Strategic Leadership
of the Digital Revolution

NYENRODE BUSINESS UNIVERSITEIT

STRATEGY WORKS

Who am I?

Prof. Dr. Bob de Wit

What do I do?

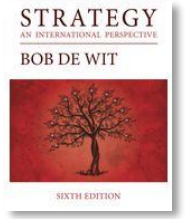
- Inspirational speaker *on the digital revolution*
- Director, *Strategy Works / Strategy Academy*
- Professor, *Nyenrode Business University*
- Author of international bestsellers

How to reach me?

- +31 (0)6 5377 8151
- B.deWit@Strategy-Works.com

Recent publications

Strategy: An International Perspective (6th edition, 2017)
Strategy Synthesis (5th edition, 2017)



Bobcasts (produced by Nick and Lorenzo)

- ''We gaan een superelite humanoidras krijgen'' 2017
- "Afscheid nemen van een dikke overheid en een dikke markt", met Jeroen den Uyl 2018
- "Op de intensive care van E-Health: het zorgsysteem met zwaar overgewicht", met Leonard Witkamp 2018
- "Van big ideas to giant leaps – creatief denken en ondernemen", met Jenny Elissen 2019
- "Henk Ovink – The Water Guy – de man die Obama aan het polderdenken bracht'' 2019
- 'Het flexibele woon-werk-kantoor ('Smart Hubs'), met Ricardo van Loenen 2019
- 'Bunq: Bank of the Free', met Founder / CEO Ali Niknam over hoe 'ziek' de bancaire wereld is 2019

Characteristics of top 10 companies

1917

Resourcing industrialization
(Oil, steel, rubber, chemicals, cables)

- U.S. Steel $46.4B
- AT&T $14.1B
- Standard Oil of N.J. $10.7B
- Bethlehem Steel $7.1B
- Armour & Co $5.8B
- Swift & Co $5.7B
- International Harvester $4.9B
- E.I. du pont de Nemours $4.9B
- Midvale Steel & Ordnance $4.8B
- U.S. Rubber $4.6B

1967

Industrial applications
(Cars, camera's, phones, households)

- International Business Machines $258.6B
- AT&T $200.5B
- Eastman Kodak $177B
- General Motors $171.2B
- Standard Oil of N.J. $106.5B
- Texaco $82.3B
- Sears, Roebuck $64.6B
- General Electric $63.9B
- Polaroid $58B
- Gulf Oil $58B

2017

Resourcing digitization
(Big Data, Artificial Intelligence, VR/AR)

- Apple $898B
- Alphabet $719B
- Microsoft $644B
- Amazon $543B
- Facebook $518B
- Berkshire Hathaway $452B
- Johnson & Johnson $374B
- Exxon Mobil $350B
- JPMorgan Chase $340B
- Wells Fargo & Co. $266B

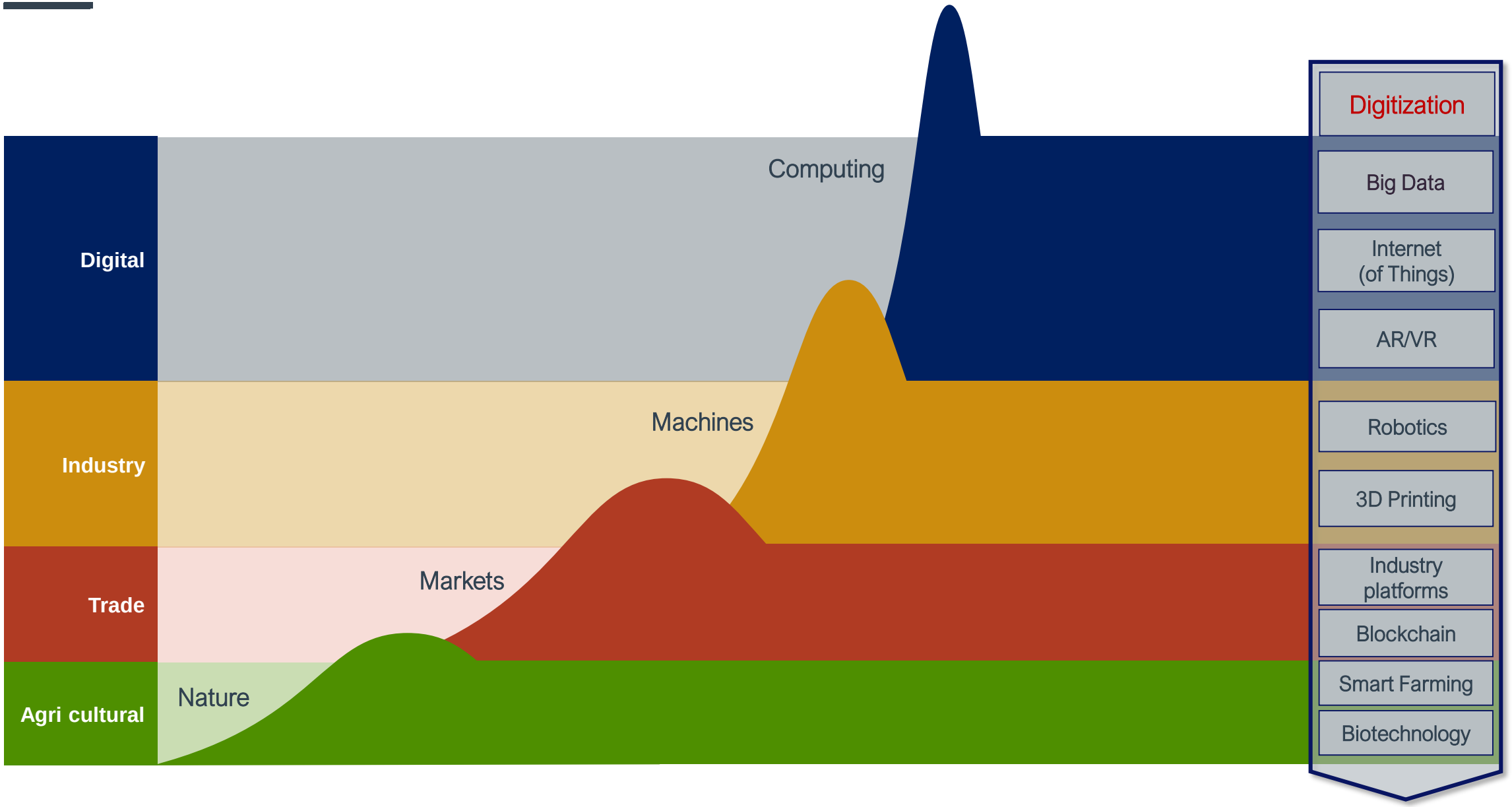
2027

Digital applications
(*Machine learning, Cyborgs?*)

We have entered the digital age

How different will our future be?

The ‘vertical’ impact of the digital wave



Digitization: Big Data

Digital
- Digitization
- Big Data
- Internet (of Things)
- AR/VR

Industry
- Robotics
- 3D Printing
- Industry platforms

Trade
- Blockchain

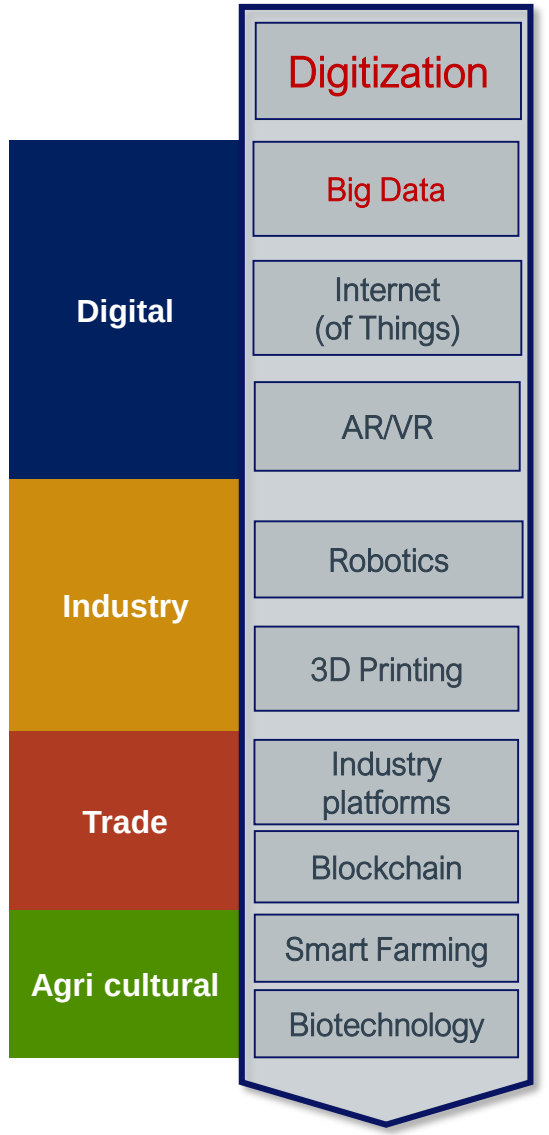
Agri cultural
- Smart Farming
- Biotechnology

