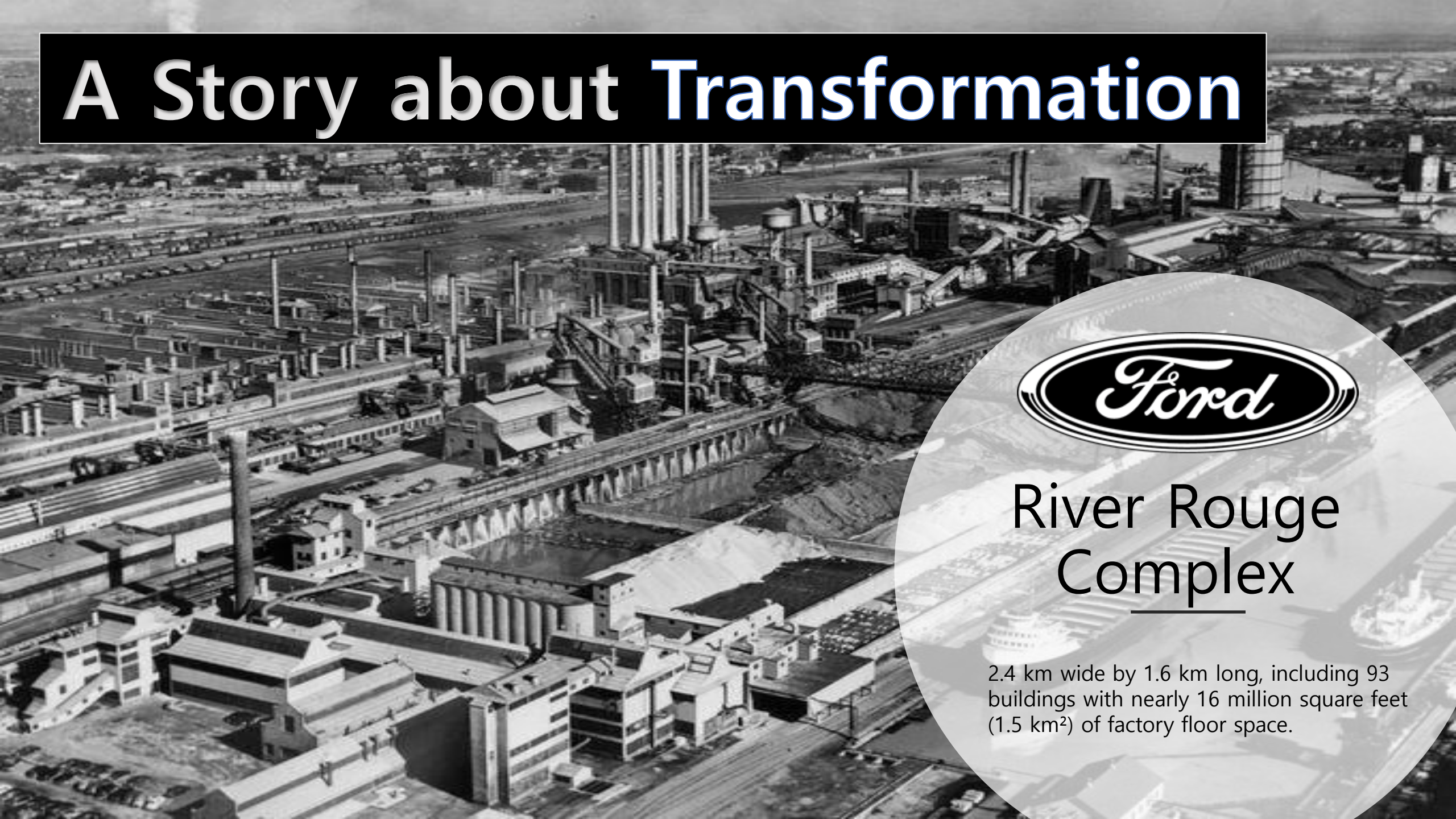
First Internet ARPANET

Digital

Blurring the
physical and
the virtual
divide

2016+

A Story about Transformation



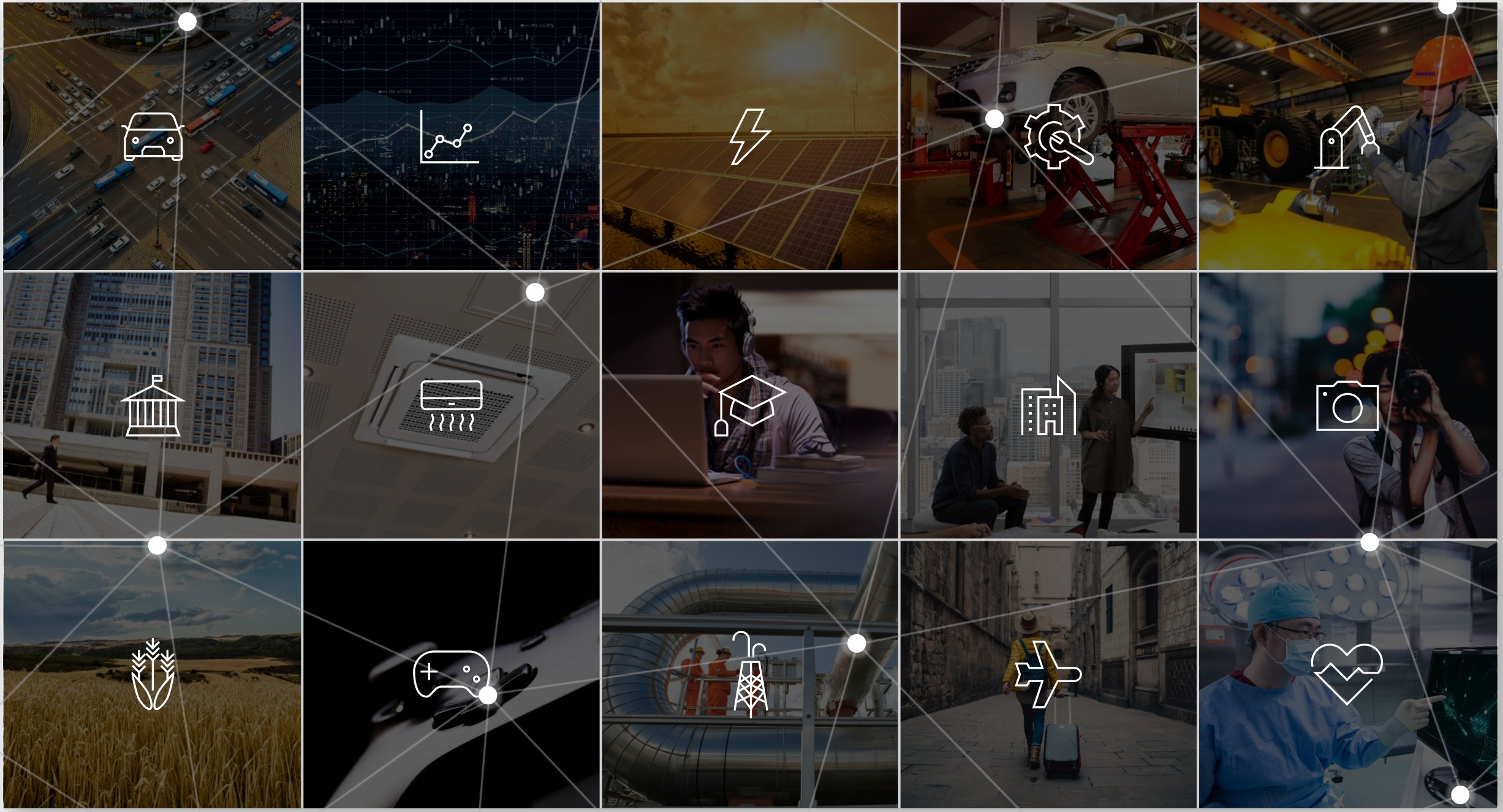
River Rouge Complex

2.4 km wide by 1.6 km long, including 93 buildings with nearly 16 million square feet (1.5 km²) of factory floor space.

the Henry Ford

/Autonomous
/Sensing
/Communication
/Battery
/Navigation
/Mirrorless
/Ecology
100m
48
mph

