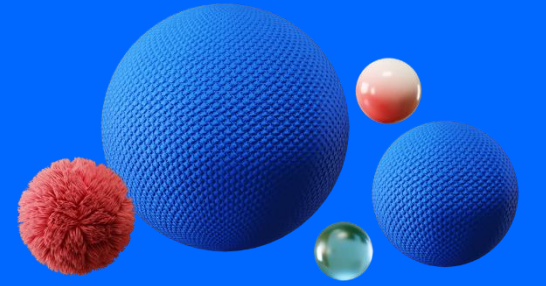


EDIH



EDIH Network Summit 2023
31 May – 1 June

Workshop on Digital Health

Introduction and welcome, 1st June - 11-12:30

Jaakko Aarnio EC DG CONNECT.A4 Digital Transformation of Industrial Ecosystems

Alexandra Wesolowska EC DG CONNECT.H3 eHealth, well-being, ageing

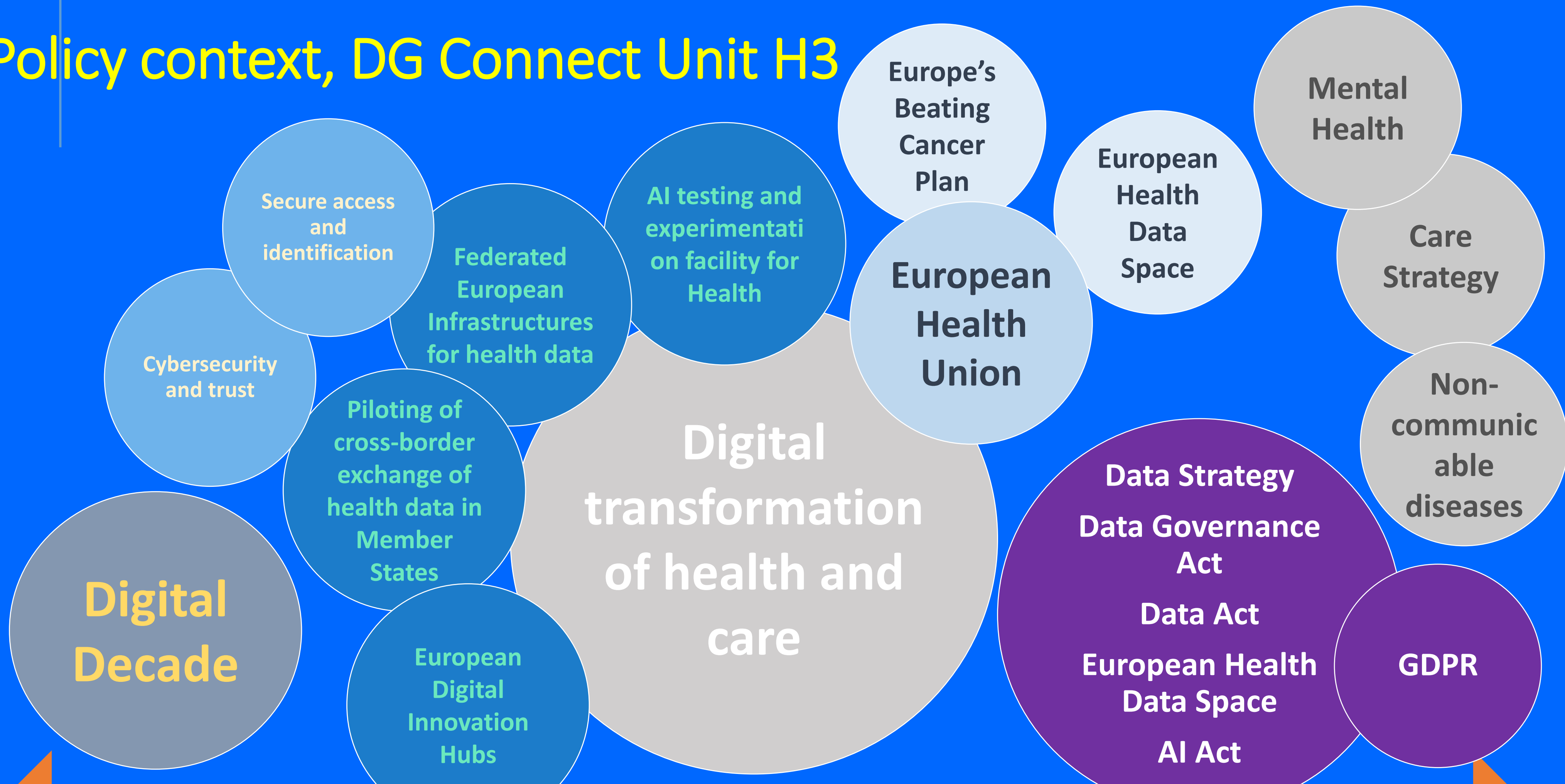
European Commission

Location: Brussels, Belgium

Outline:

- **Welcome and policy contexts of Digital Health at DG Connect**
- **Objectives**
- **Participants and tentative organisation**
- **Planning ahead**

Policy context, DG Connect Unit H3



Digital Europe Programme + Horizon Europe

Objectives

- to present the findings from the kick-off meeting of the Working Group on Digital Health on 17th April
- to present the activities of four EDIHs addressing broadly Digital Health themes
- to collect and discuss further proposals with common and specific interests

Participants and tentative organisation

- **78 Registered participants and representation of 64 EDIHs or SoEs in this workshop**
- **Voluntary participation in the EDIH Working Group on Digital Health**
 - Organisation and content of the Working Group on the shoulders of the EDIHs
 - Community manager Prof. Sebastiaan Maijer (HDS, KTH Stockholm), 1st year, moderator in this workshop
 - EC role to assist only - policy and connections
 - DG Connect Unit A4: Digital Transformation of Industrial Ecosystems (Jaakko Aarnio)
 - DG Connect Unit H3: eHealth, Well-being and Aging (Aleksandra Wesolowska)
 - Liaison with DG GROW, DG SANTE, DG RTD, JRC, HaDEA, EIC, etc.

