

活動報告

20230518

調査委員会

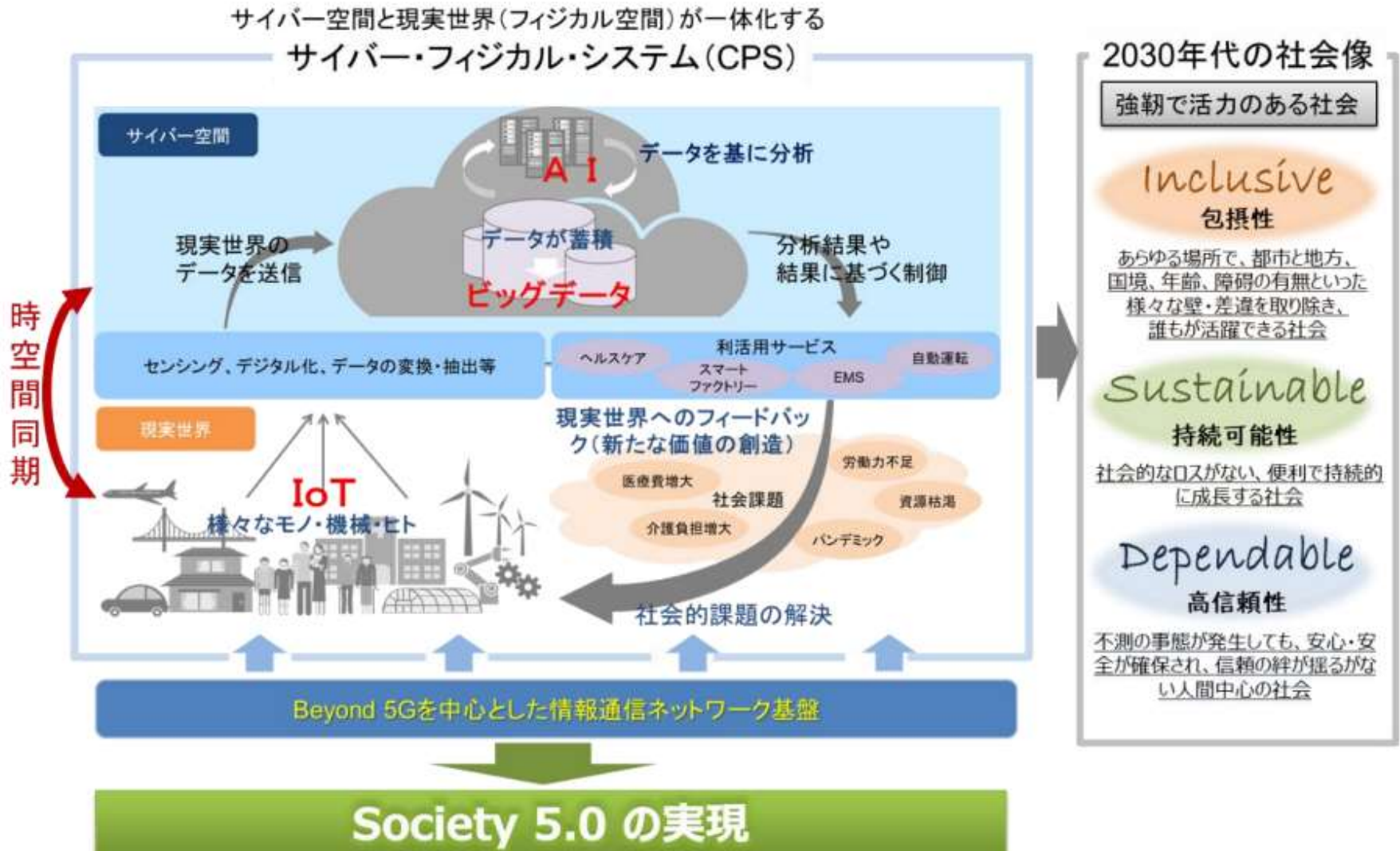
拡大するVirtual生活圏と 人間生活

-DXによる幸福の追求-

2023年5月16日

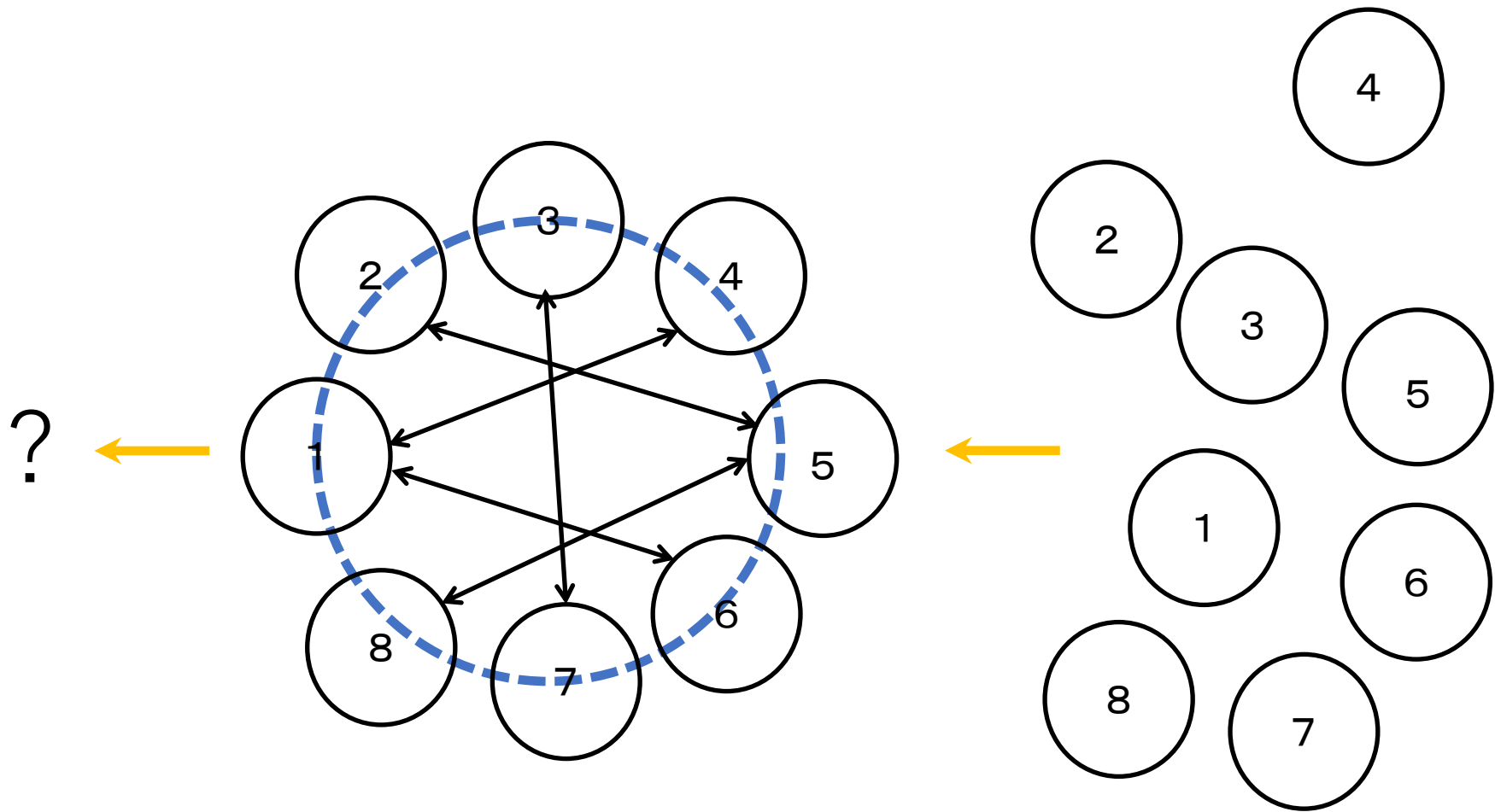
林秀臣

(図表1：サイバー・フィジカル・システムの進展と 2030 年代の社会像)



Virtualな世界

- **Virtual Reality**（仮想現実）：映像、音、風圧、匂い、温度、触感、味、、、要するに体を感じるあらゆる感覚が再現される場の構築と相互作用
- 人の存在する場に同時に実在していても、いなくても、対象物と感覚を共有して情報を交換しあう場
- **Virtual Reality**で最低限共有する情報：映像と音
 - 現在のSNS
 - ある種のPlatform

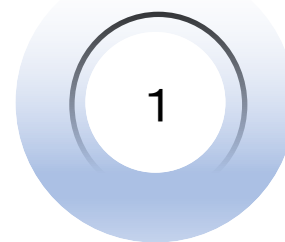
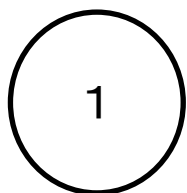