MODEL S



NETFLIX

MARKET Kurly

amazon.com

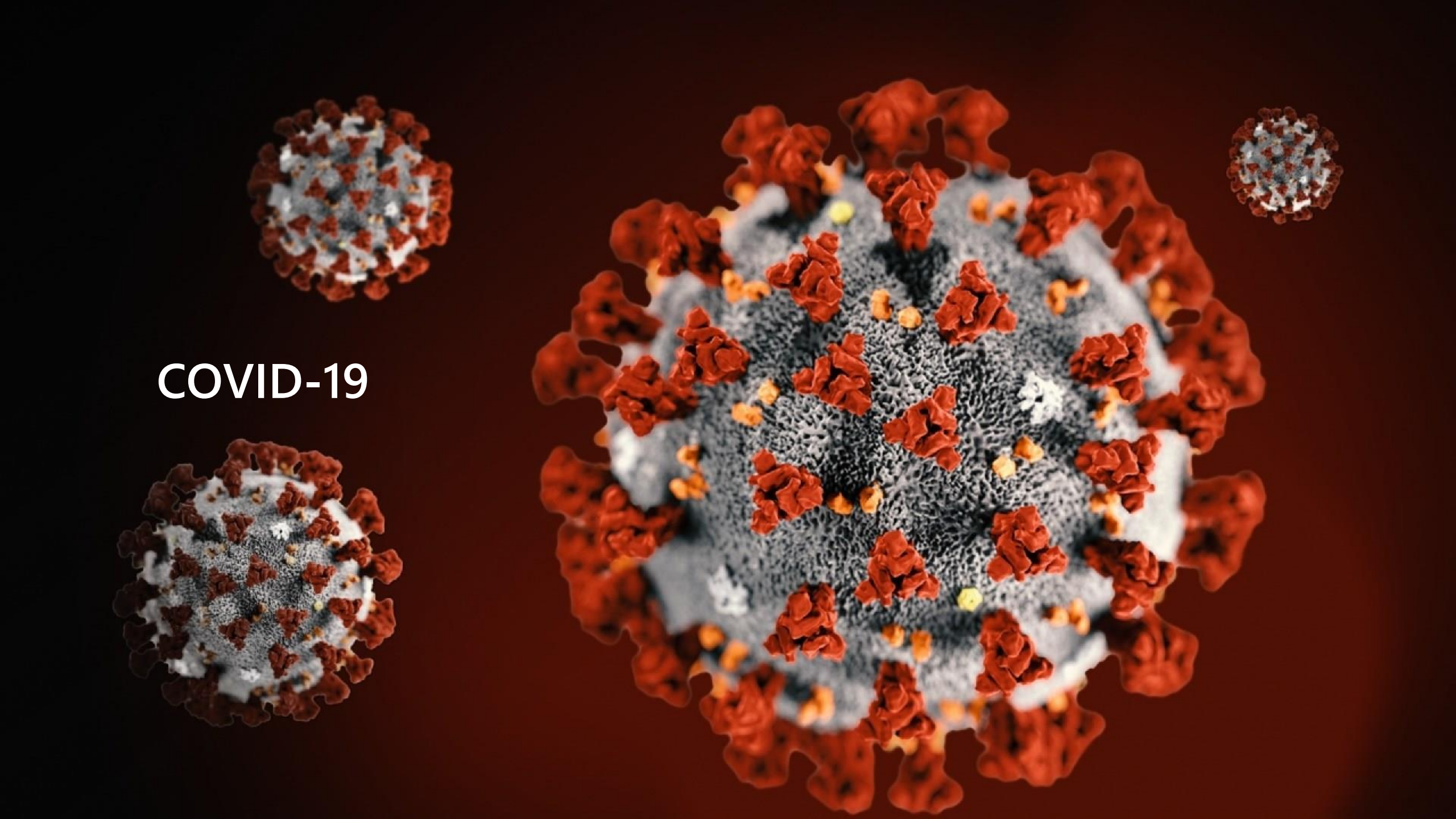
YouTube

Cloud Computing & Artificial Intelligence

IGN NEWS
BLOCKBUSTER
STORE CLOSING
STORE CLOSING
NOTHING HELD BACK!

We are living in a changed world.

Rapid advancement in
technology is changing
how we live,
how we work, and
how we learn


COVID-19

NEW NORMAL

THE DIGITAL ERA IS HERE

What does this mean to you?

"Every company is a software company. You have to start thinking and operating like a digital company. It's no longer just about procuring one solution and deploying one. It's really you, yourself, thinking of your own future as a digital company."

– Satya Nadella, Microsoft CEO

Transformations

1980s: **PC**

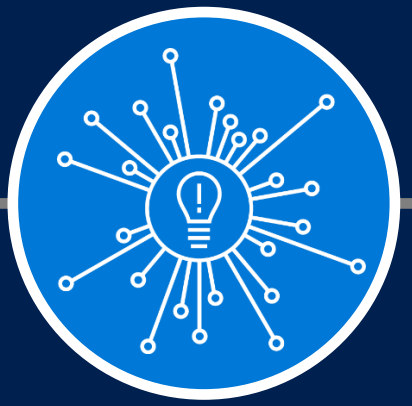
- Basic compute
- Process automation
- Software ecosystem
- GUI