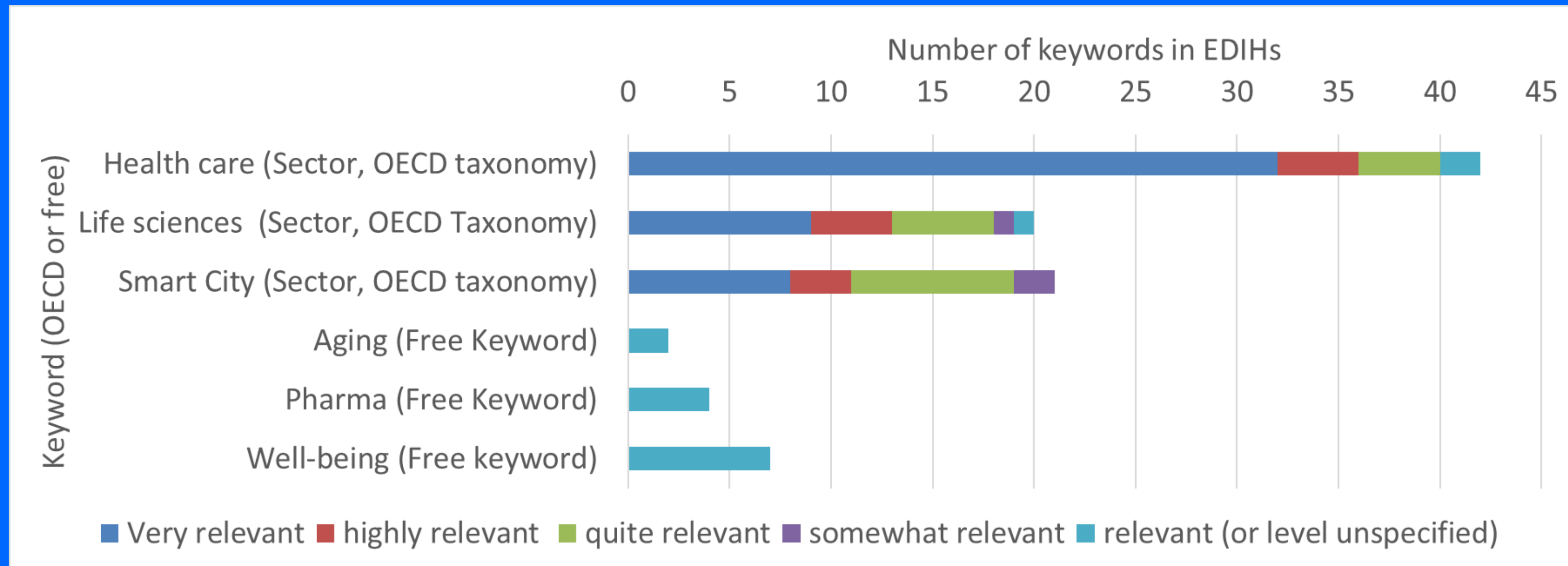
Rough breakdown to Digital Health industries:

- **Healthcare**
- **Well-being**
- **Pharmaceuticals**
- **Aging**

Four desks labeled in Auditorium B accordingly for organising discussion per industry sector during and after the workshop

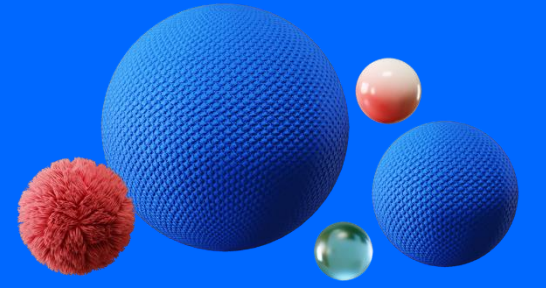
Summary of EDIH profiles represented in this workshop per OECD or free keywords based on rough classification to Digital Health industries per the level of relevance:

Health (Healthcare, Life sciences), Care (Aging, Smart city), Pharmaceuticals and Well-being. *)



*) Breakdown to sub-industries in individual EDIHs: https://european-digital-innovation-hubs.ec.europa.eu/system/files/2023-05/EDIH%20Summit%20-%20Workshop%20on%20Digital%20Health%20representation%20of%20EDIHs_31.5.2023.pdf, Source: European Digital Innovation Hubs Network, EDIH Catalogue, <https://european-digital-innovation-hubs.ec.europa.eu/edih-catalogue>

EDIH



EDIH Network Summit 2023
31 May – 1 June

Thank you

Working Group Health

Prof. Sebastiaan Meijer

KTH Royal Institute of Technology,
Stockholm

EDIH Network Summit 2023

31 May – 1 June



Health: a little different.....

- A highly decentralised decision-making system
- With strong professional evidence requirements
- And a weak capability to exchange data
- Governed by many regulations

- How do we move forward?



Different dimensions covered in our EDIHs

- Hospital Care <-> Everyday Health
- Small-scale data <-> Large-scale biobanks
- Young age <-> Aging

Looking through the EDIH descriptions vs medical innovation: Lack of the keywords that drive the health care sector:

- Patient Safety, Ethics
- Patient Centric

Proposition: the gap in Digital Innovation in health is even visible in EDIH

.... but maybe we attack it from the other side?



