

Why Living Labs Matter: Advancing Open Innovation and Stakeholder Engagement

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Living Labs: Which is the first word that comes into your mind?



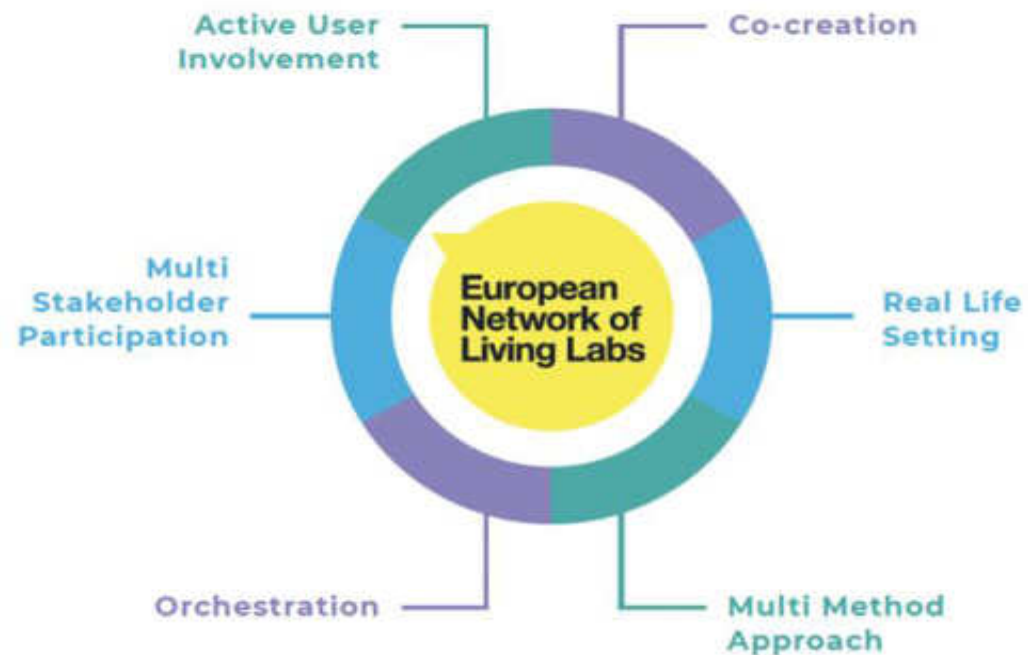
Living Labs characteristics

A Living Lab is an **innovation intermediary**, which orchestrates an ecosystem of actors in a specific region. Its goal is to **co-design** products and services, in an iterative way, with key stakeholders in a public-private-people partnership (PPP) and in a real-life setting.

One of the outcomes of this co-design process is the co-creation of social value (benefit). To achieve its objectives, the Living Lab mobilizes existing innovation tools and methods or develops new ones.

Living Labs characteristics

- Living Labs operate as intermediaries and orchestrators among citizens, research organizations, companies & government agencies/levels.
- They focus on joint-value co-creation, rapid prototyping and testing and scaling-up innovations & businesses.
- They are open innovation ecosystems in real-life environments using iterative feedback processes throughout the lifecycle approach of an innovation.
- They all have common elements