Digitization: Big Data

Clustering data to sell personalized adds

Analysing risks to price health care insurance

Optimizing stock & supply chain to increase efficiency and lower costs



Digitization: Internet (of Things)

- **Digital**
  - Digitization
  - Big Data
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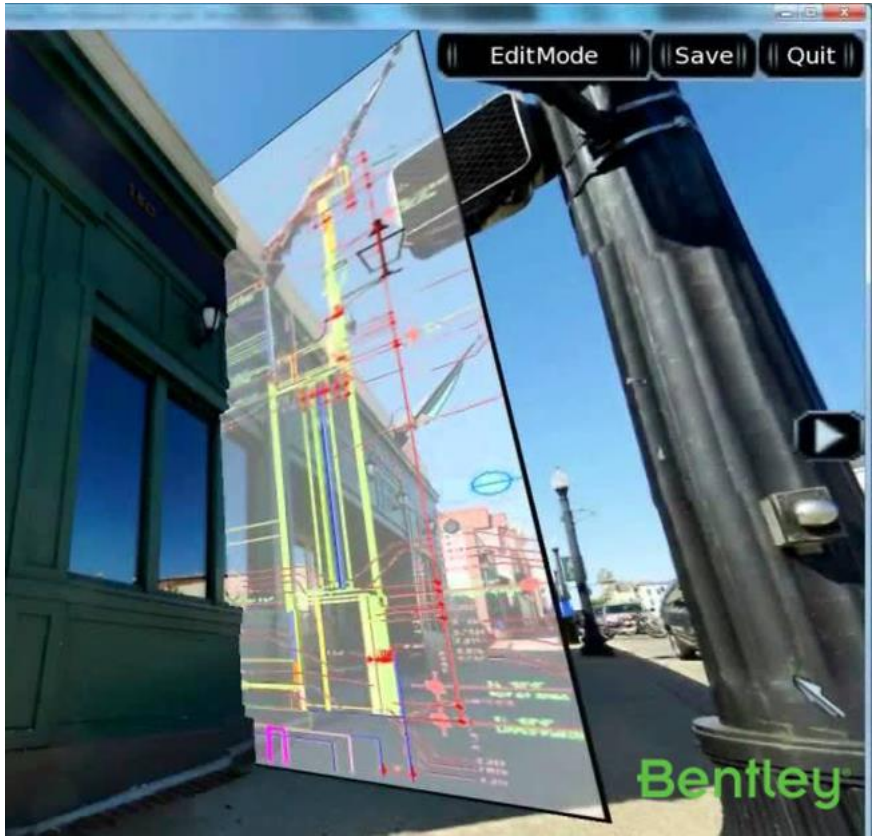
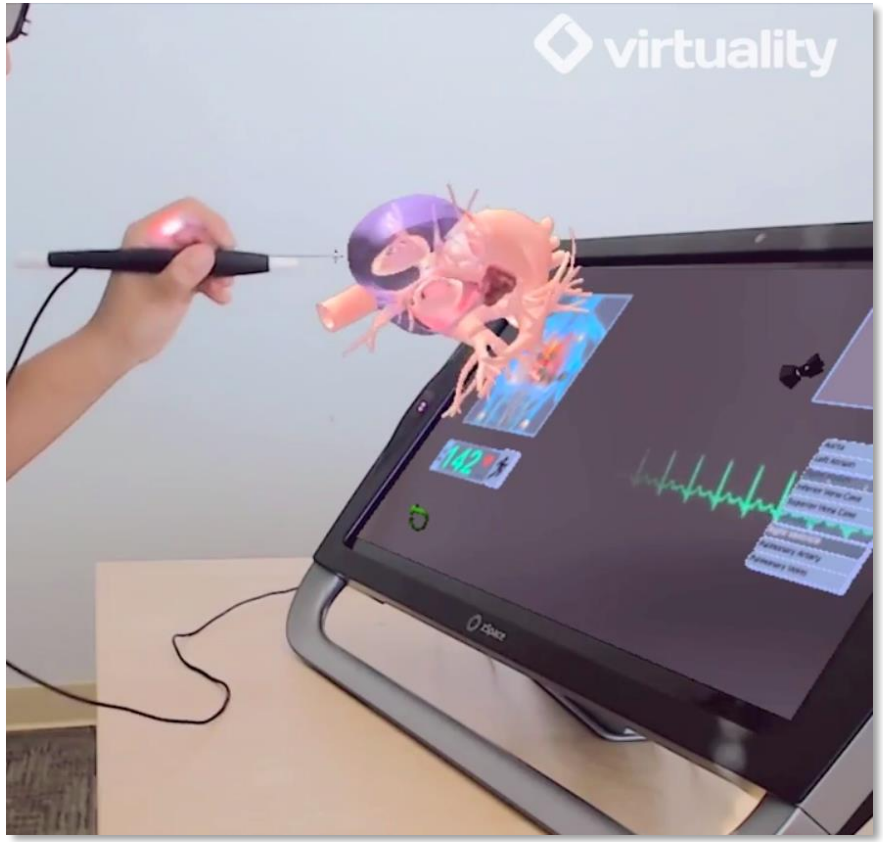
Digitization: Virtual & Augmented reality





Digital

Industry

Trade

Agri cultural

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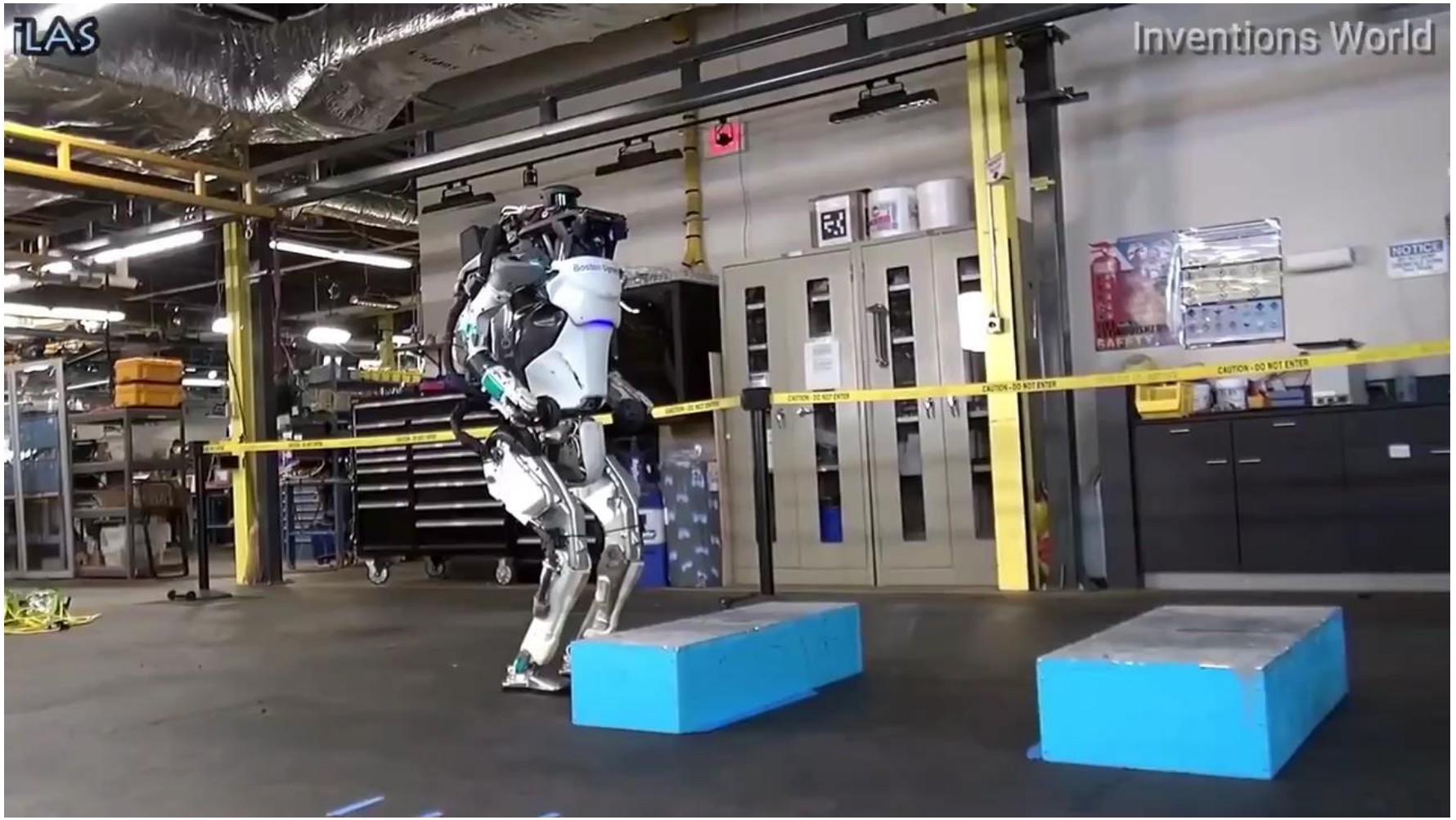
Digitization & Machines: Robotics