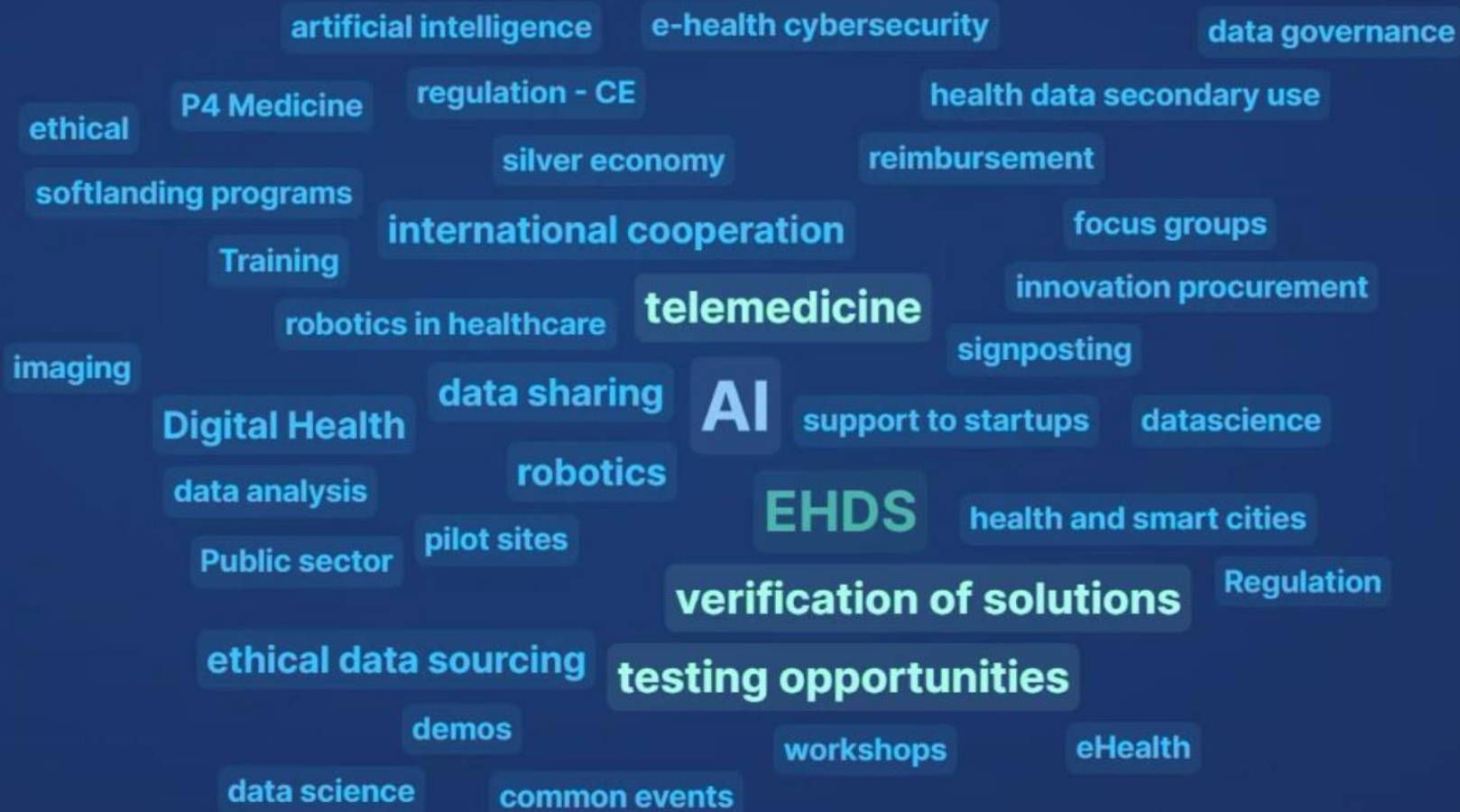
Our WG Health: first conversations

The first online meeting of this group was held on **17th of April**

- *Introduction (EC, DTA)*
- *Goal definition*
- *Introduction of the initial members*
- *Selection of the moderators and the roles of the members*
- *Suggestions for long term agenda items with common interest*
 - *Data access and data processing for SMEs*
 - *The new landscape within EDIHs*
 - *The balance between large scale initiatives and SME-based innovation*
 - *Citizen-centric innovation: my own data vs health care data*
 - *Preparing the demand side for Digital Health innovations*
- *Joint communication and networks*
- *Suggestions for interaction methods*
- *Discussion towards the EDIH launch event*
- *Tools and support*

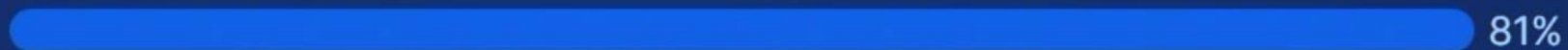


Which 5 areas would you like to collaborate with other EDIHs in?



Which interaction mechanisms would you prefer to engage in as part of this WG?

Special interest groups



Seminars



Working on joint proposals



Other (please suggest)



Discussion forum



Some conclusions from the kick-off

- Webinars can be organised and announced to the whole WG, with participation based on relevance and interest. Such events could have a format like:
 - Mapping of available expertise, infrastructure, etc. What service are we providing? One or 2 EDIH could prepare a 3-5 minutes presentation with the objective to highlight unique competence and services.
 - A deep-dive into a specific topic. The aim is not to name the main pillars, but to address very specific focal points and best practices.
- Wishes to have one physical meeting per semester, preferably co-located with other meetings (Brussels, annual EDIH Summit?)
- Suggestion to create “EDIH Health”/ WhatsApp / Slack.
 - Implemented: LinkedIn group “EDIH Health”

- Keyword concepts are broad: cluster and group them.
- How can we offer clients better services? Focus on the end user.
- Sharing of methods, lessons learned
- EDIHs should get to know each other better to enable referring clients to another EDIH that can help.

Four areas of common interest:

1. Health system complexities
2. Signposting (sharing specialisations, expertise etc.)
3. How to provide input for regulating bodies and governance
4. Providing support to start-ups/SME ecosystem

Today: getting to know each other better!

Four tables:

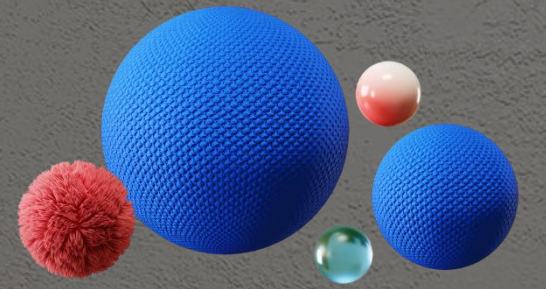
- Healthcare, Wellbeing, Pharmaceuticals, Aging
- Two Slidos to collect your input
 - At the start: who is your customer?
 - At the end: themes and volunteers for the webinars
- Talk with peers, have fun
- Focus on your top skills as EDIH
 - We all have more or less the same basic services....

Taking WG Health forward

- Subscribe to the LinkedIn page 'EDIH Health'
 - And feel free to post all your Health related activities!
- Reach out:
 - Sebastiaan Meijer (community manager) smeijer@kth.se
 - Jaakko Aarnio (European Commission) Jaakko.AARNIO@ec.europa.eu
- Based on the input collected, webinars will be announced!



EDIH



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31 May – 1 June

Market access for digital healthcare innovations

Anna Werner, CEO Medical Valley, Coordinator DIGICARE

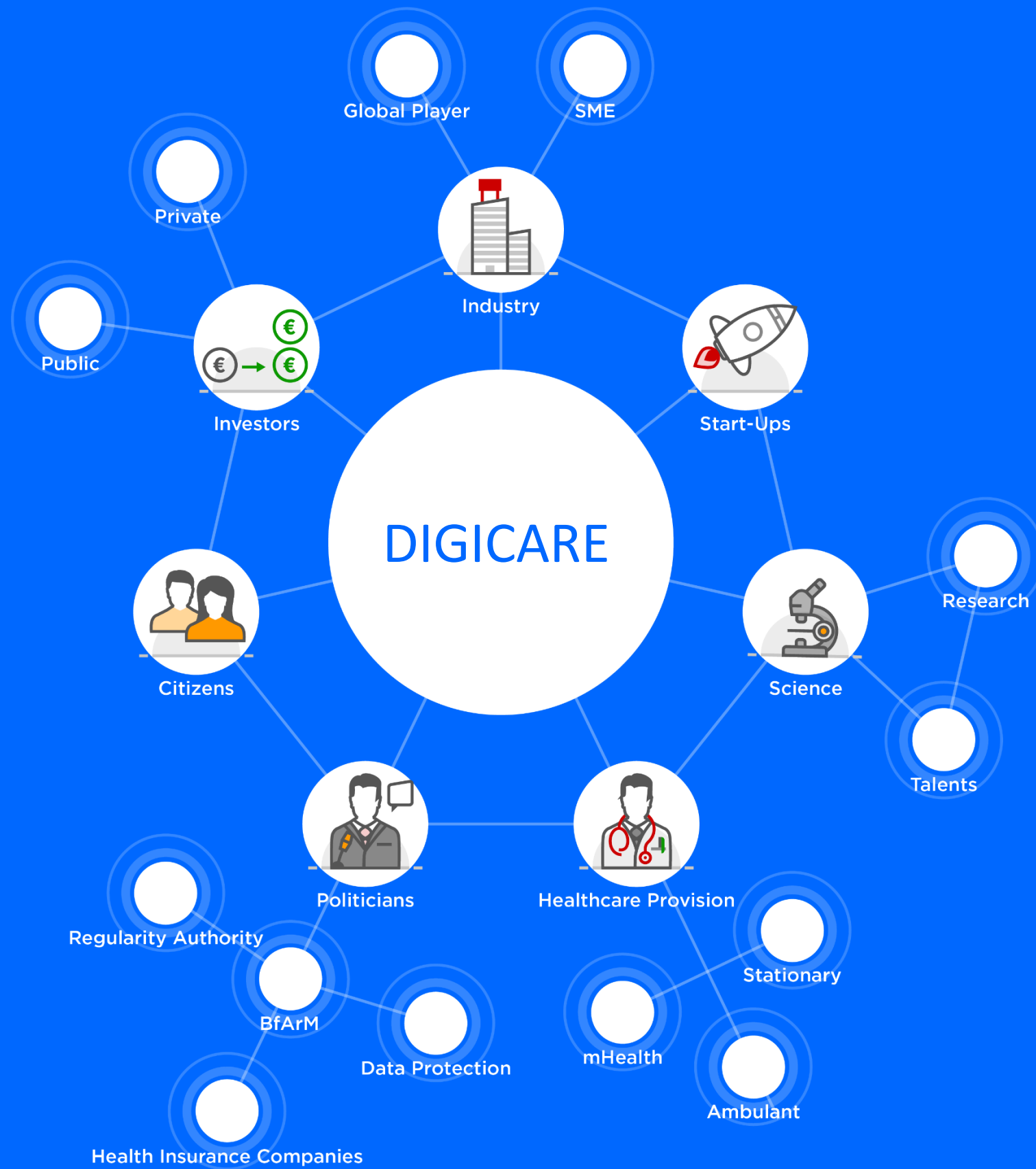
EDIH DIGICARE

Why?