Living Labs essentials: the 4 helix approach

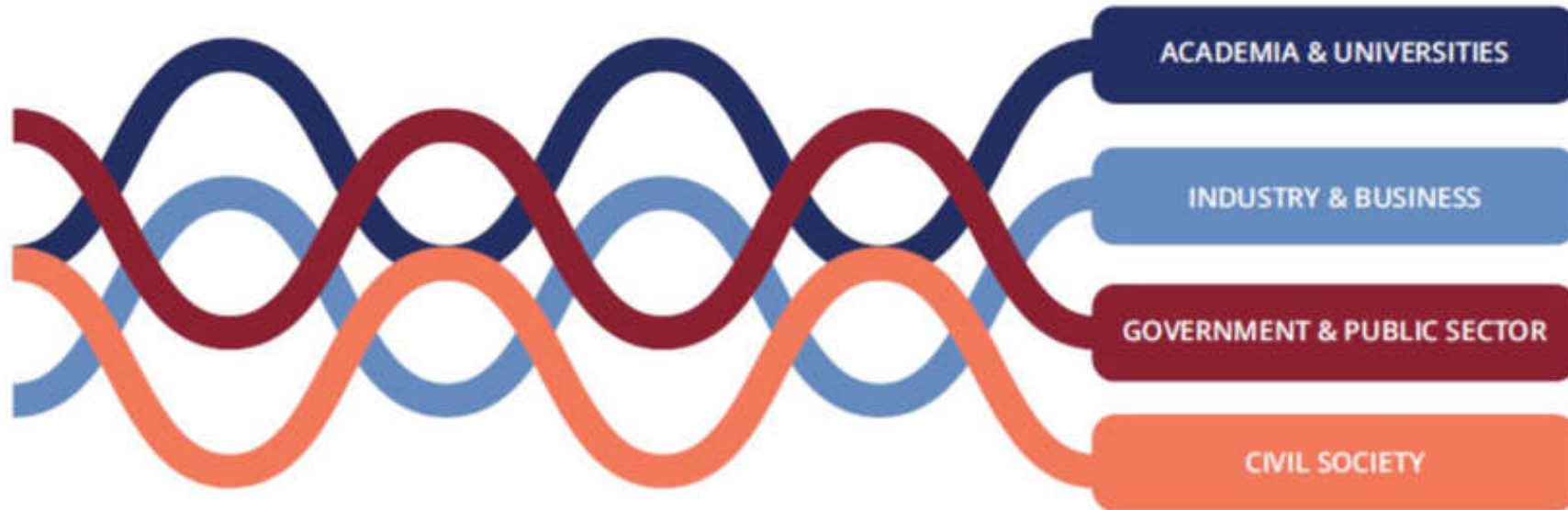


Figure 7: The quadruple helix model as a basis for Knowledge Societies

How can we explore stakeholders' needs and requirements?

HOW CAN WE EXPLORE STAKEHOLDERS' NEEDS AND REQUIREMENTS?

DIRECT ENGAGEMENT



-  INTERVIEWS
-  SURVEYS & QUIZZES
-  FOCUS GROUPS



OBSERVATION & ANALYSIS



SHADOWING / FIELD VISITS





JSER JOURNEY MAPPING

-  PERSONA DEVELOPMENT
-  DESIGN THINKING

PARTICIPATORY & ITERATIVE METHODS



DESIGN THINKING

-  PROTOTYPING
-  FEEDBACK LOOPS

OPEN COMMUNICATION CHANNELS



COMMUNITY FORUMS

SUGGESTION BOXES



-  COMMUNITY FORUMS
-  STAKEHOLDER PANELS

WHAT IS CO-CREATION?

What is co-creation?

- Co-creation is about involving stakeholders, particularly end users in the design and development of innovative technologies and services.
- The collaborative process of creating new value together with external experts and stakeholders.
- Spark new value in the form of a concept, product, service, business model or a strategy