- Digitization
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Digitization & Machines: 3D printing

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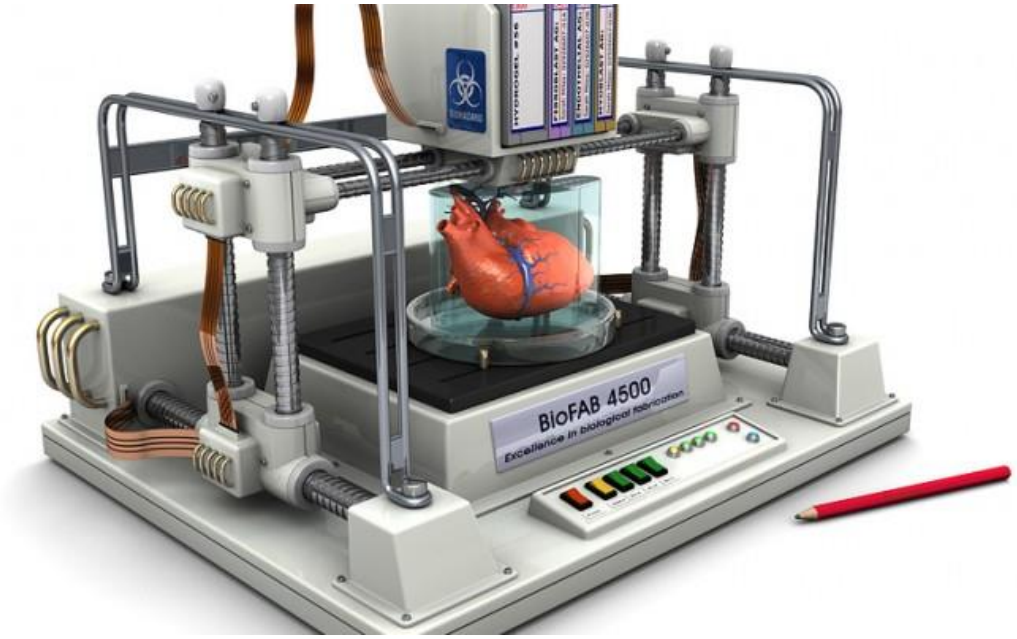
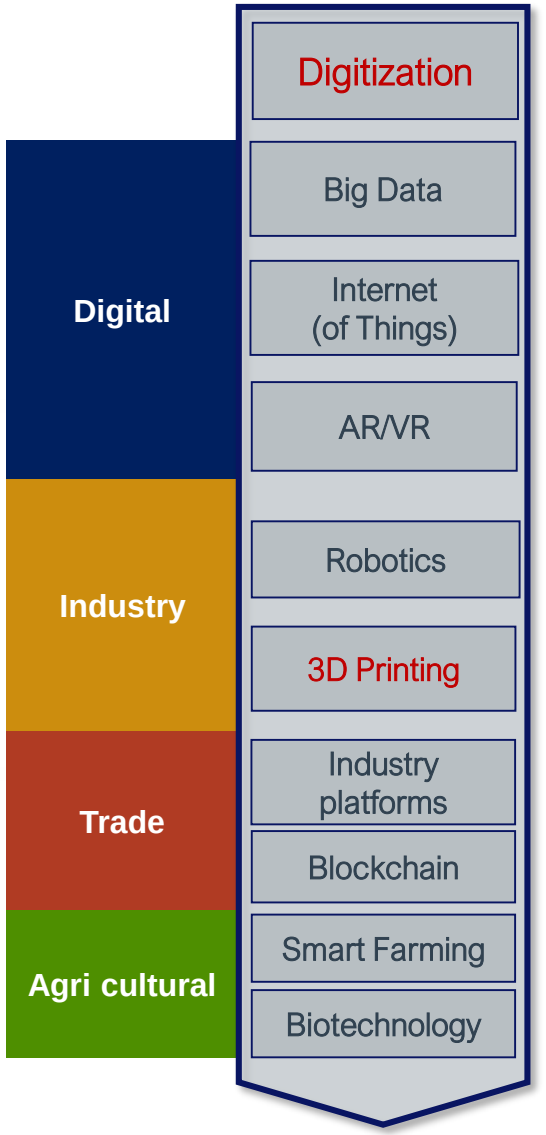
Offshore printing

