OPEN and co-created ViRtual worldS for Europe

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open-verse.eu

OPENVERSE at a glance

OpenVerse

Full name
OPEN and co-created ViRtual worldS

Topic
Supporting the emergence of an open human-centric virtual worlds (CSA)
HORIZON-CL4-2023-HUMAN-01-23

36 months

Funding scheme
Horizon Europe

Costs
EUR 3,206,000

12 partners

from **5** countries
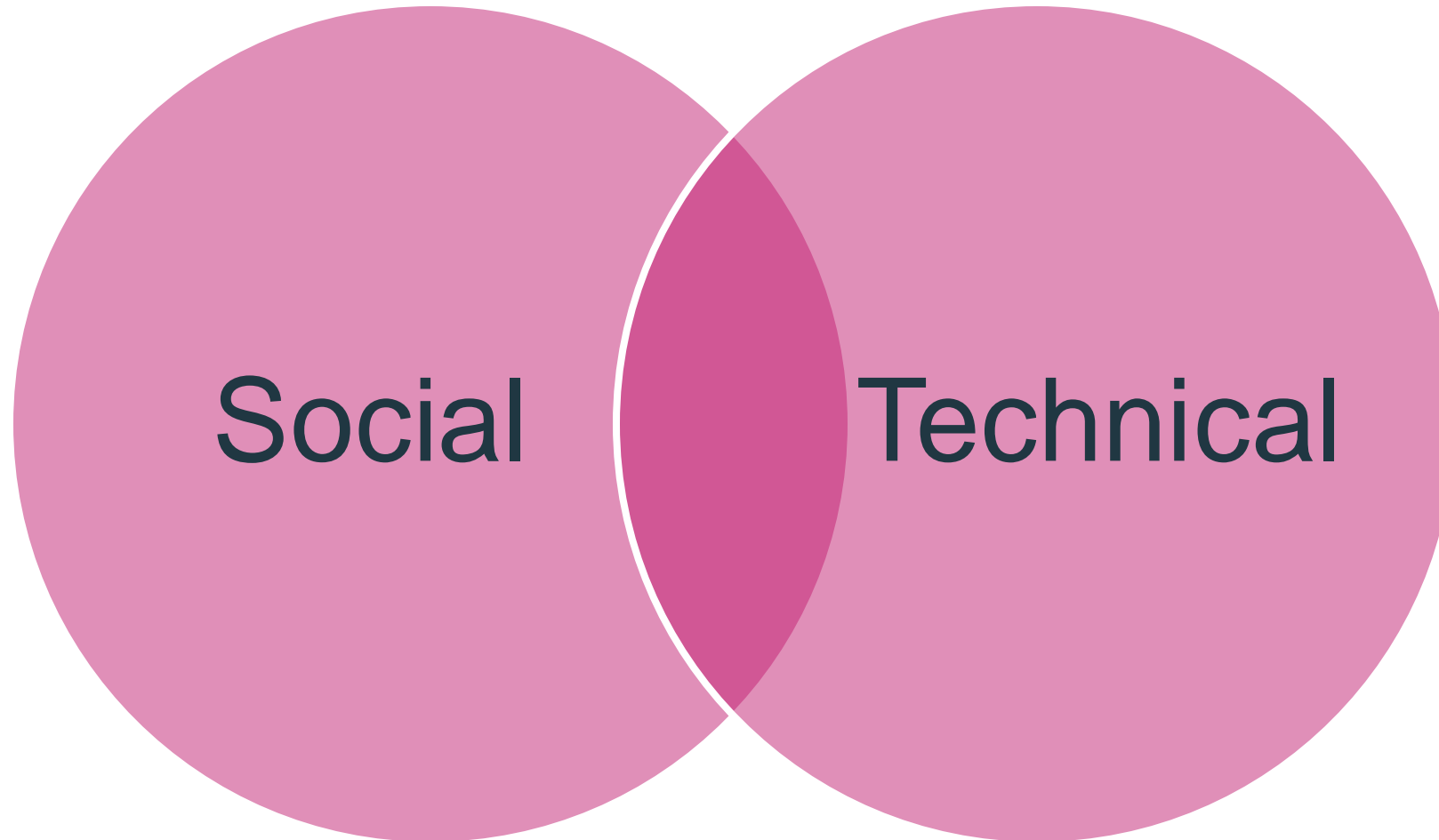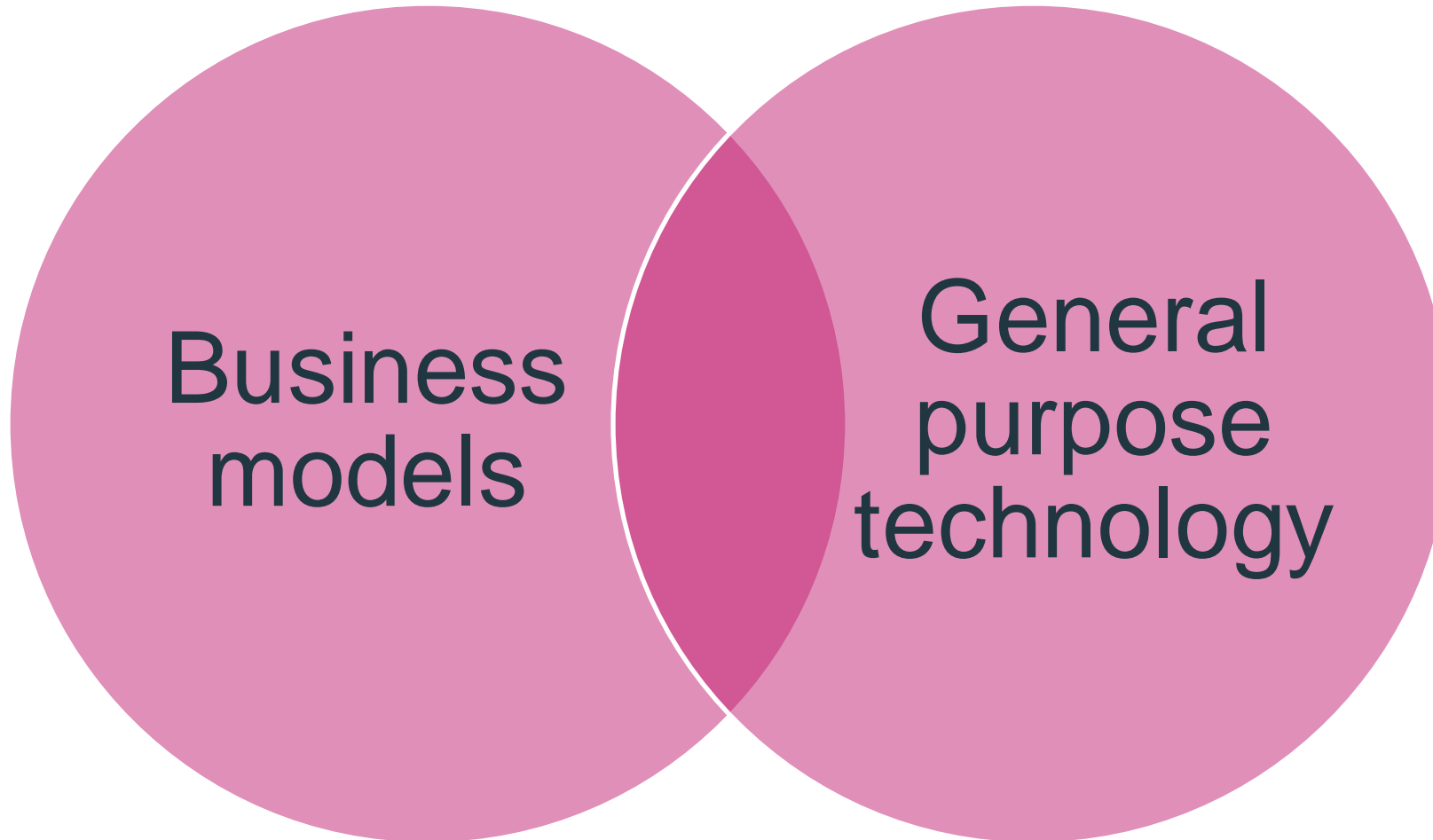
The Partners