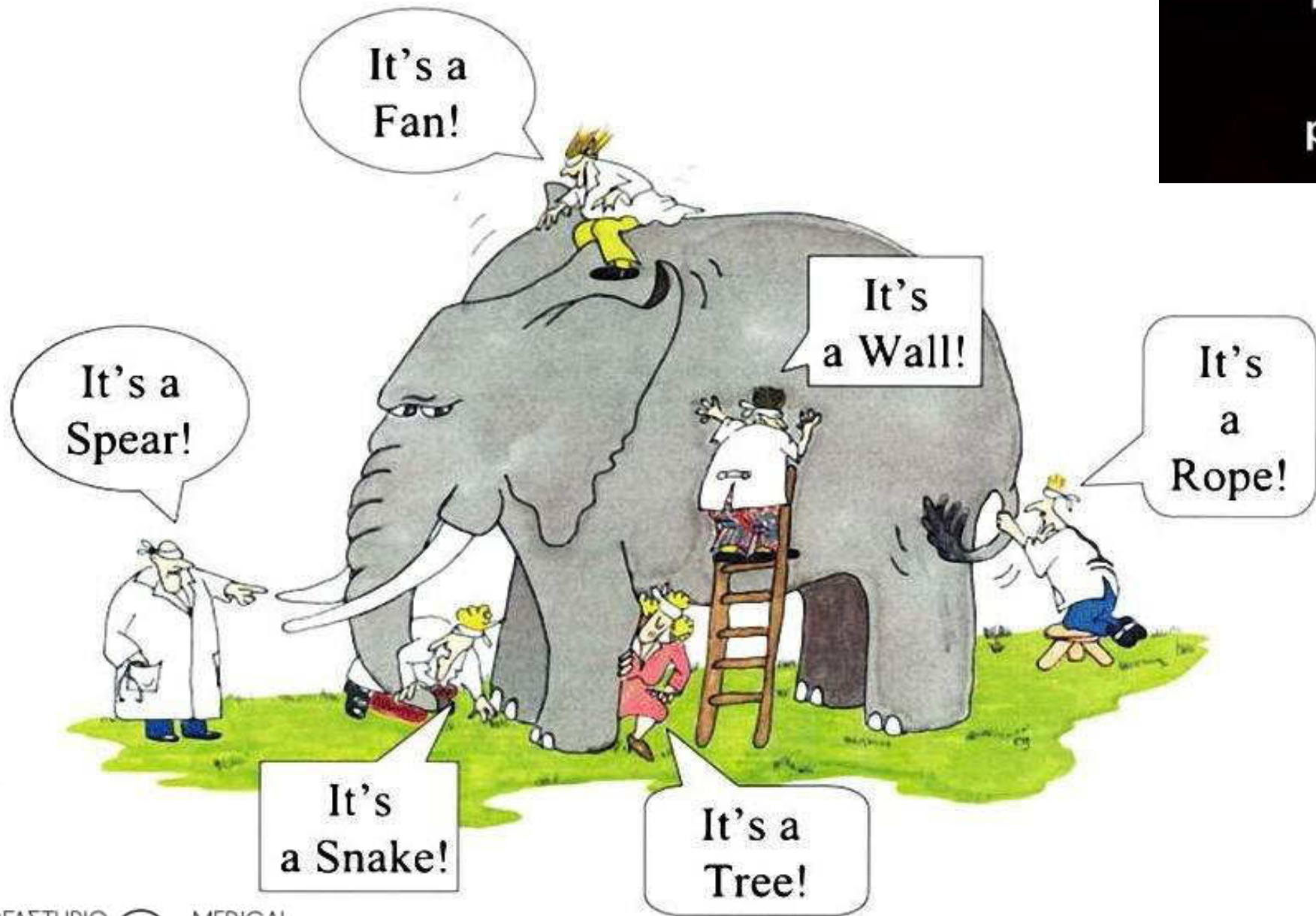
Active, creative and social collaboration process between producers and customers



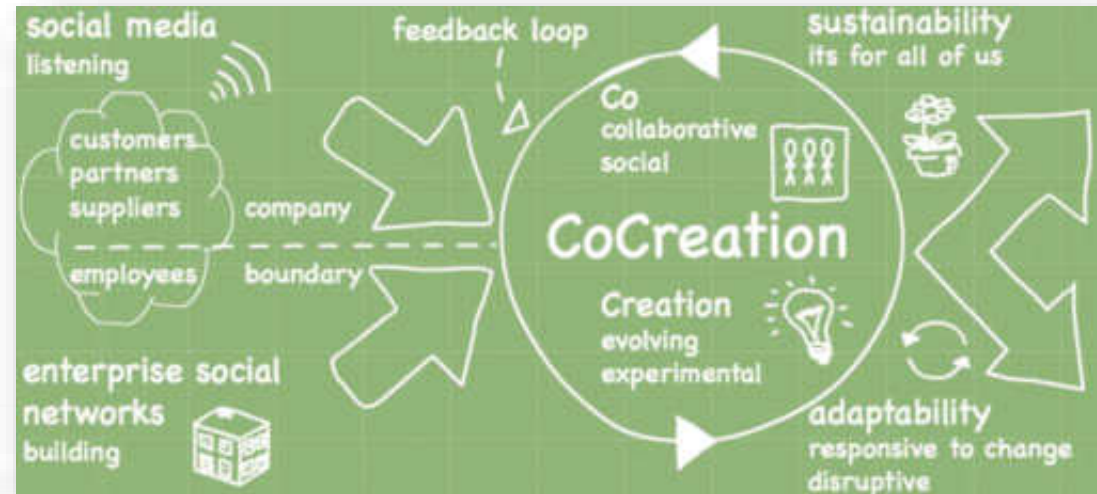
**exchange of opinions, thoughts,
experience & knowledge between
different actors involved in the
development of a service and/or
product**