Organ printing





Digitization & Markets: Industry platforms

Uber

WORLDS LARGEST TAXI COMPANY OWNS NO TAXI'S

Airbnb

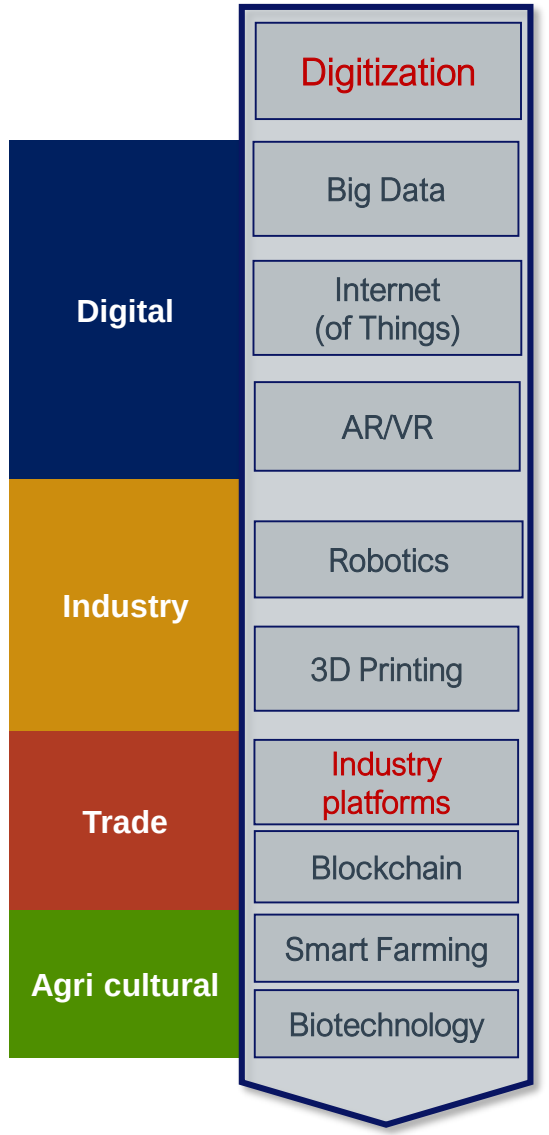
LARGEST ACCOMMODATION PROVIDER OWNS NO REAL ESTATE

Booking.com

TRAVEL FARE AGGREGATOR WEBSITE

Tinder

MOST POPULAR DATING APPLICATION



Digitization & Markets: The Blockchain

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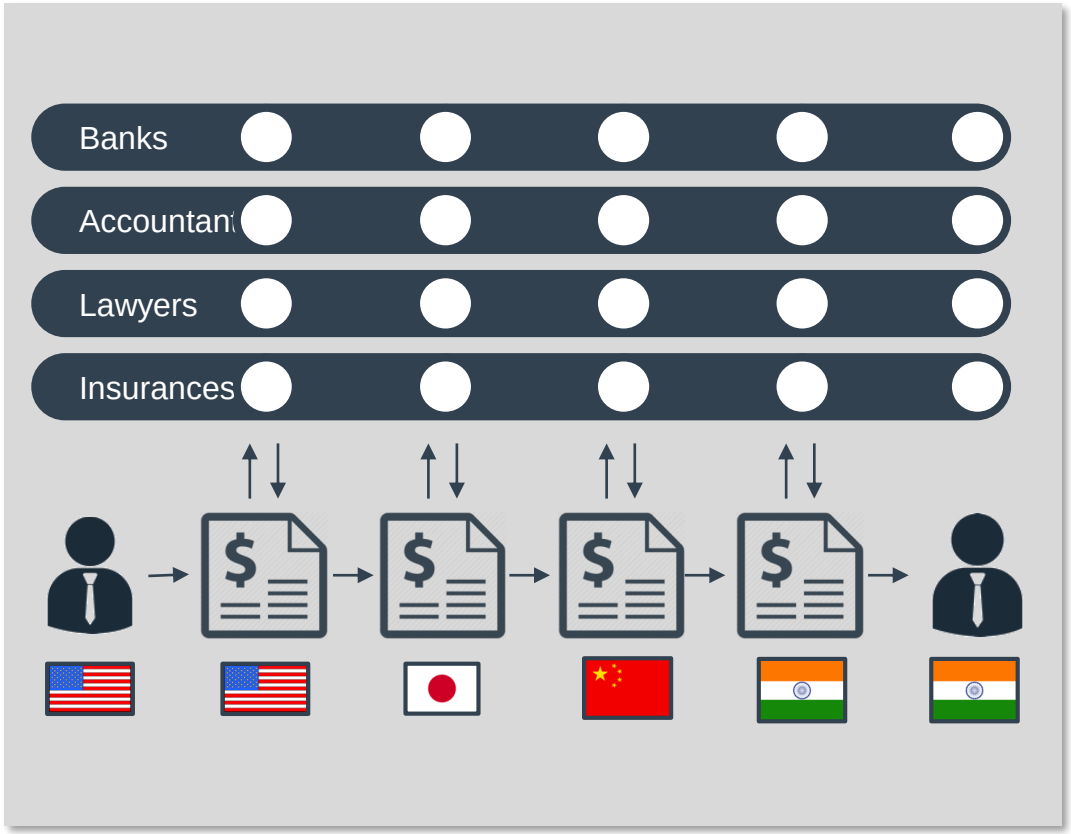
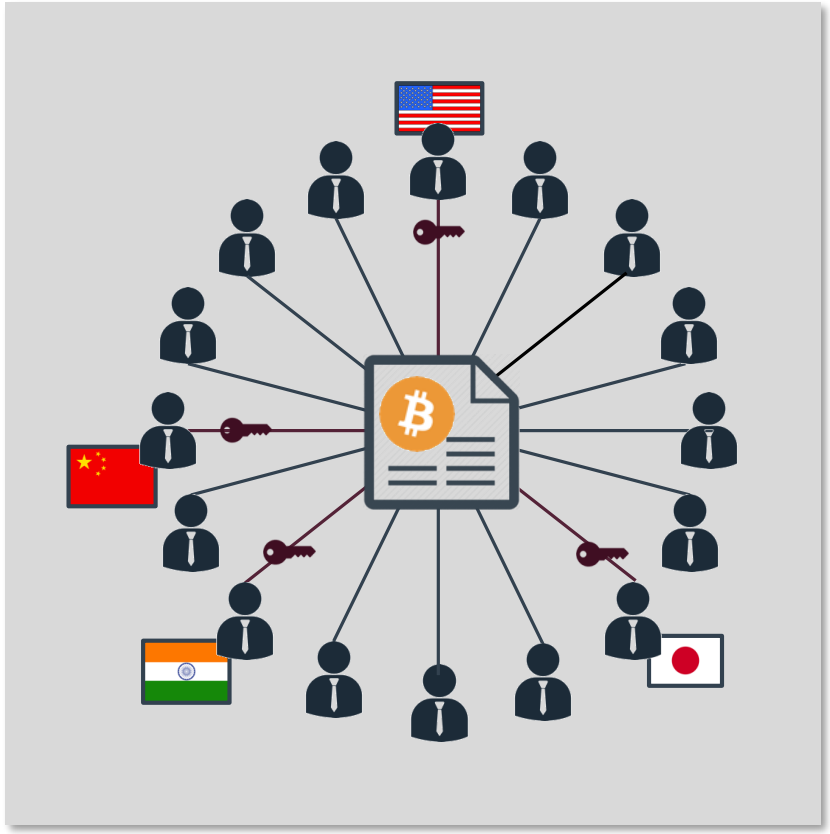
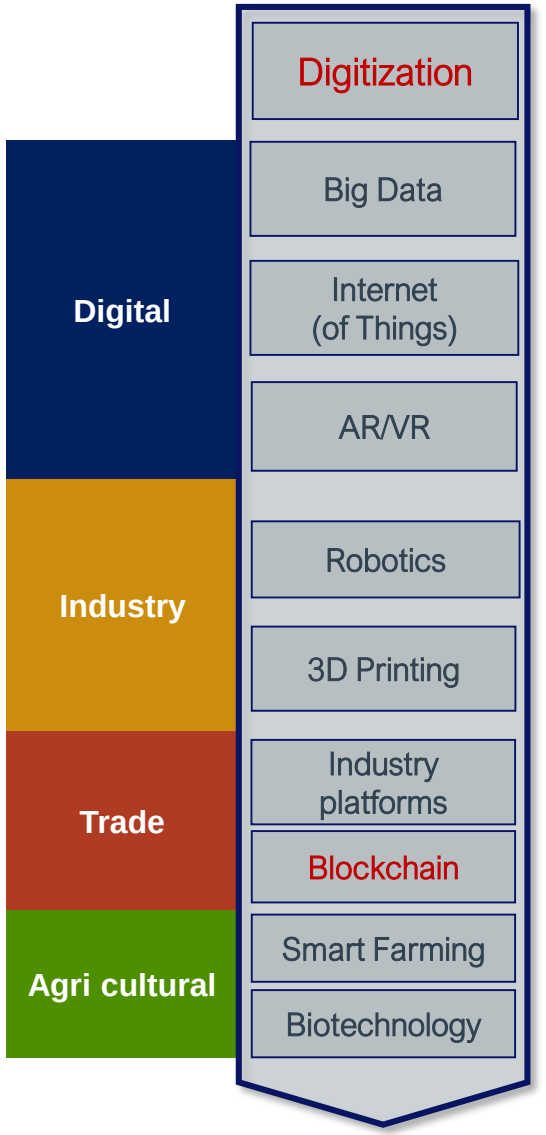
Overhead reduction and crypto value transactions







