



Computing capacities and data infrastructures supported by Digital Europe programme

Healthy Cloud Workshop
23 November 2022

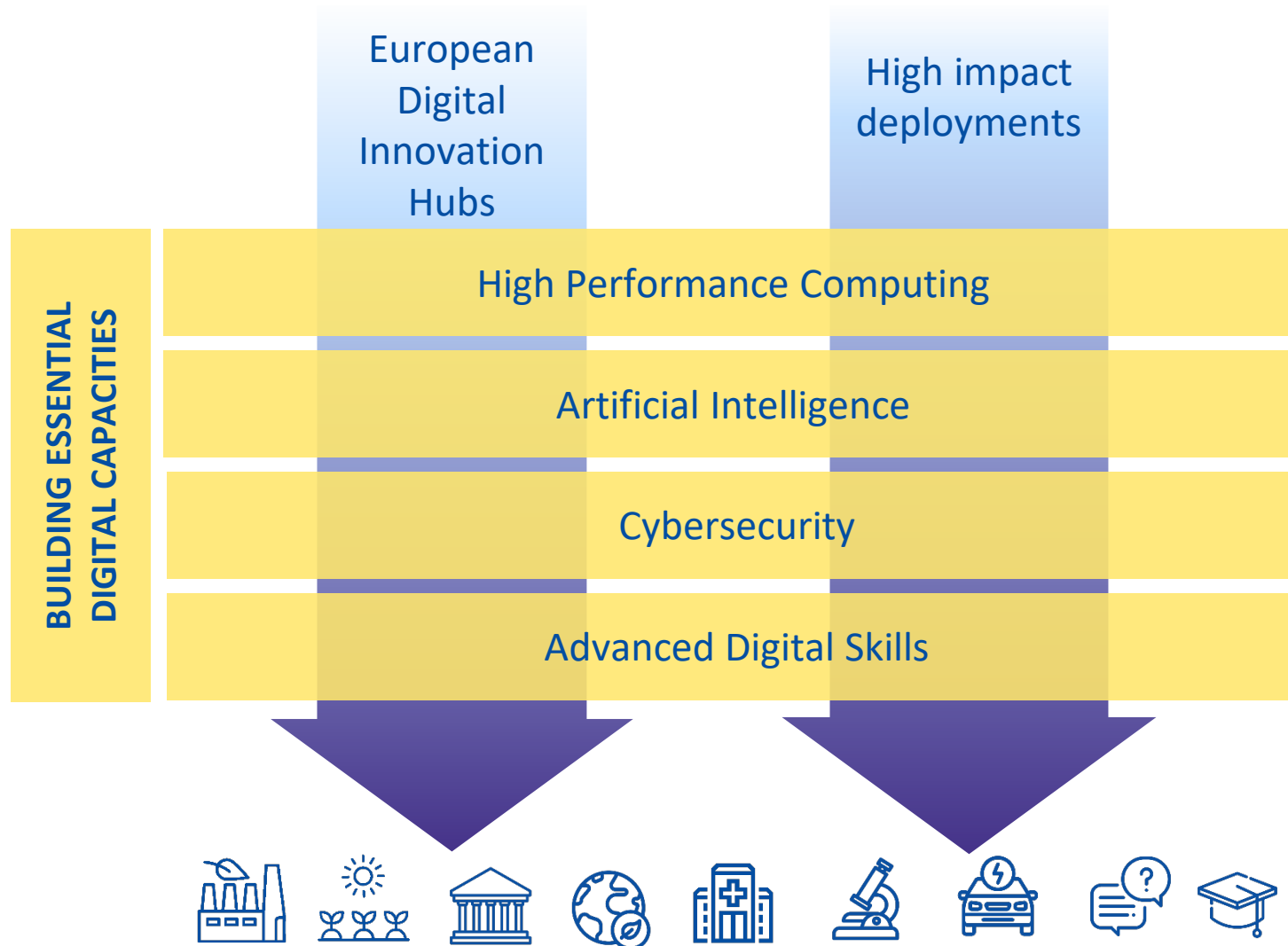
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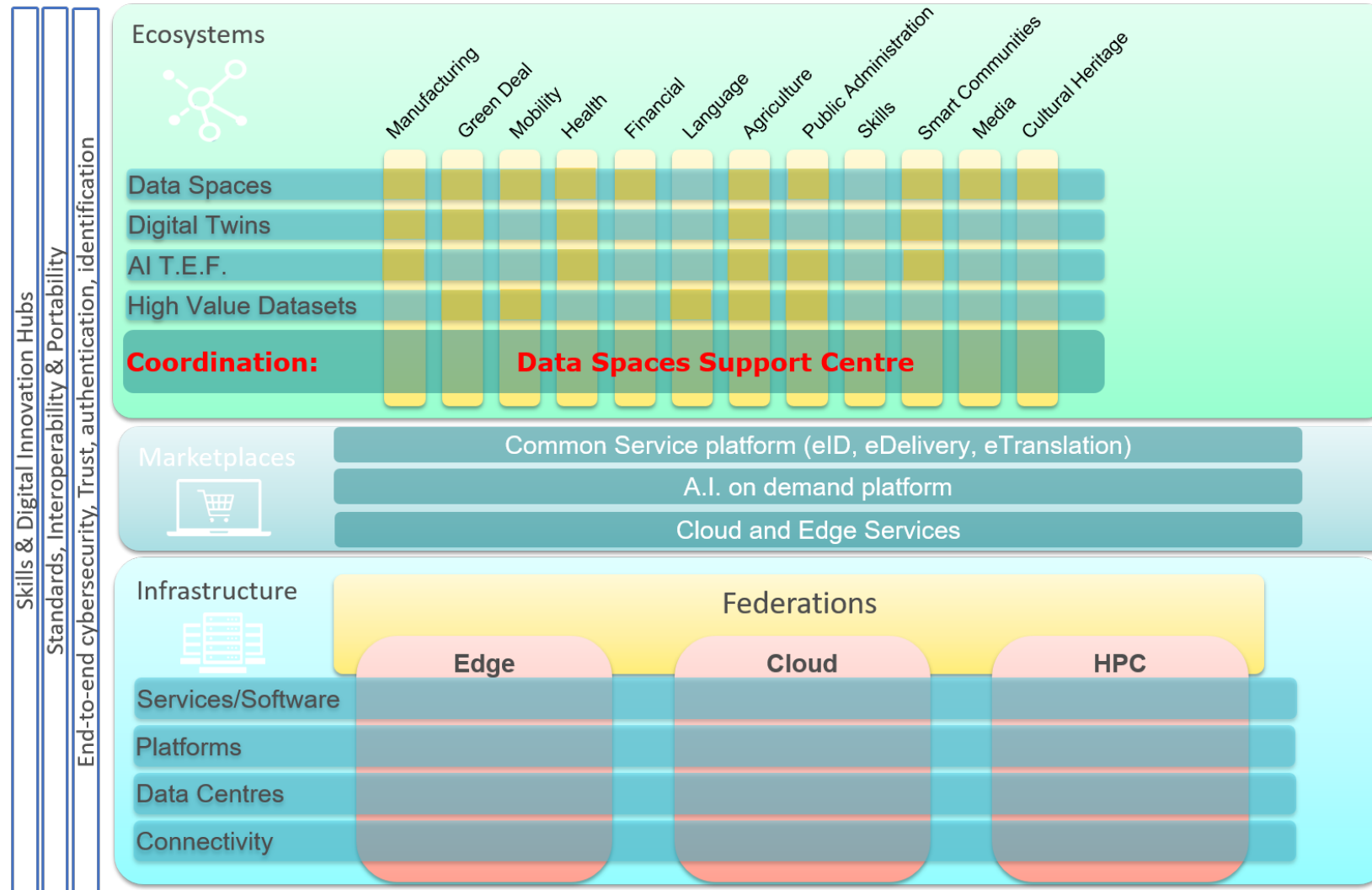