Challenges

- Need to ensure that the future virtual worlds will consider the human-centric dimension at the same level of importance of technologies and infrastructure as foundational components of truly EU virtual worlds.

- Need to ensure higher accessibility, greater freedom and control, lower barriers to entry and more equitable distribution of resources.

- Need to ensure interoperability, privacy and security as well as data ownership.

- Need to ensure more innovation, creativity and social benefits in an open and collaborative humancentric virtual worlds where developers and users could work together.

Key exploitable results

- The OPENVERSE stakeholder community

- Handbook of co-creation methodologies

- Mixed reality repository of use cases

- The OPENVERSE roadmap to be available in the observatory as an interactive web tool

- The watch and taxonomy, the Marketplace

- Repository of policies and projects

- Results and methodology from the demonstration case on virtual worlds-Enabled Robotics

- Results and methodology from the on exploratory study existing virtual worlds environments

- Results and methodology from Technology Foresight, and research on IPR and Governance Models, Ethical and legal requirements elicitation

- Input to redefinition of industry standards.

- Plan for exploitation and sustainability of the results

- The OPENVERSE Observatory

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Socio-technical systems

Techno-economic paradigms

Business models

General purpose technology

Regulation as a safeguard

Regulation **safeguards** those aspects of the **social system** that we do **not want to change**, but it **can be challenged**.