Digitization & Markets: The Blockchain

Decentralized buying and selling of electricity

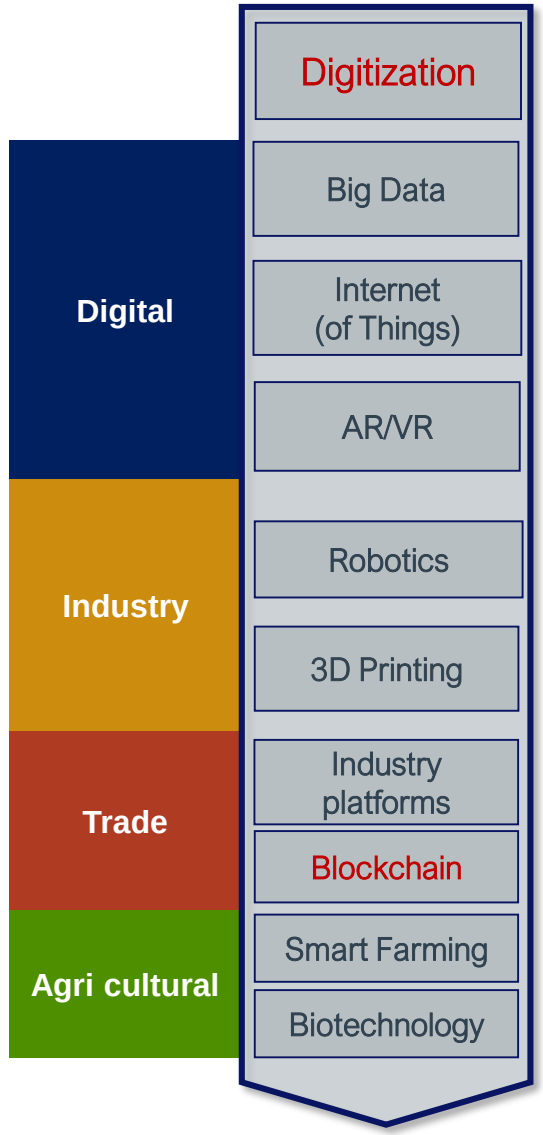
WORLD ECONOMIC FORUM | Agenda | Initiatives | Reports | Events | About | English | TopLink

Blockchain | Environment and Natural Resource Security | Electricity

In this Bangkok neighbourhood, you can buy and sell electricity using Blockchain

Electricity generated by each of the four locations will be initially used within that building. Excess energy can be sold to the others through the trading system.

Image: REUTERS/Athit Perawongmetha



Digitization & Nature: Smart Farming

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"Precision agriculture allows plants and animals to get treatment with great accuracy per square meter or even per plant, by using GPS, sensor technology, ICT and robotics"

Digital	Digitization
	Big Data
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Trade	Blockchain
Agri cultural	Smart Farming
	Biotechnology

Digitization & Nature: Biotechnology

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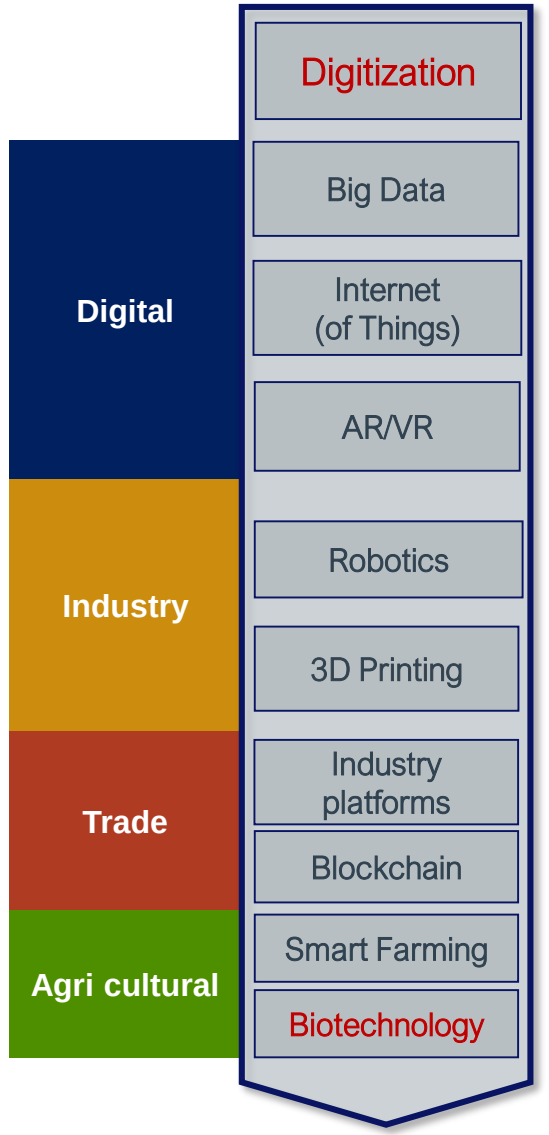
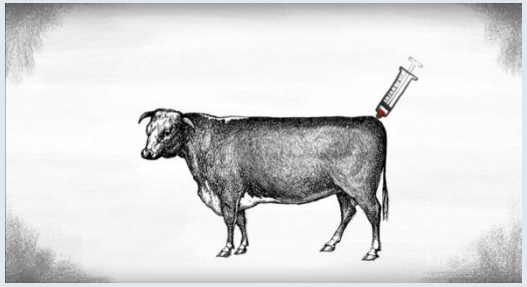
"Manipulation (through genetic engineering) of living organisms or their components."