空間のVirtualな連結
(距離を意識しない多様な結合)

空間の集合

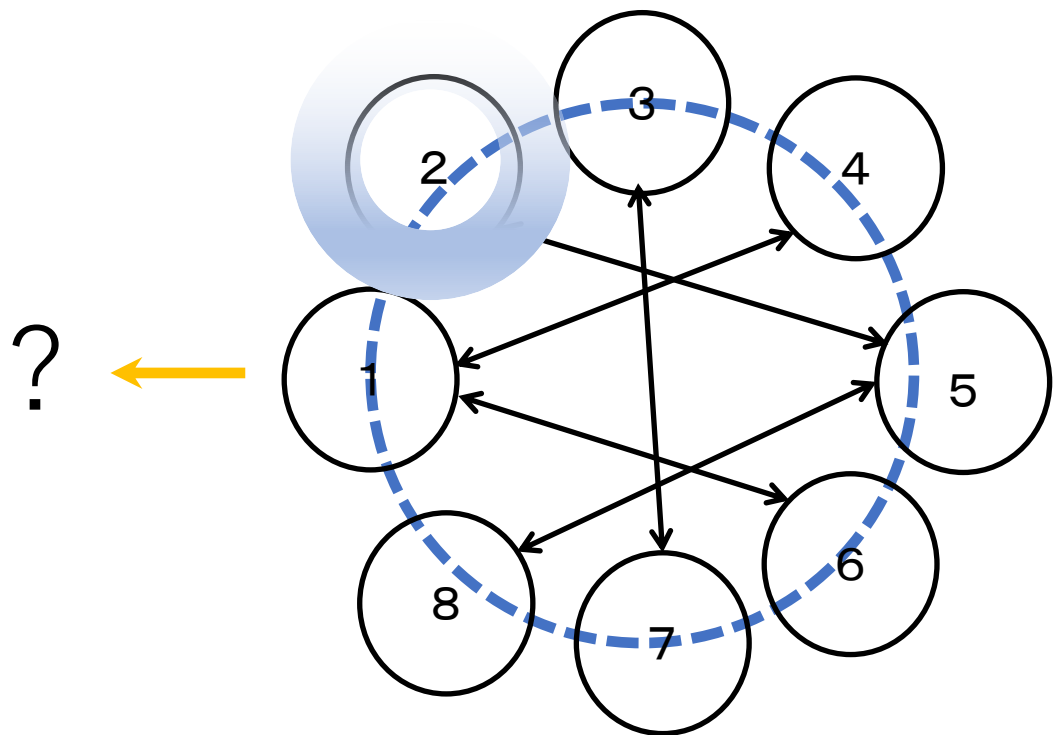
生活圏

- 生きる場：生かすものが供給される場

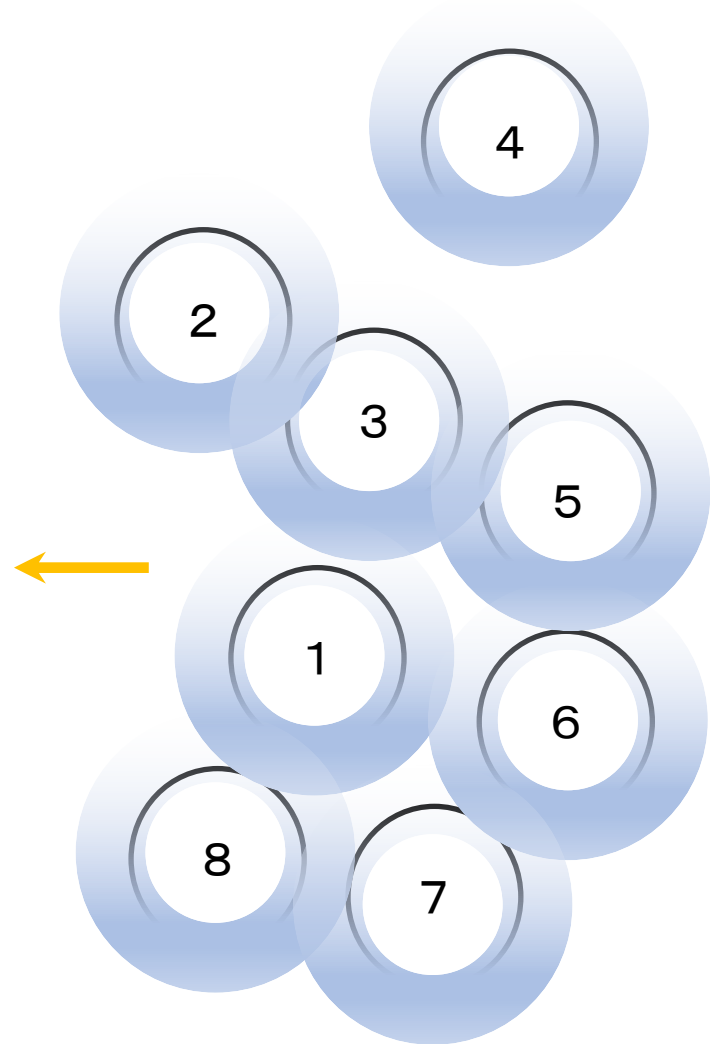


生活圏

- 生きる場
- 人間を生かすものが供給される場（人は完全にはVirtualになりえない）
- 情報をものに交換する仕組みが組み込まれる
- この仕組みをBack-yardとして構築して人間の生活圏が得られる
- 情報と物理的実体との連結



Virtual生活圏の形成
 遠隔地の結びつきの
 強化(生活圏の連結)



個別の生活圏の集合
 + 外周への染み出し

Virtual生活圏

- **Virtual Reality**（仮想現実）：映像、音、風圧、匂い、温度、触感、味、、、要するに体を感じるあらゆる感覚が再現される場の構築と相互作用
- 人の存在する場に同時に実在していても、いなくても、対象物と感覚を共有して情報を交換しあう場
- 生活圏：生活の場（生きるために必要な場）
- **Virtual Reality**で最低限共有する情報：映像と音
 - 現在のSNS
 - ある種のPlatform