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Regulation as a catalyst

Regulation (and policy) act as a **catalyst of innovation** among the **possible trajectories**.

Reality check

**How certain industries might emerge as arenas of tomorrow**

● Arenas of today　○ Subsegments of arenas of today　● Candidate arenas of tomorrow

Cloud services · **E-commerce** · **Electric vehicles** · **Semi-conductors**

4 arenas of today could continue as arenas of tomorrow.

Consumer internet → Digital advertisements

Software → AI software and services

Video/audio entertainment → Streaming video

3 spin-offs of arenas of today could become arenas of tomorrow.

Batteries · Cybersecurity · Drugs for obesity · Future air mobility · Industrial and consumer biotech · Modular construction · Nuclear fission power plants · Robotics · Shared autonomous vehicles · Video games · Space

11 emergent arenas could exhibit high growth and high dynamism through 2040.

Reality check

How certain industries might emerge as arenas of tomorrow

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(Cloud services) (E-commerce) (Electric vehicles) (Semi-conductors)
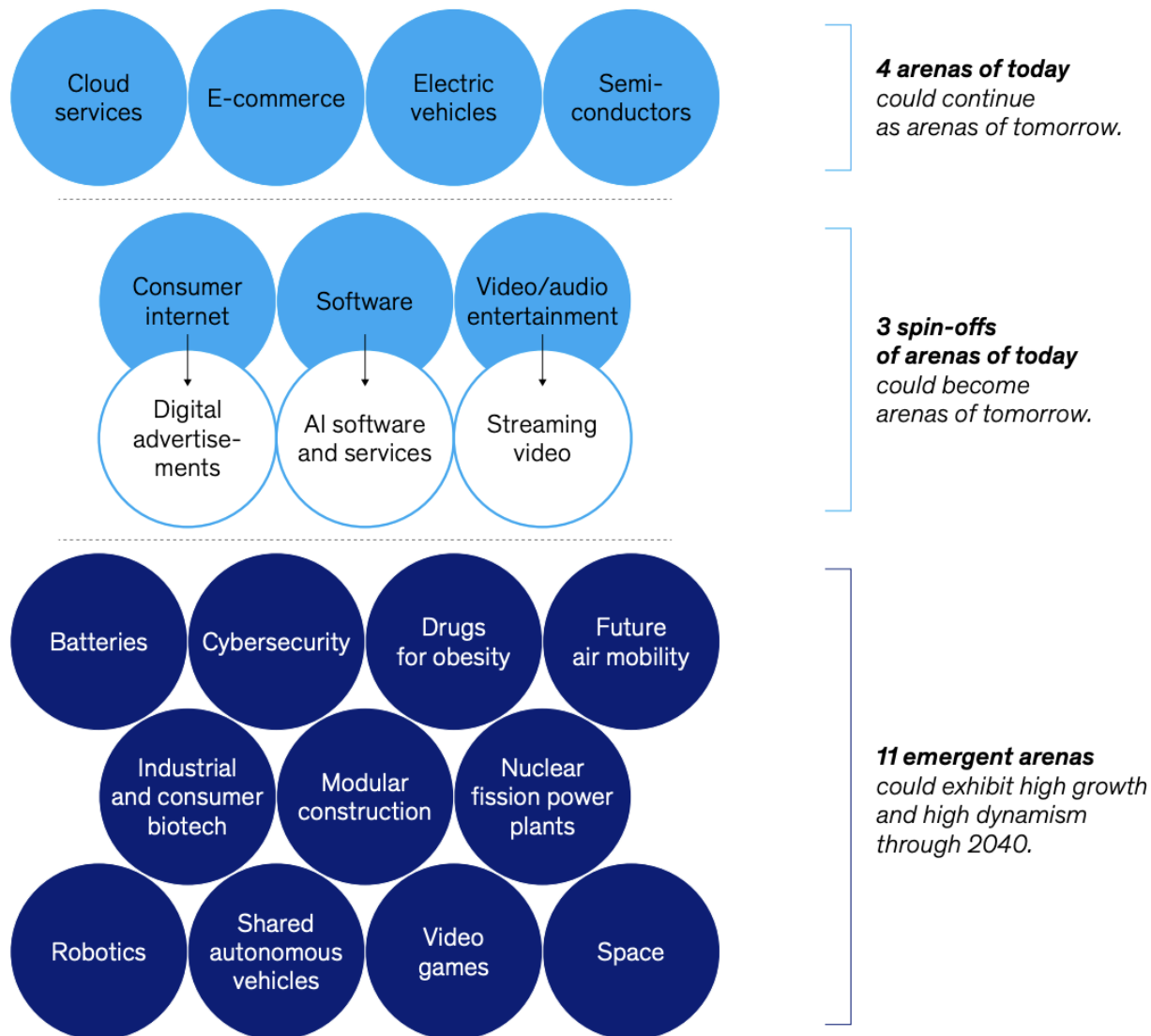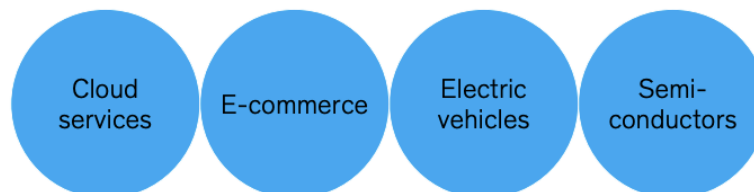
4 arenas of today could continue as arenas of tomorrow.