Digital Europe programme structure

ACCELERATING THE BEST USE OF DIGITAL TECHNOLOGIES



Digital Europe programme: overview of data spaces



Data Spaces should be built over federated data infrastructure with common technical requirements to **assure interoperability and use common standards.**

Services and middleware developed to enable a federation of cloud-to-edge capacities that will be at the disposal of all data spaces



Health in Digital Europe Work Programme 2021-22

Artificial Intelligence, data and cloud

Data spaces

Genomics

Cancer Imaging

Testing and
Experimentation
Facilities

TEF
for
Health

Accelerating best
use of technologies

Uptake of digital
solutions in
Health and Care

An ecosystem
for digital twins
in healthcare

Cybersecurity and
trust

Support to
cybersecurity in
the health
sector

... plus activities under advanced **skills**; benefits through **HPC** and **cloud** infrastructures; European **Digital Innovation Hubs**...



Health data space - federated European infrastructure for cancer images data

- deployment of the infrastructure needed to **link and explore** fragmented **European databases of medical images** of different types of cancer
- infrastructure facilitating **access to cancer images and related patient data** in full compliance with the applicable data protection requirements
- targeted **users**: clinicians, researchers and innovators
- clear **business model** for ingestion of data and its exploitation by public and private organisations, industry and innovators
- supported by **advanced IT tools and capacities**, e.g. AI and HPC
- ultimate aim: more precise and faster **clinical decision-making, diagnostics, treatments and predictive medicine**



Health data space - federated European infrastructure for genomics data

- deployment of the infrastructure needed to make **harmonised European genomic data** resources and linked **clinical, phenotypic and other information**, [...], **securely findable and accessible** across national borders.
- the infrastructure is expected to provide a **federated network** of connected genomic databases deploying trust mechanisms (**security and privacy by design**), enabling **data discovery, querying** and use of appropriate computing capacities for **distributed data analysis** and providing a minimum of **core services** to facilitate the operation of the federated network.
- implementation of the genomic data infrastructure should **build on the progress achieved and agreements made within the 1+ Million Genomes initiative**
- the project is expected to **engage with patients, health professionals, the public** and other stakeholders to **explain** that data is used transparently and responsibly, and **raise awareness** of the expected benefits for European patients and citizens.

Why collaborate on genomics?

Data and expertise

- data dispersed across Europe – sequenced genomes
- link, connect, protect, collaborate
- secure access
- scale effect

Research

- better understanding of diseases
- causes, risk factors, probabilities, cure



Healthcare

- quicker diagnosis and treatment
- personalised medicine
- improved prevention programmes
- more efficient healthcare systems



Thank you

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