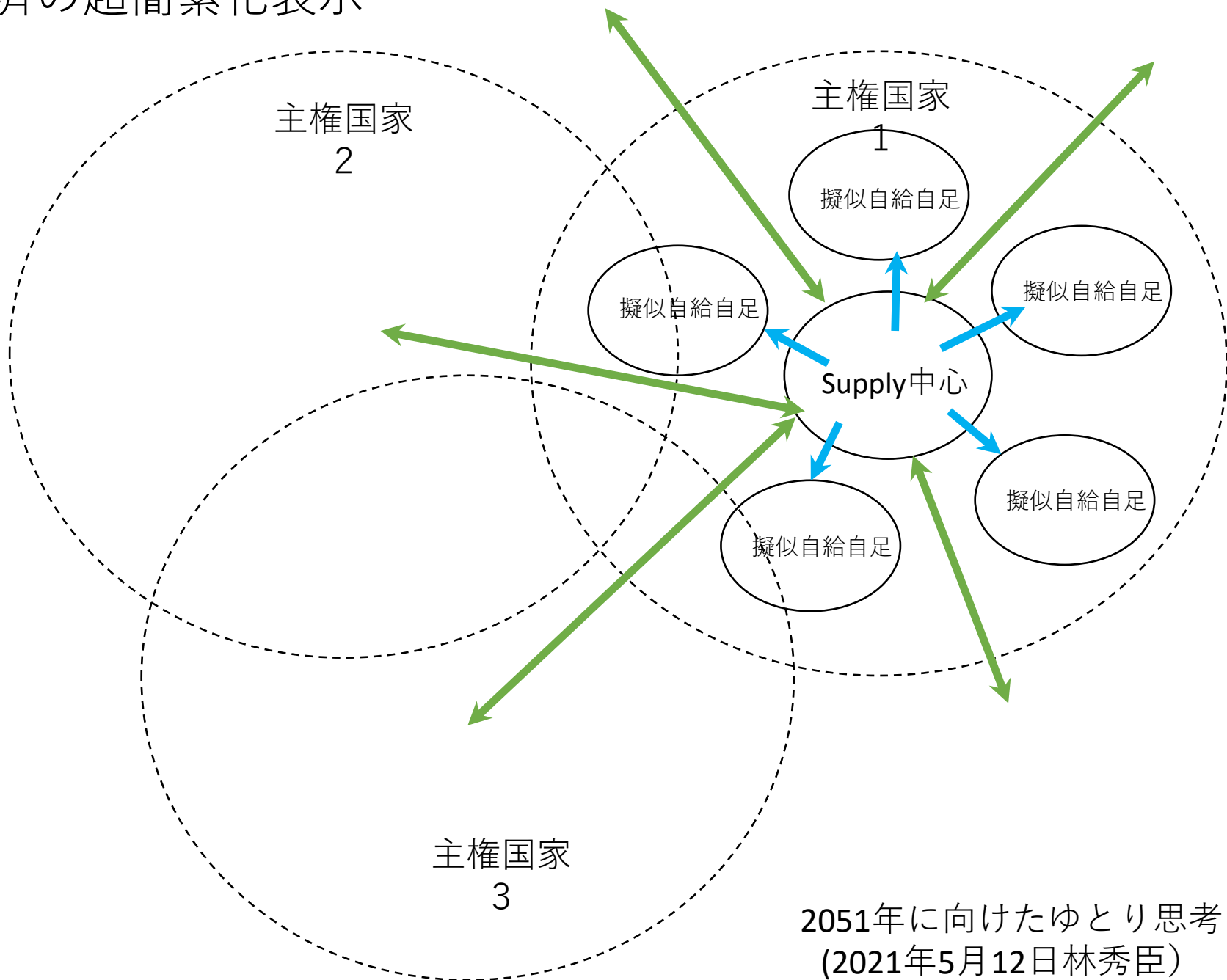
何をBack-yardに組み込むか

- 人間はVirtualにはなりえない（ものの世界との融合）
- 情報をものに交換し供給し
- 廃棄物を除去する仕組み

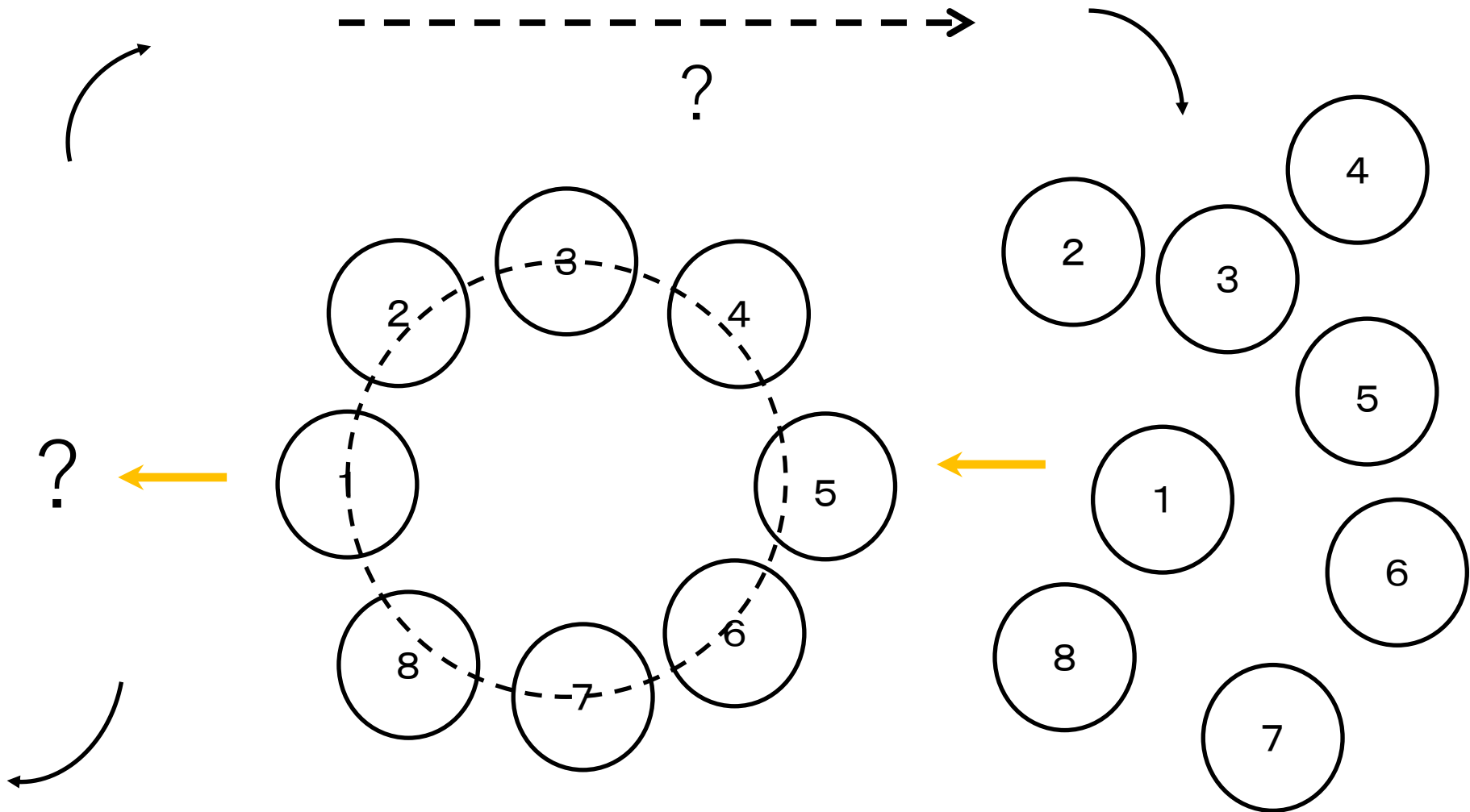


単純にDrone? : この仕組みと運ばれるもので、世界は変わる

経済の超簡素化表示



2051年に向けたゆとり思考
(2021年5月12日林秀臣)



鎖依存状態：輪にはいると
何でも楽に手に入れられる
(出る必要を感じない)

自由独立(現状?)

2051年に向けたゆとり思考
(2021年5月12日林秀臣)

幸せな世界の構築

それがDXなのか？

お聞き頂き有り難うございました。

Brussels, 30.11.2022
COM(2022) 677 final

2022/0396 (COD)


Proposal for a


REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL


on packaging and packaging waste, amending Regulation (EU) 2019/1020 and Directive (EU) 2019/904, and repealing Directive 94/62/EC


(Text with EEA relevance)


{SEC(2022) 425 final} - {SWD(2022) 384 final} - {SWD(2022) 385 final}


 Annexes to the proposal.pdf


 Executive summary of the Impact assessment.pdf