“Innovations in the healthcare sector are only real innovations if they can be used by patients or providers and the added value is felt by all.”



Image by Freepik



What does the EDIH DIGICARE offer?

Development

Cross-Industry Open Innovation Challenges

Services for healthcare providers to discover their needs and find matching partners to cover them and foster needs-based innovation

Providing digital native talents to increase digitalization within their organizations

Financial support

Support for the acquisition of subsidies

- R&D grants
- Loans

Support to find investments

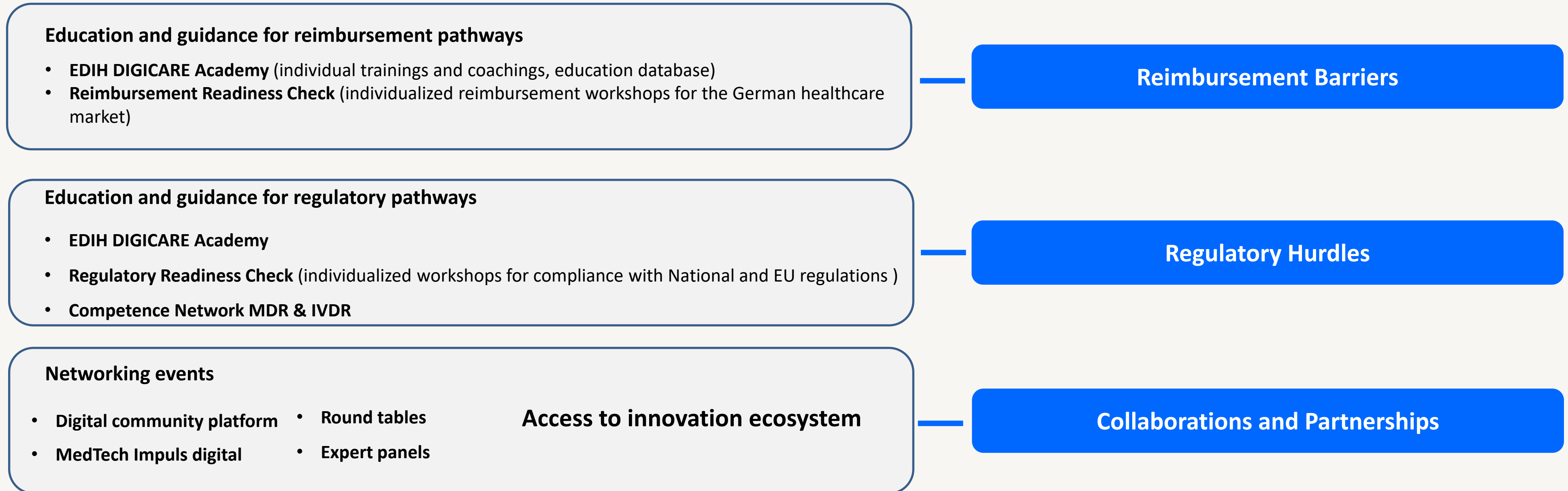
- Preparation of fundraising
- Access to investment community (business angels, VCs, others)

Generation of evidence

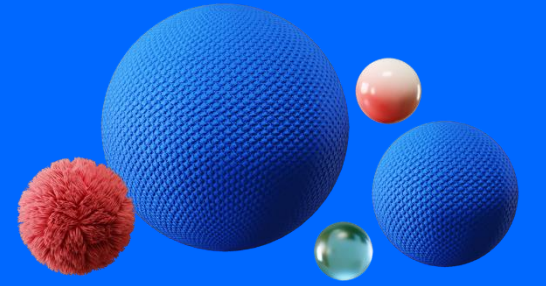
Testing before investing - Access to living labs and test beds infrastructure

- Digital Health Application Center (DMAC)
- Institute for Healthcare Robotics and Automation (Ifohra)
- Cluster Future of Care - Nursing Practice Centre Nuremberg
- Center for Sensor Technology and Digital Medicine
- Competence Center Smart Hospital
- Digital Health Innovation Platform (d.hip)

What does the EDIH DIGICARE offer?



EDIH



EDIH Network Summit 2023
31 May – 1 June

Thank you!

Anna Werner,
anna.werner@medical-valley-emn.de

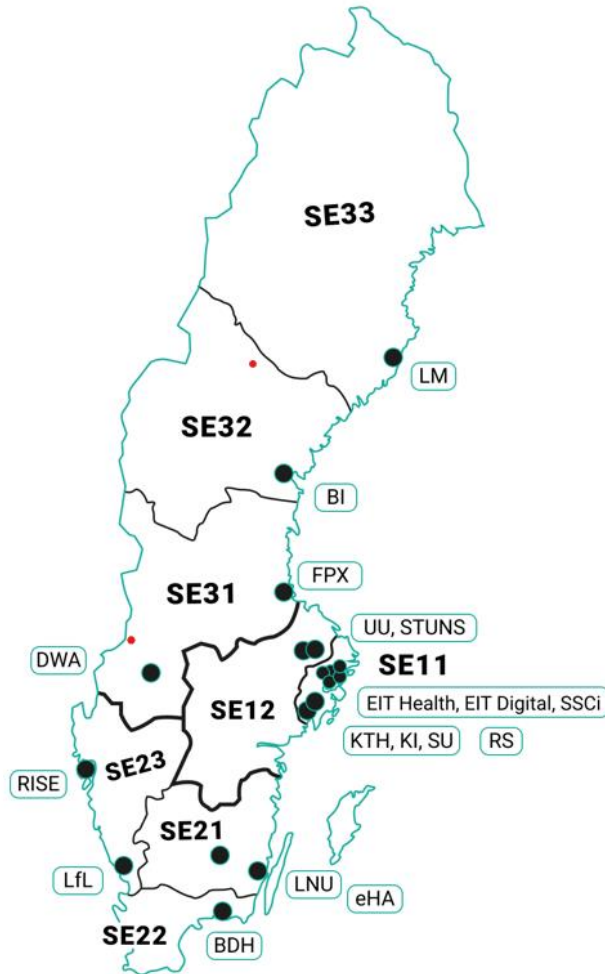


HDS – enhanced access to a mature and comprehensive ecosystem

Frida Lindberg, KTH

HDS
Health Data Sweden

Health Data Sweden



Sweden situation:

- Health data is splintered and fragmented
- Very good initiatives, regionally locked
- Difficult to scale
- HDS covers whole of Sweden
- Services catalogue making knowledge, test beds, data and infra accessible.
- No central data warehouse



Co-funded by
the European Union

VINNOVA
Sweden's Innovation Agency

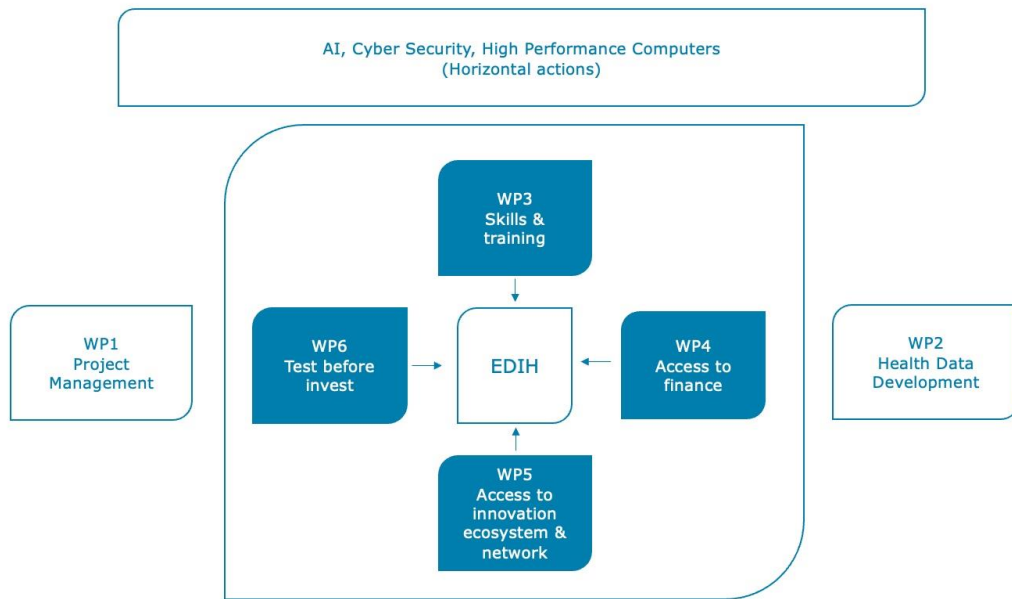
EDIH | European
Digital Innovation
Hubs Network

HDS Health
Data
Sweden

HDS Partners



Modus Operandi



- A **base layer** to support all partners in their support of SMEs and public sector
- A **portal** to access the services for other SMEs and public sector
- A price list for services (some reduced, state support rules, transparent)
- Contribute a health data management, a wide definition, a citizen / patient perspective
- Access to Sweden for European SMEs
- Access to Europe for Swedish SMEs



Co-funded by
the European Union

VINNOVA
Sweden's Innovation Agency

EDIH | European
Digital Innovation
Hubs Network

HDS Health
Data
Sweden

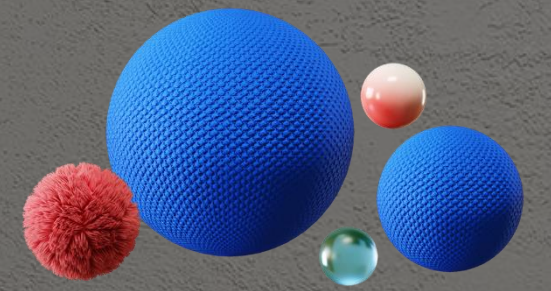
HDS – launch on June 20th!



Website includes:

- Service Catalogue
- Apply for support
- Events

EDIH



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THE PHARMA SECTOR

identifying and addressing challenges in digitalization
and its close interconnection with the healthcare system

EDIH HEALTH HUB – Greece
Maria Pournari, COO

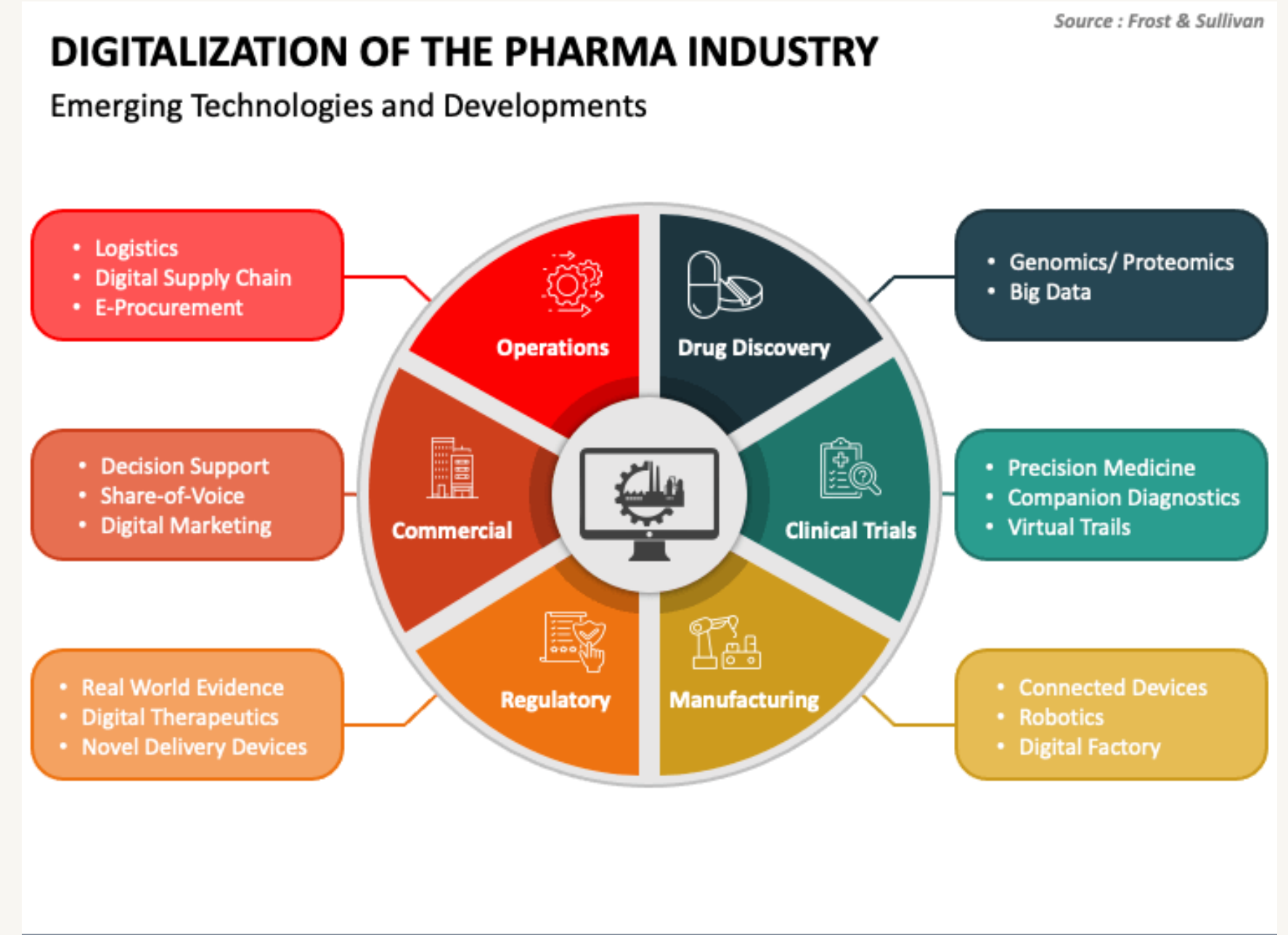
How does Health Hub approach the pharma industry to assist its digitalization?