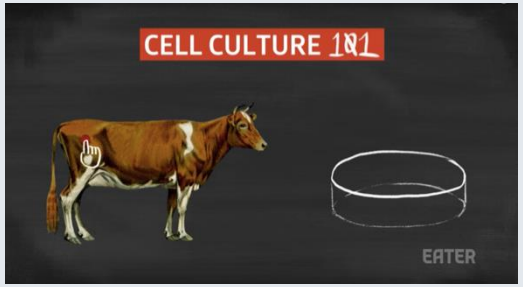


Digitization & Nature: Bio technology

1. Harvest muscle tissue



2. Culture muscle cell



3. Grow burgers from 1 cell

Cheaper

Faster

More environmental friendly

Safer

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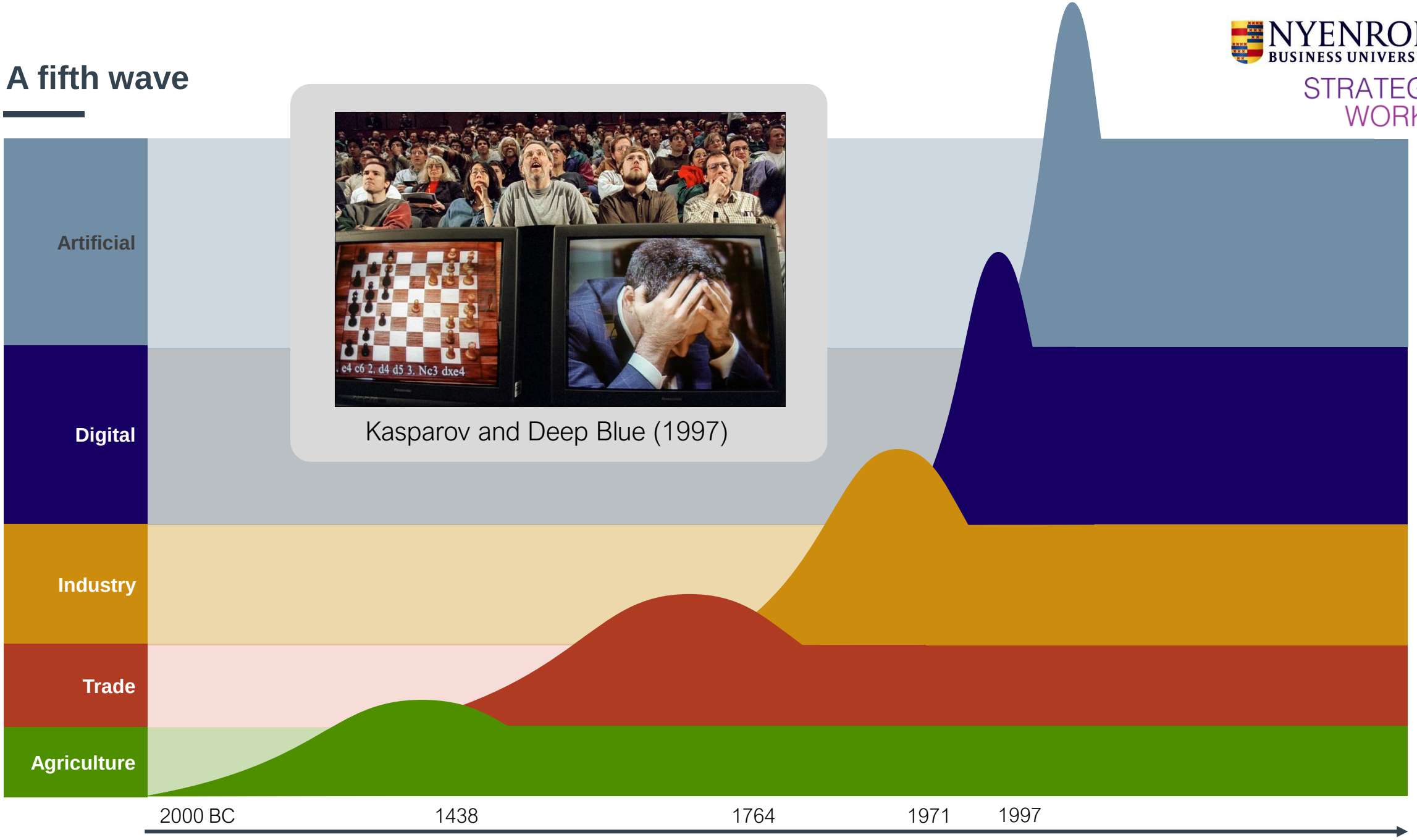
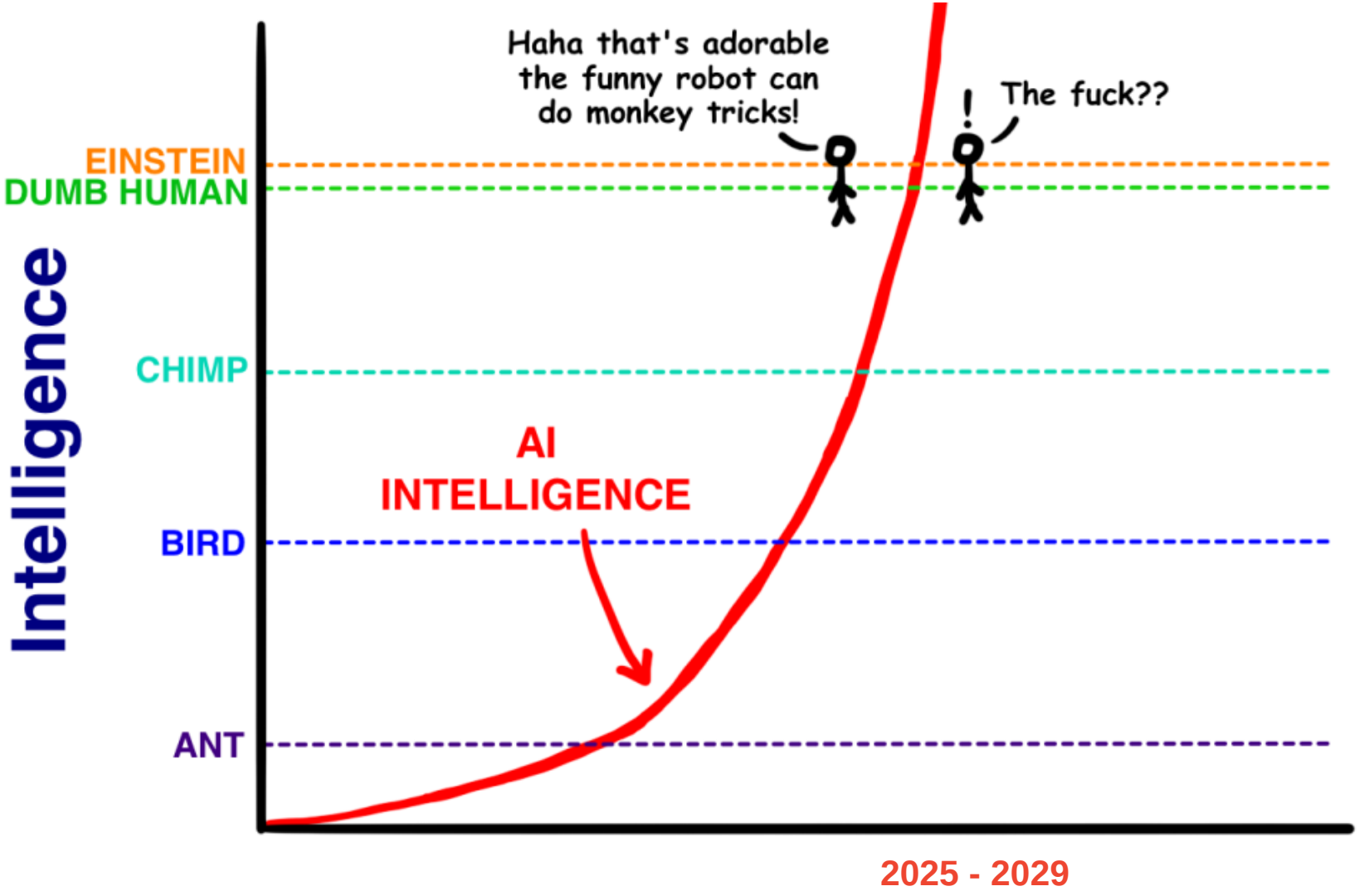
A fifth wave

Kasparov and Deep Blue (1997)



Artificial intelligence: a realistic view



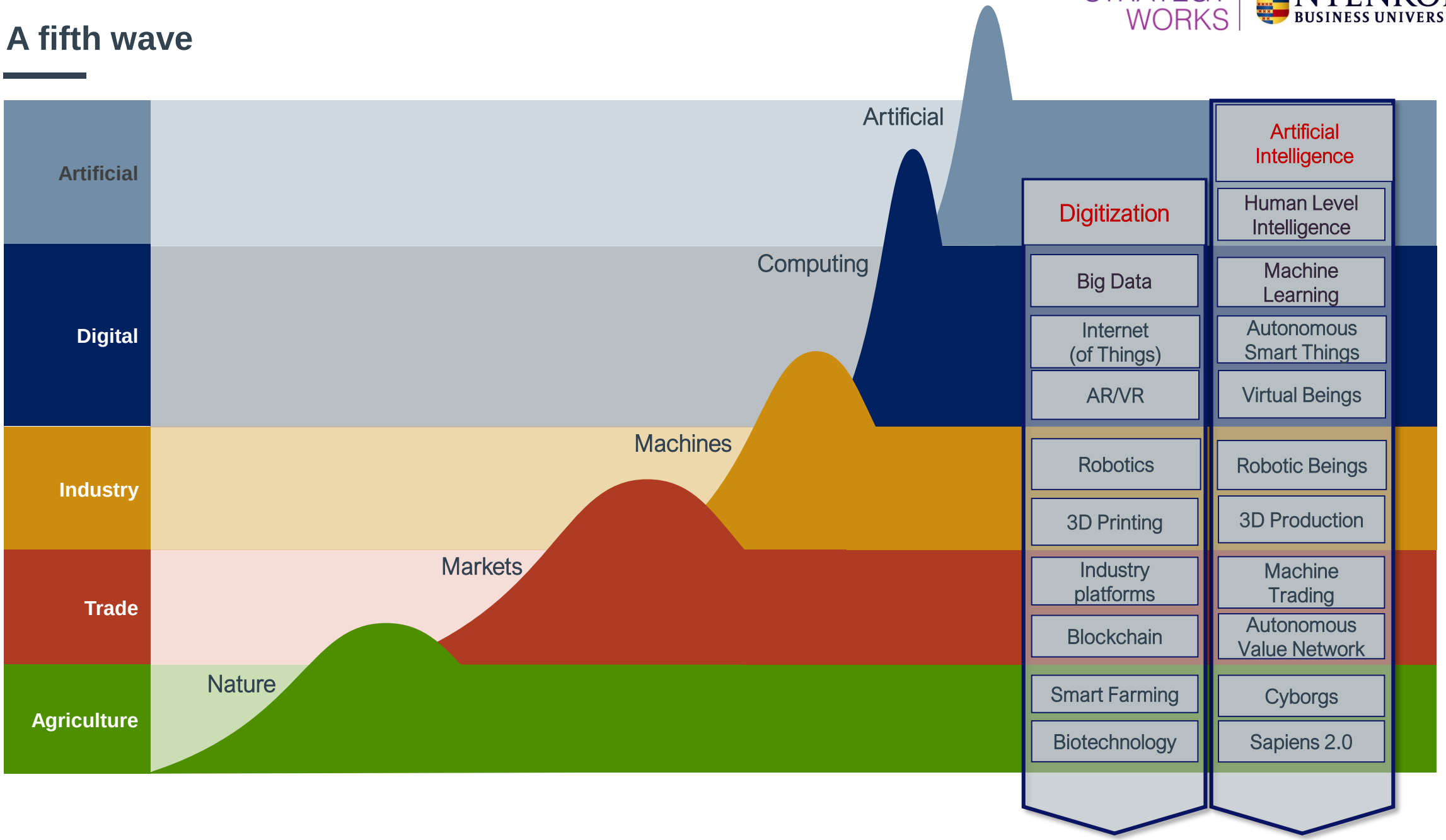
Source: http://waitbutwhy.com/2015/01/artificial-intelligence-revolution-1.html

Artificial intelligence: “By 2029, AI will have human-level intelligence”

“2029 is the consistent date I have predicted for when an AI will pass a valid Turing test and therefore achieve human levels of intelligence. have set the date 2045 for the ‘Singularity’ which is when we will multiply our effective intelligence a billion fold by merging with the intelligence we have created.”