 Impact assessment accompanying the proposal - part 1.pdf

 Impact assessment accompanying the proposal - part 2.pdf

 Proposal for a Regulation on packaging and packaging waste.pdf

 Questions__Answers_on_the_Regulation_on_Packaging_and_Packaging_Waste.pdf

 Questions_and_Answers_-_Communication_on_a_policy_framework_for_biobased_biodegradable_and_compostable_p

Green Deal: New proposals to make sustainable products the norm and boost Europe's resource independence

←

←

欧州委員会は本日、持続可能な製品を EU の標準とし、循環型ビジネスモデルを促進し、グリーンな移行に向けて消費者の力を高めるための欧州グリーンディール提案パッケージを提示する。循環型経済行動計画で発表したように、欧州委員会は、EU 市場に流通するほとんどすべての物理的製品を、設計段階から日常の使用、再利用、廃棄に至るまで、ライフサイクル全体を通してより環境に優しく、循環的で、エネルギー効率の高いものにするための新たな規則を提案している。←

←

また、欧州委員会は本日、繊維製品の耐久性、修理性、再利用性、リサイクル性を高め、ファストファッション、繊維製品の廃棄、売れ残り繊維製品の破棄に取り組み、それらの生産が社会権を完全に尊重して行われるようにするための新たな戦略も発表している。←

←

3 つ目の提案は、建設製品の域内市場を強化し、建設環境が我々の持続可能性と気候に関する目標を達成するために適切な規制の枠組みを確保することを目的としている。←

←

最後に、このパッケージには、グリーン移行において消費者の力を高めるための新たな規則に関する提案が含まれており、消費者は製品の環境面での持続可能性についての情報をよりよく得ることができ、グリーンウォッシュからよりよく保護されるようになる。←

←



Brussels, 30.3.2022
COM(2022) 140 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

On making sustainable products the norm

- [On making sustainable products the norm.pdf](#)
- [Sustainable_products_Factsheet.pdf.pdf](#)
- [Questions_and__Answers__Sustainable_Products_Initiative.pdf](#)



Making sustainable products the norm in Europe

Our current 'take-make-replace' economic model depletes our resources, pollutes our environment, damages biodiversity and drives climate change. It also makes Europe dependent on resources from elsewhere. This is why the EU is moving to a circular economy model, based on more sustainable products.