The process:

Multiple meetings || right person || 😊 || DMA

Steps:

- Identify individual and common challenges (e.g. lack of digital skills among professionals)
- Understand the needs
- Propose solutions and provide regulatory guidance
- Facilitate Access to Technologies and Infrastructure
- Advocate for implementation
- Support the client continuously in a multilevel way



Our ecosystem =
Our impact

2000+

Health & Pharma
Organisations

1 mil.

Potential end-users of
our services & products

150+

SMEs & start-ups to be supported

10.000

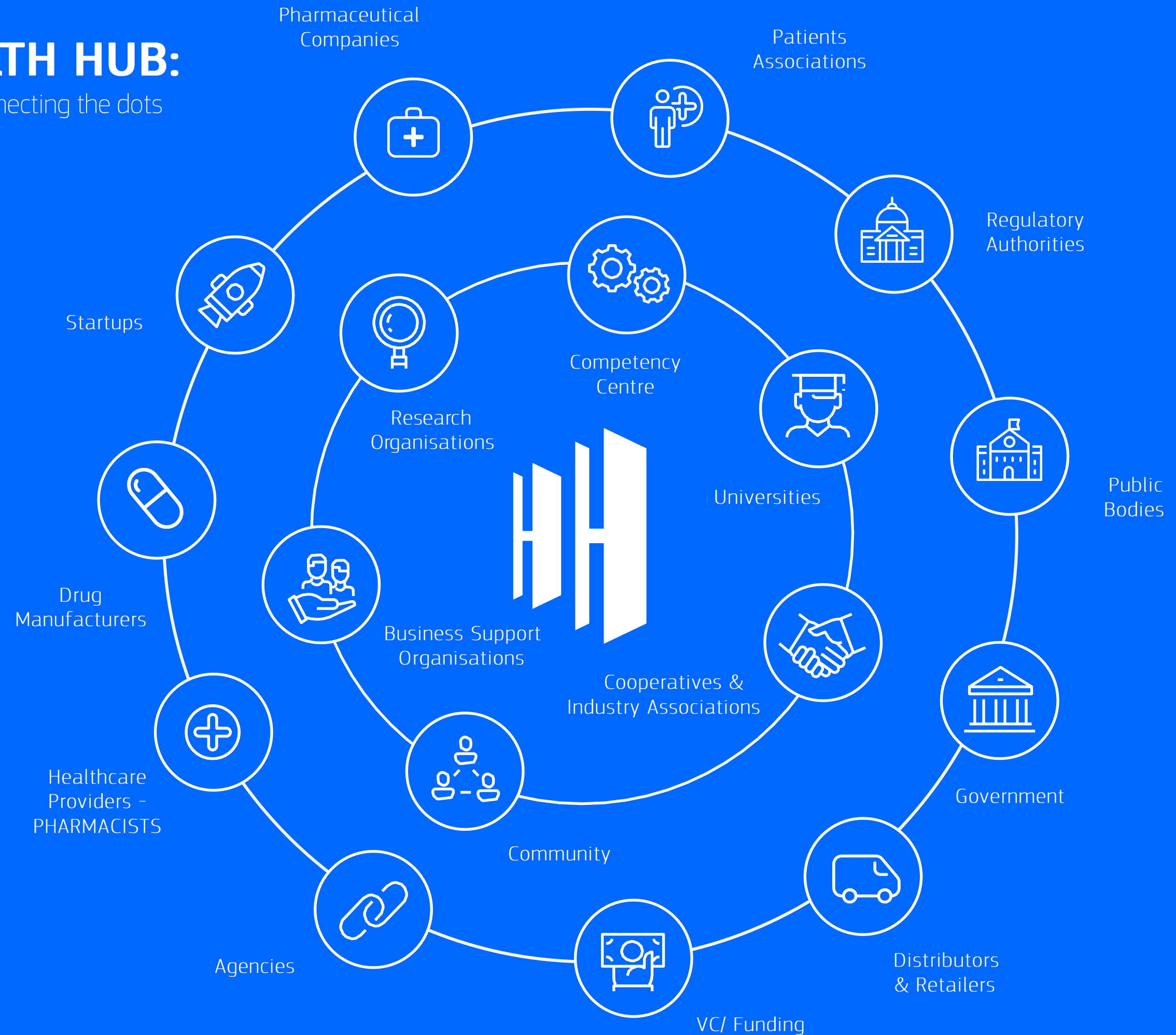
Pharmacies

26

Health Hub Partners

HEALTH HUB:

Keeps connecting the dots

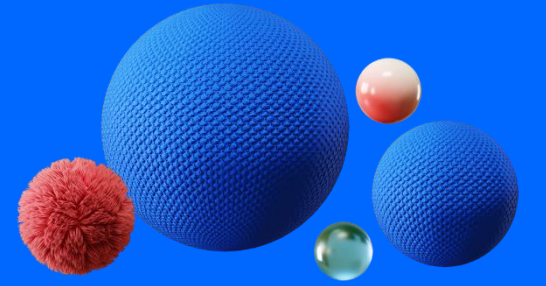


What does Health Hub offer?

Indicative services:

- Risk prediction models via AI analytics for chronic diseases for personalized treatment
- In silico clinical trials using AI Algorithms and simulations in virtual populations for personalized medicine and treatment
- AI tools for the design/discovery/repurposing of new drug and vaccine molecules and newly developed pharmaceuticals
- Tools for transcriptomic profiling in drug and biomarker discovery
- Access to scientific infrastructure to test and optimise novel biotech products
- Novel diagnostics via digital biomarkers

EDIH



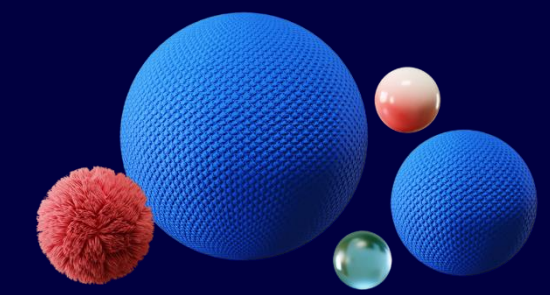
EDIH Network Summit 2023
31 May – 1 June

Thank you!