Artificial intelligence 2019: Fake Linked Profile Katie Jones

A fifth wave


Artificial
Digital
Industry
Trade
Agriculture
Artificial
Computing
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Markets
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3D Production
Machine Trading
Autonomous Value Network
Cyborgs
Sapiens 2.0

Artificial Intelligence & Computing: Machine learning

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IBM's Watson

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Artificial Intelligence & Computing: Machine learning

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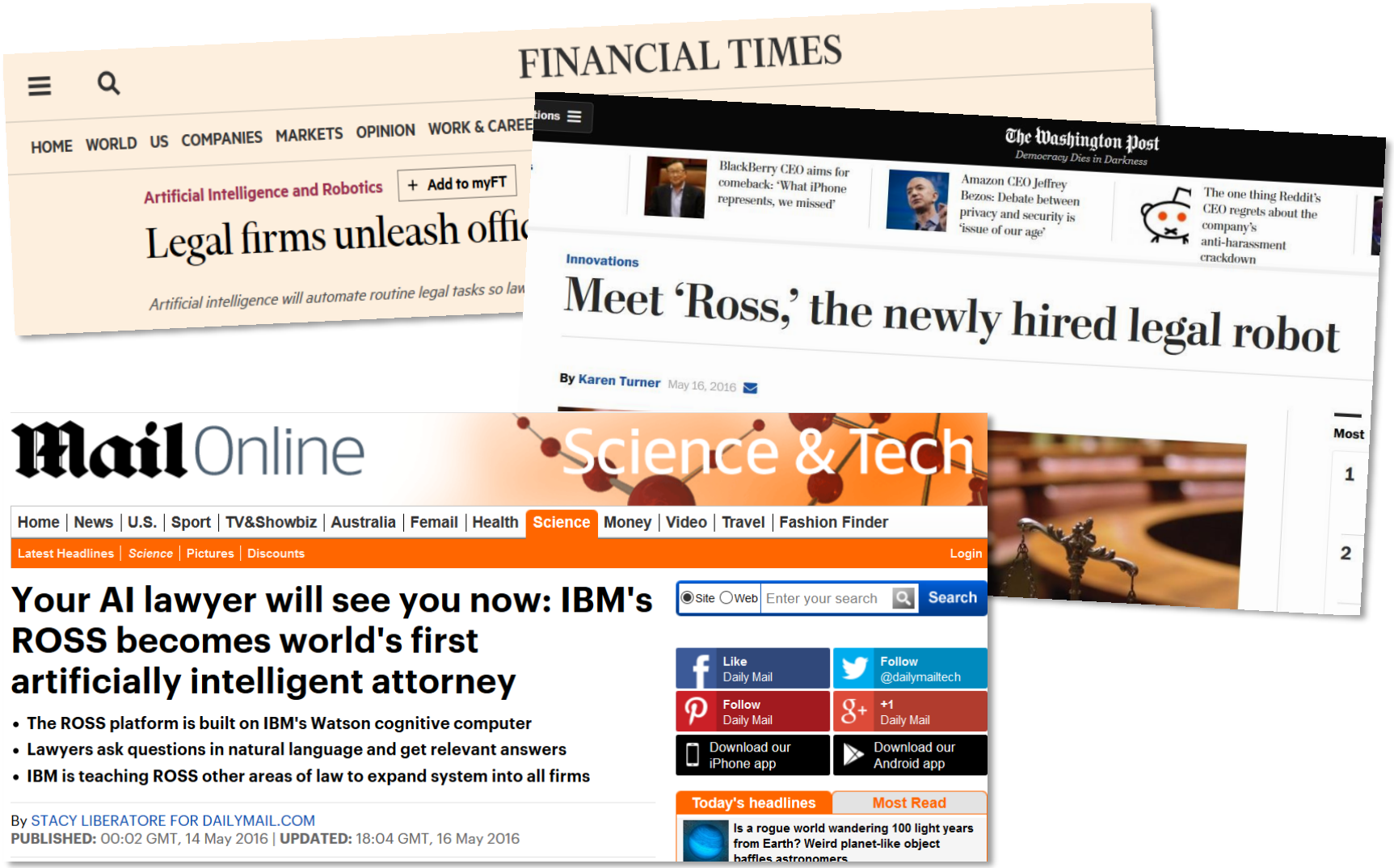
Meet AI lawyer ROSS



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Artificial Intelligence & Computing: Autonomous Smart Things

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Autonomous vehicles

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Artificial Intelligence & Computing: Virtual Beings

The “world’s first” AI news anchor has gone live in China

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Artificial Intelligence & Machines: Robotic Beings

Sophia, the first robotic citizen of Saudi Arabia

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Artificial Intelligence & Machines: 3-D Production

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Mass-customized manufacturing

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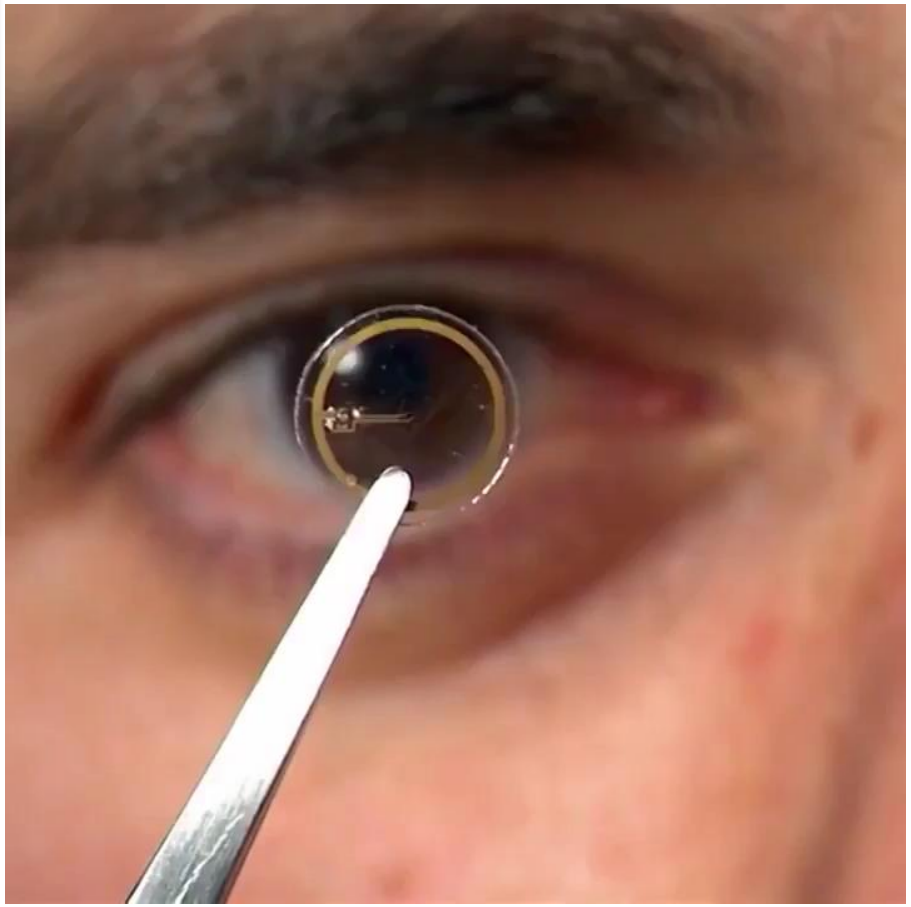
Artificial Intelligence & Biotechnology: Cyborgs