30 March 2022
#EUGreenDeal

Key actions for circular and sustainable products:



Make products greener, circular and energy efficient through **ecodesign requirements**



Improve products **environmental sustainability information** for consumers and supply chain actors by introducing **Digital Product Passports**



Prevent destruction of unsold consumer products



Promote **sustainable business models**



Set mandatory requirements for **green public procurement**

Benefits of sustainable products

Addressing the **environmental impact** of products throughout their life cycle, will lead to more **sustainable, circular and more resource efficient products** in the EU. More sustainable electronics, furniture, textiles and other products will contribute to the **resilience of the EU economy**.



BENEFITS FOR CONSUMERS

- Extend lifetime of products
- Save energy, resources and costs
- More information to make sustainable choices



BENEFITS FOR THE ENVIRONMENT

- Help reduce impacts on climate, environment and biodiversity
- Remove the most polluting products from the EU market
- Reduce negative impacts along product value chains



BENEFITS FOR BUSINESSES

- Reduce administrative and compliance costs
- Ensure level playing field
- Create competitive edge globally



BENEFITS FOR THE ECONOMY

- Decouple economic growth from energy and resource use
- Increase resilience to external shocks, reduce dependencies
- Strengthen market for recycled materials

Ecodesign for sustainable products

New rules build on the existing Ecodesign Directive, which sets ecodesign requirements at EU level for energy-related products. The new rules propose to cover **almost all products on the EU market** for maximum environmental and economic benefit.

Impact of current ecodesign and energy labelling legislation:

€ 120 billion saved in energy expenditure for consumers in 2021 alone

Ecodesign

New Ecodesign for Sustainable Products Regulation

Wider range of requirements and products covered:

- product durability, reusability, upgradability and reparability
- presence of substances that inhibit circularity
- energy and resource efficiency
- recycled content
- remanufacturing and recycling
- carbon and environmental footprints
- Information requirements, including a Digital Product Passport

Sustainable products



Ecodesign requirements



Extending product life cycle



Reducing carbon and environmental footprints of products throughout their life cycle



Ensuring products are fit for a climate neutral and circular economy



Preventing waste and boosting material recovery



Minimum uptake of recycled materials



DIGITAL PRODUCT PASSPORT

New 'Digital Product Passports' provide information about products' environmental sustainability. They help consumers and businesses **make informed choices** when purchasing products, **facilitate repairs and recycling** and improve **transparency** about products' life-cycle impacts on the environment. The passports also help public authorities to **better perform checks and controls**.



Publications Office

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European Union, 2022
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Brussels, 30.3.2022
COM(2022) 141 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

EU Strategy for Sustainable and Circular Textiles

Brussels, 30.3.2022
SWD(2022) 82 final

PART 1/4

COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

Accompanying the document

**Proposal for a Regulation of the European Parliament and of the Council
establishing a framework for setting ecodesign requirements for sustainable products
and repealing Directive 2009/125/EC**

{COM(2022) 142 final} - {SEC(2022) 165 final} - {SWD(2022) 81 final} -
{SWD(2022) 83 final}

II

*(Information)*INFORMATION FROM EUROPEAN UNION INSTITUTIONS, BODIES, OFFICES
AND AGENCIES

EUROPEAN COMMISSION

COMMUNICATION FROM THE COMMISSION

Ecodesign and Energy Labelling Working Plan 2022-2024*(2022/C 182/01)*

Digital Product Passport

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 CLG Europe
 Wuppertal Institut

Materials & Products Taskforce

Digital Product Passport:
 The ticket to achieving a climate neutral and circular European economy?

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WE MEAN BUSINESS COALITION

wbcscd

The EU Digital Product Passport shapes the future of value chains: What it is and how to prepare now

BCG BOSTON CONSULTING GROUP

BCG BOSTON CONSULTING GROUP wbcscd

Enabling circularity through transparency: Introducing the EU Digital Product Passport

January 2023



Industry 5.0
 European Commission
 Directorate-General for Research and Innovation

IKOM Working Paper
 No. 2/2022

Volker M. Banholzer

From „Industry 4.0“ to „Society 5.0“ and
 „Industry 5.0“: Value- and Mission-Oriented Policies.

Technological and Social Innovations – Aspects of Systemic Transformation

DIN and DKE ROADMAP

German Standardization Roadmap Industrie 4.0

Version 4



 **STANDARDIZATION
 COUNCIL
 INDUSTRIE 4.0**