Maria Pournari, mpournari@ied.eu
Health Hub - Greece



DANTE
EUROPEAN DIGITAL INNOVATION HUB



EDIH Network Summit
2023

31 May – 1 June

Towards Aging 5.0

(Digital Solution for Active, Healthy and Smart Life)

Pietro Siciliano,
IMM-CNR Lecce (Italy)



DANTE

EUROPEAN DIGITAL INNOVATION HUB

EDIH Network Summit
2023

31 May – 1 June

DANTE EDIH – Partners



A national wide network with regional interconnected reference nodes, coordinated by the National Cluster SMILE

Project Partners are characterized by:

- Research / Innovation capacity and relevant critical mass** - volume and technical-scientific-organizational excellence in the area of interest;
- Industrial strength** - number and size of companies and their presence on the markets;
- Involvement of End-users** - in relation to the needs of end-users and customers;
- Consolidated experience of aggregation** among research, innovation, industry, end user and public policies bodies





DANTE

EUROPEAN DIGITAL INNOVATION HUB

**EDIH Network Summit
2023**

31 May – 1 June

Innovative technologies
for healthy & active ageing and accessibility
in smart living
(homes, workplaces, health facilities,
environnements, etc.), tele-assistance and digital
psychology

Social – Demographic Context

- Social changes, ageing population, fragility and disability
- New welfare models (public (GO, NGO), private, research system, users and new roles)
- Emergence created by Covid 19 and prevent other pandemics

Technological and Productive Context

Radical change of living ambients: Home, working ambient, public environments, according to a User-Centric approach
Fundamental role of ICT in improvement of quality of life and saving energetic spending, assistance and health,

Emerging market sectors - **“Silver Economy”**
P4 Medicine: Predictive, Preventive, Personalised, Participatory

“User Centred” Smart Living and Digital Solutions

Intelligent technologies can play a crucial role in enabling individuals to age actively and supporting people with disabilities

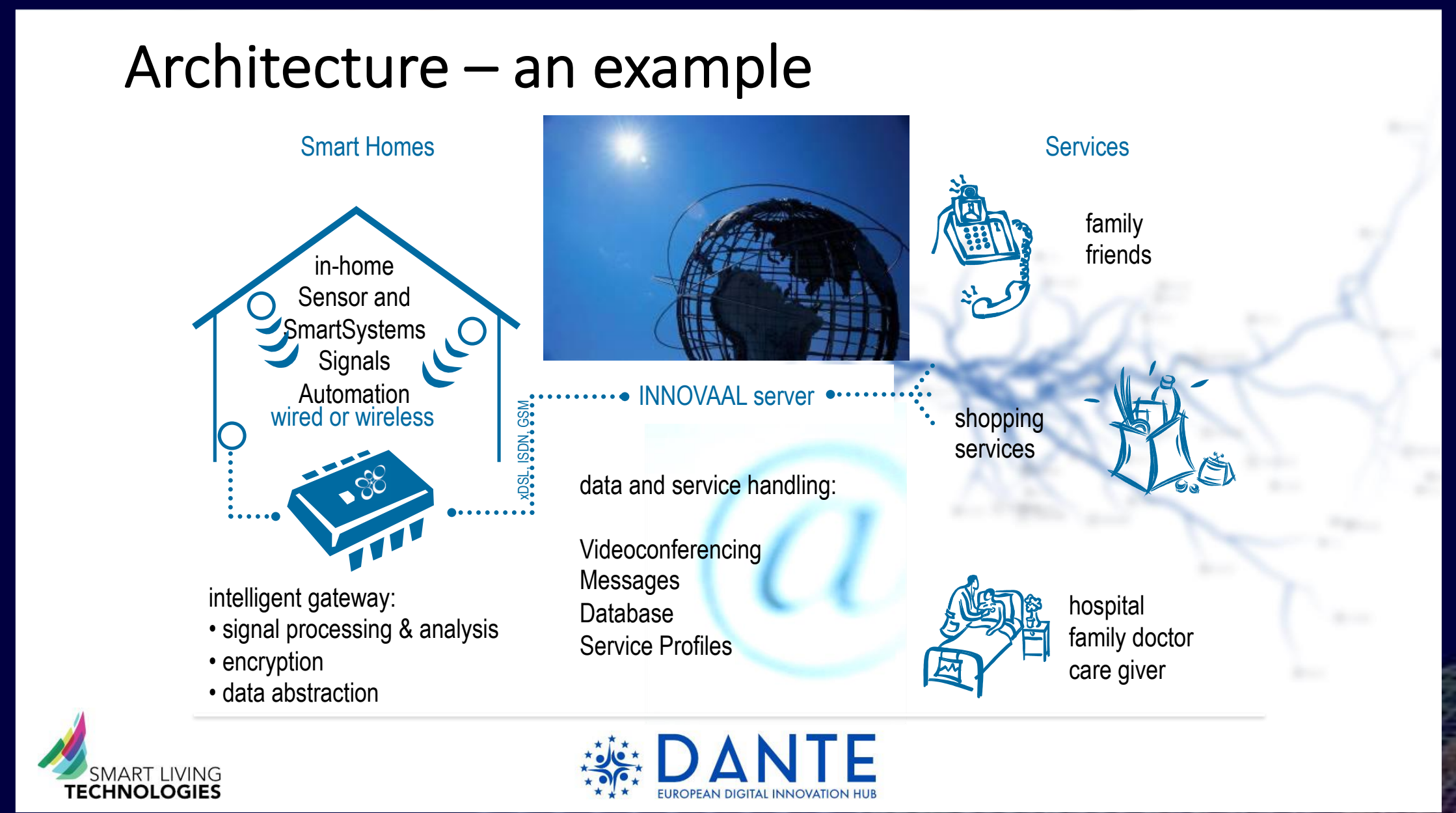
Smart tools and living environments must be designed and developed considering different environments, high standards of accessibility, inclusiveness, and safety

Smart technologies can also be used to promote an active lifestyle, health, and overall wellbeing

- Relevant environments for these interventions are homes, workplaces, health facilities, parks and other places where we spend our free time. Other technologies can be designed for telemedicine and digital psychology interventions.

Smart Home for older adults and people with disabilities

- Inclusive flat meant to foster independent living
- State-of-the-art IoT technology and digital services
- **Accessible user interfaces with speech-based and touch-screen controls for users and caregivers**
- Automatic alert of caregivers in case of emergency



WORKPLACE: Adaptive Workstation for senior workers

Adaptive workstation that can be tailored to the user's characteristics (e.g., age)

In this example a collaborative robotic arm has been connected to a complex sensors system that transmit data for AI elaboration.

The AW can monitor the user's mental workload and stress and adapt its features consequently.