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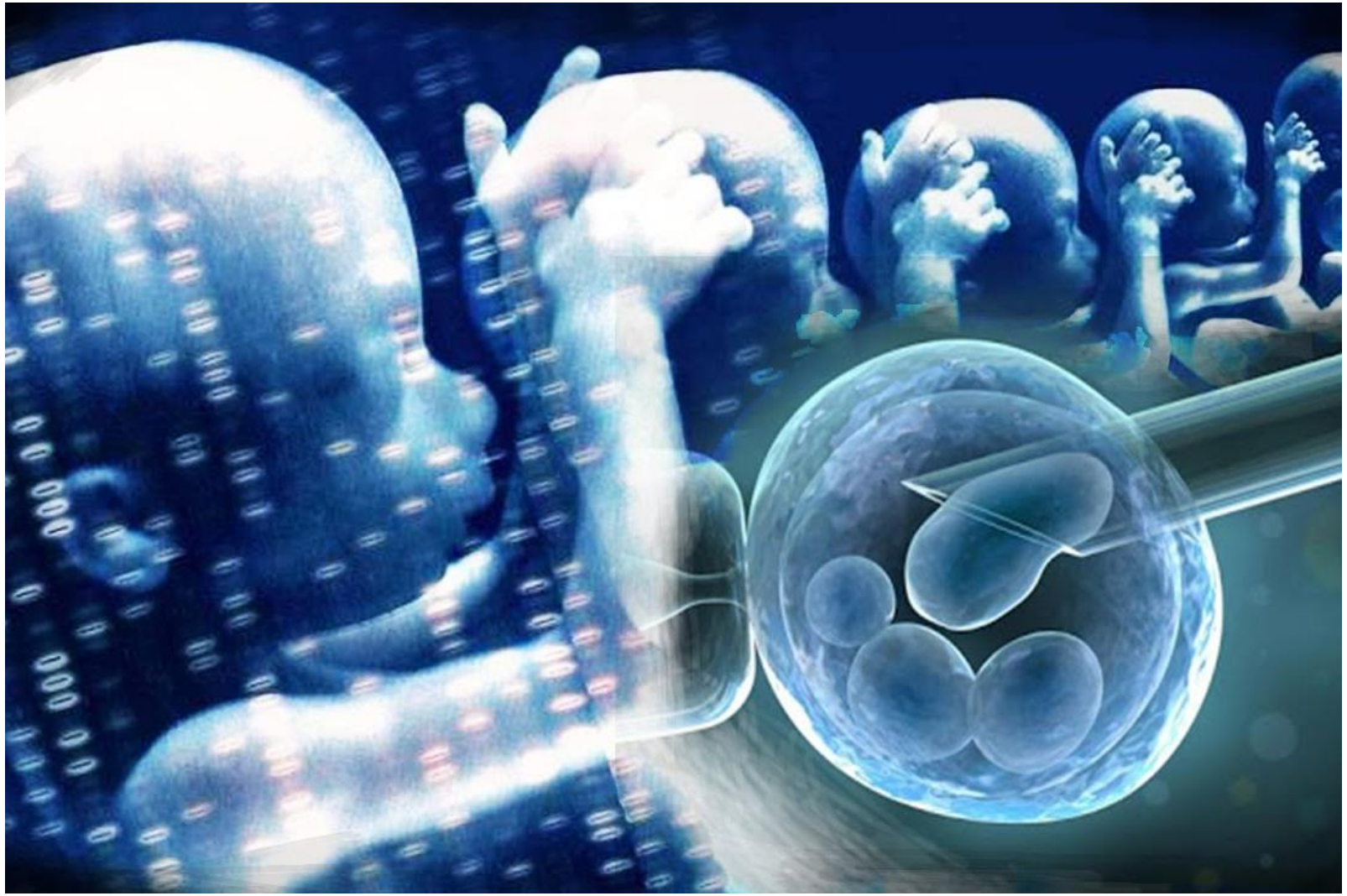
Artificial Intelligence & Biotechnology: Sapiens 2.0



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Visioning and strategizing for the digital future

Industries are changing (or going to change) fundamentally

	Mobility	Valuation	Health	Safety
Artificial				
Digital				
Industry				
Trade				
Agriculture				

Strategy development:
Exploration **PLUS** Exploitation

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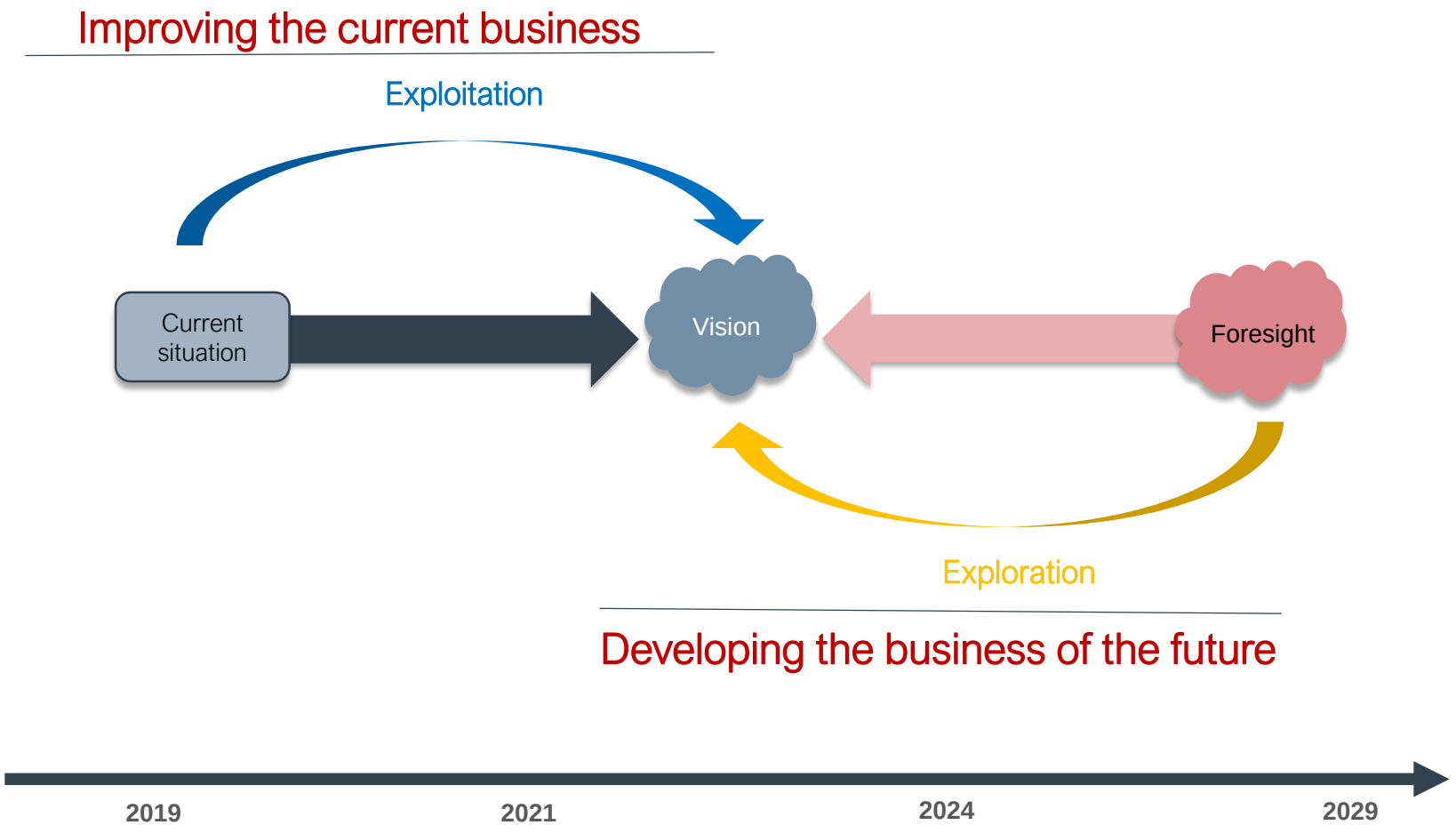

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Breaking News! AI news anchor expects a societal revolution

For more information: Contact us!

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Christien van Rijs
Chief Liaison Officer

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