1990s: **Internet**

- Communications
- Content proliferation
- Distributed services
- Browsers

2000s: **Mobile**

- Cloud computing
- Ubiquitous access
- Data explosion
- App economy



Now: **Artificial Intelligence**

- Deep learning
- Machine intelligence
  - Natural language and speech processing
  - Computer vision and recognition
  - Knowledge understanding and reasoning
- Autonomous agents, robotics
- Natural UI, immersive technologies

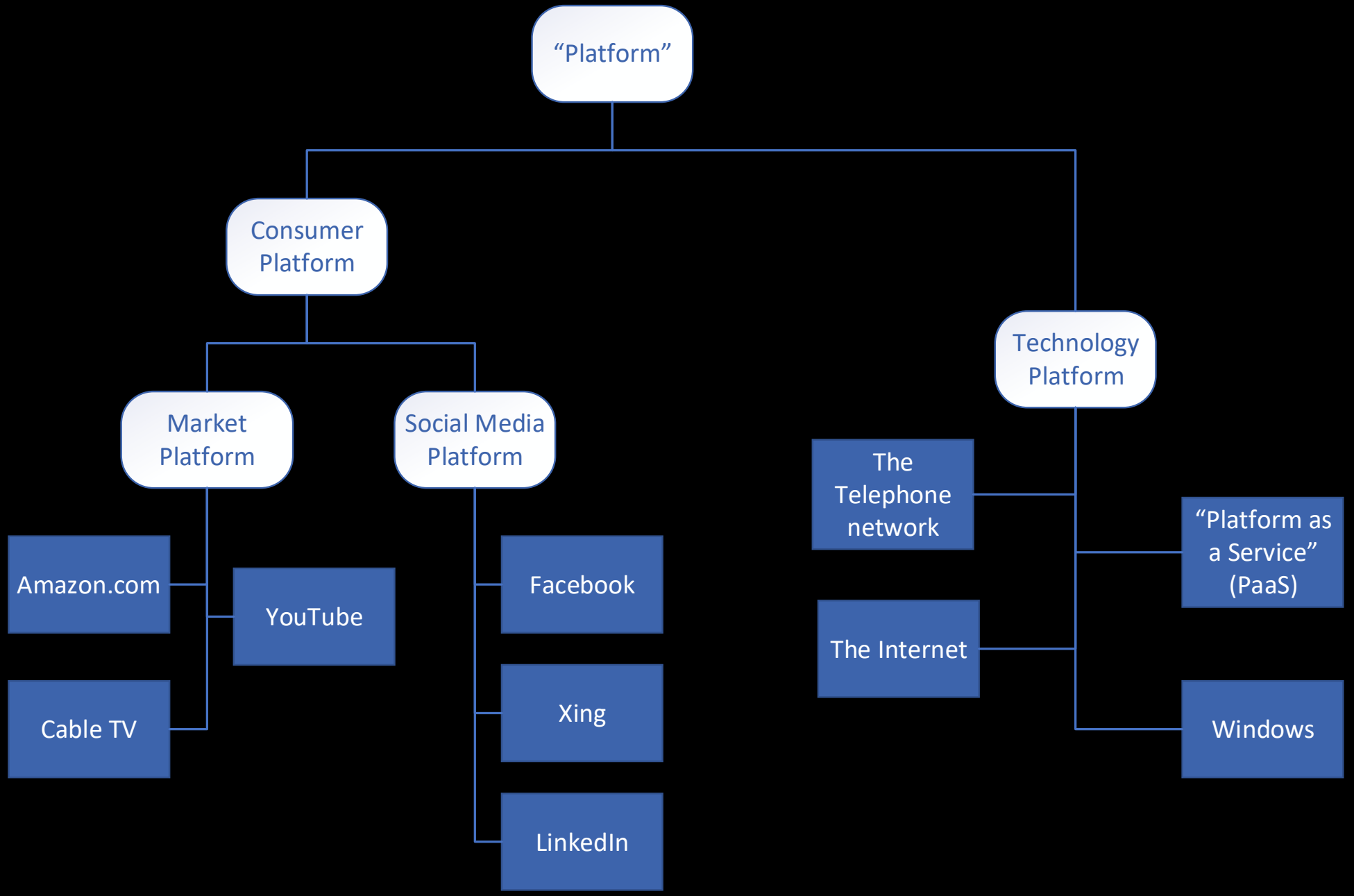
Platform

Operating System

Marketplace

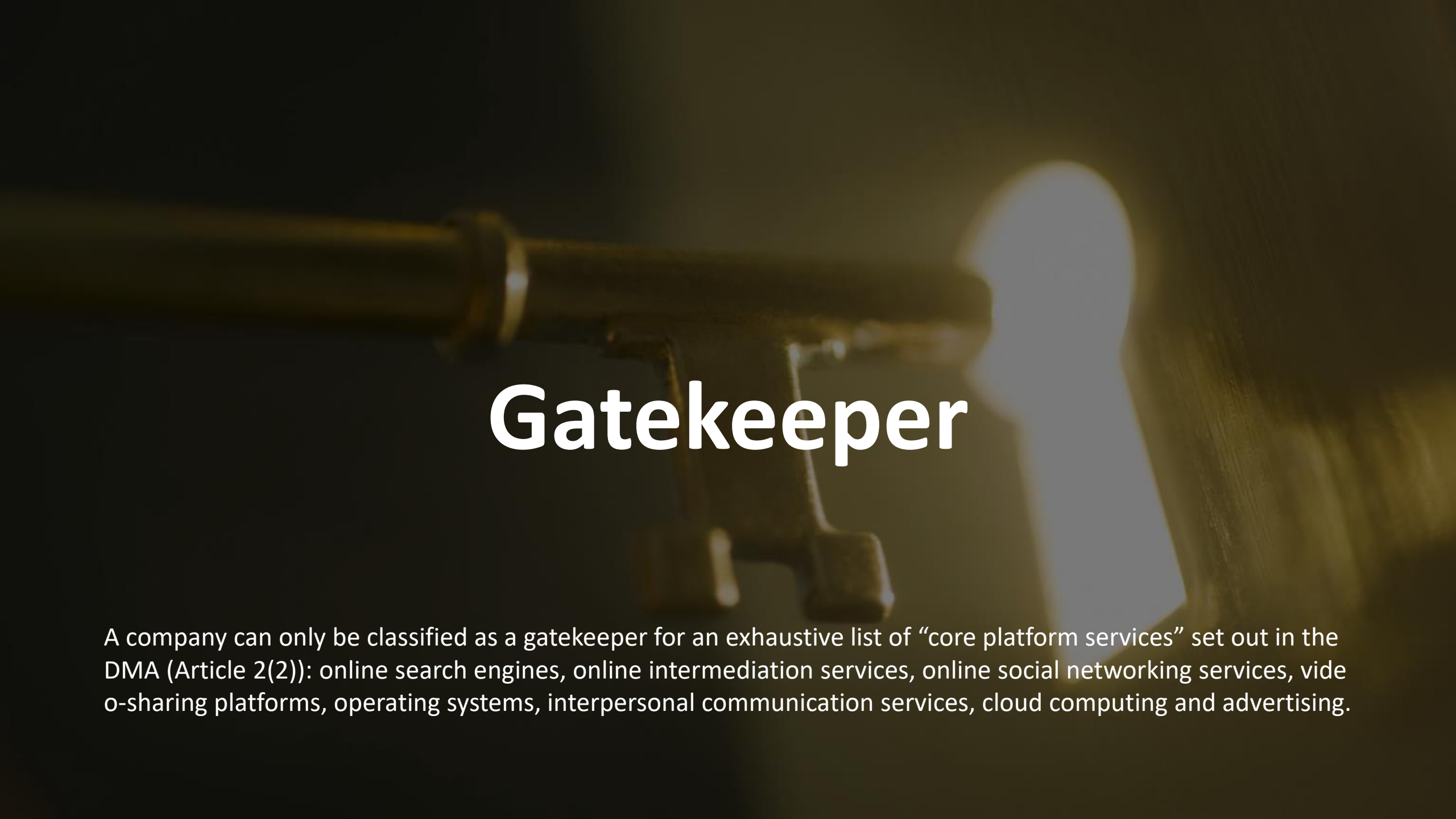
Social Network

Search Engine



[Source] ISO/IEC AWI TS 5928 Taxonomy for digital platforms, **MODIFIED**

[Image source] DPP Law -http://www.dpp-law.com/



Gatekeeper

A company can only be classified as a gatekeeper for an exhaustive list of “core platform services” set out in the DMA (Article 2(2)): online search engines, online intermediation services, online social networking services, vide o-sharing platforms, operating systems, interpersonal communication services, cloud computing and advertising.

NEW OPPORTUNITY

The Call to Action is Clear

"Every organization will need to have what I describe as **tech intensity** … every organization will need to be a **fast adopter of digital technology** … every organization will need to **build their own proprietary digital capability**."

"Today **every company is a digital company**, and every organization will need **tech intensity to compete and grow**.

It's a simple formula!"

$$\text{Tech intensity} = (\text{Tech adoption} \times \text{Tech capability})^{\text{Trust}}$$

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감사합니다

Thank You!