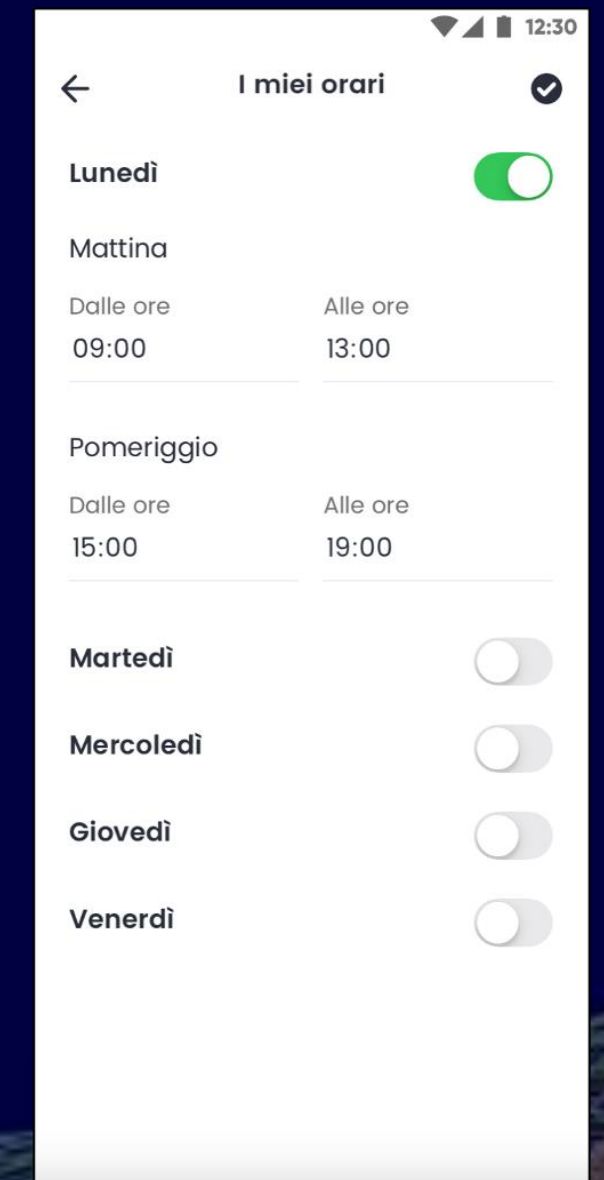
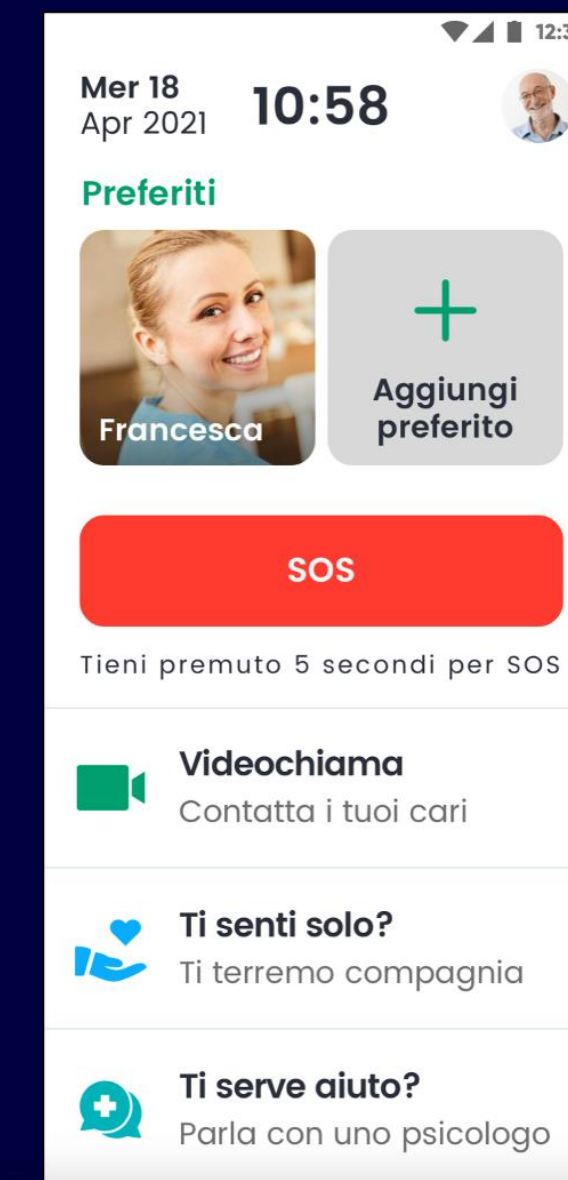
Inclusive, accessible and sustainable tools for urban parks

- Accessible and inclusive furniture for urban parks
- Sport equipment for physical well-being and active ageing
- Rides for people with/without disabilities
- Environmental sustainability of materials (circular economy)



Remote social and psychological support for older users

- User-centered design
- Usable, accessible and inclusive application
- Tool for maintaining social contacts in forced isolation
- Working tool for caregivers and psychologists (counseling)



TELEMONITORING in Health Care

IO  **CARE**



Assistive Robotics



Consultare i dati diversi

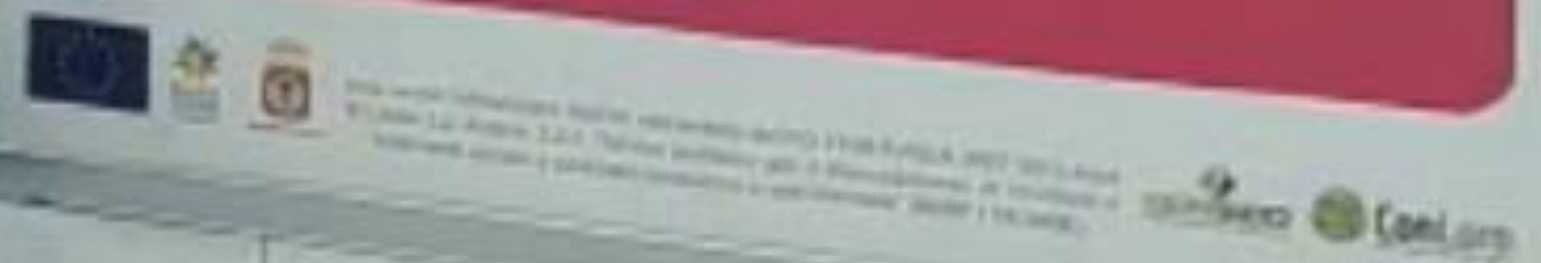
Essere assistiti in caso di pericolo

La domotica per tutta la famiglia!

La DOMOTICA (informatica in casa) permette oggi di gestire in modo più semplice e funzionale la casa, con nuove possibilità di controllo e supervisione sia dell'abitazione che delle persone che la vivono, attraverso degli interventi all'interno dell'impianto elettrico. Chiedi informazioni, un'equipe è a tua disposizione gratuitamente per fornire consulenza fiscale, legale, psicologica, sociale e tecnica.



DOMOS
Via Donatella, 8 Cervinara (BN)
Tel. 0824600498 - www.domos.it





DANTE

EUROPEAN DIGITAL INNOVATION HUB

EUROPEAN UNION/MISE GRANT AGREEMENT

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Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union. The European Union can not be held responsible for them.

THANK YOU FOR THE ATTENTION!

<http://dante-edih.clustersmile.it>



T: @dante-edih
F: @Dante EDIH
In: @Dante EDIH

Hearing from the hubs

Prof. Sebastiaan Meijer

KTH Royal Institute of Technology,
Stockholm

EDIH Network Summit 2023

31 May – 1 June



Slido 1: who is the customer of your EDIH?

- Options:
 - SMEs with own data and innovation capacity
 - SMEs with algorithms / AI but no data access
 - SMEs with validated product
 - SMEs with a good business idea but little digital capacity
 - Public sector with unmet needs
 - Public sector with marketable innovation
 - Public sector with internal innovation
 - Other (please specify)
- Choose the most relevant 1 - 3

Slido 2: Themes and volunteers for SIG webinars

- Open format, 2 sequential questions
- Question 1: Specify the theme / topic of your ideal SIG webinar session.
- Question 2: Write down your EDIH acronym and what YOU want to organise