Why other industries considered might not emerge as arenas of tomorrow

5 arenas of today *could lack the growth and dynamism through 2040 to continue as arenas of tomorrow.*

● Biopharma

● Consumer electronics

● Industrial electronics

● Information-enabled business services

● Payments

8 almost-emergent arenas *might show high growth and dynamism through 2040 but were not analyzed because of uncertainties about the likelihood of the scenario and the time frame for scaling.*

● Clean hydrogen

● Lower-carbon materials

● Nuclear fusion

● Products and services for older adults

● Renewable energy generation equipment

● Sustainable fuels

● Virtual reality and augmented reality

● Web3, including decentralized finance

Source: McKinsey Global Institute analysis

(Robotics) (Shared autonomous vehicles) (Video games) (Space)

through 2040.

The tenets of innovation

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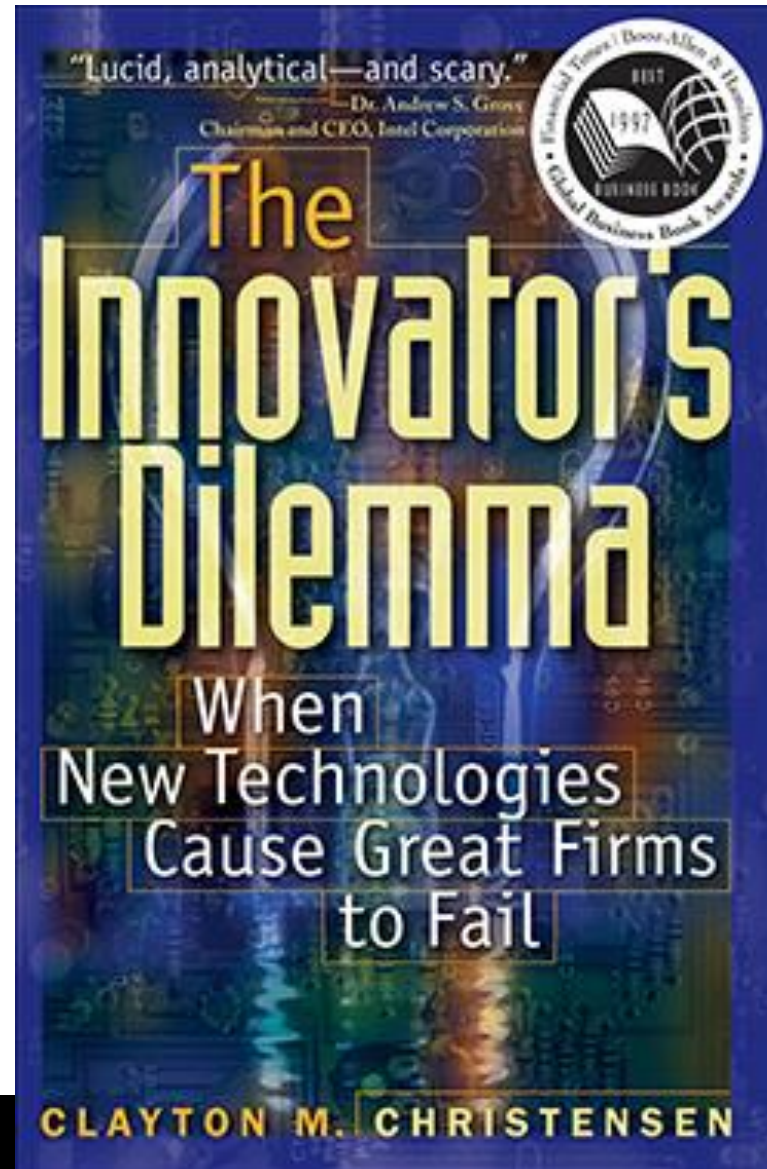
"For everything else, there's research"

So what?

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Certainly **regulation** should be **challenged** and it should also be **upheld**.

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So what?

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A few examples: intellectual property regulation **(IPR)**, **labour** market, **taxation**, **data** governance, **internet** governance. **Anything else?**

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Thanks for your attention

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