Everything we hear is an opinion, not a fact.
Everything we see is a perspective, not the truth

Live.Your.Quotes

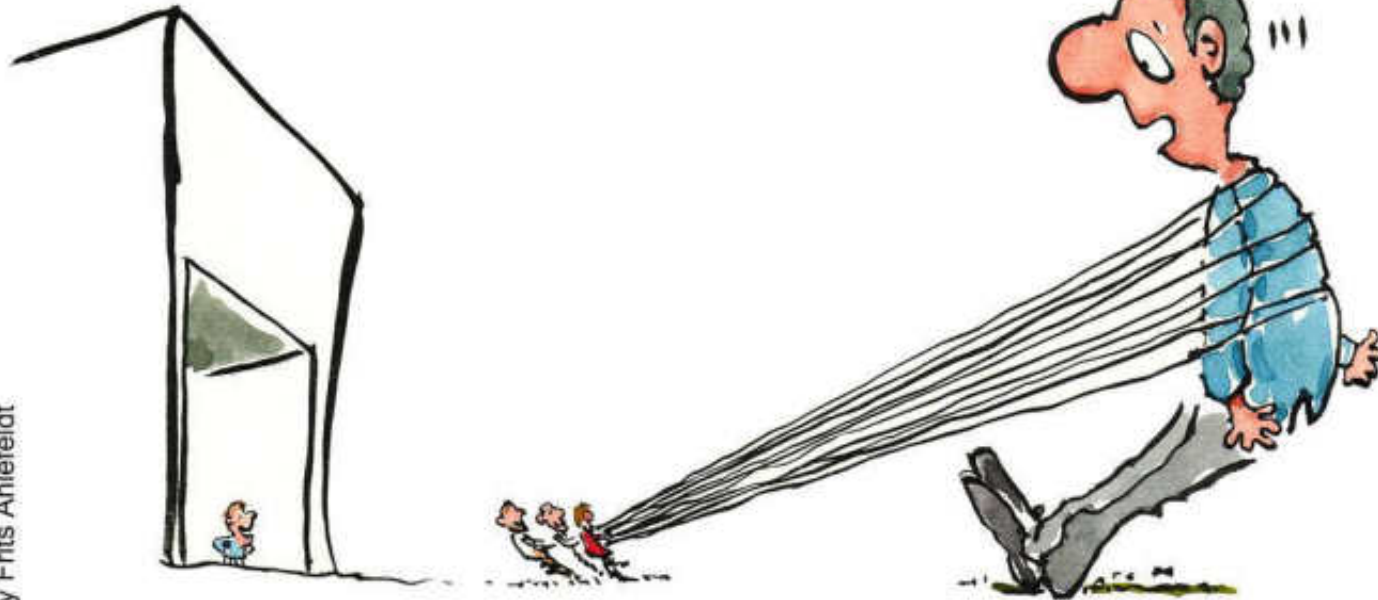


- ❖ The purpose of co-creation between customers, providers and third parties is to stimulate change.
- ❖ Co-creation in Living Labs is important → enhances and highlights the **social impact & value** of the emerged outcomes.



User involvement and engagement

Involving the user



By Frits Ahlefeldt

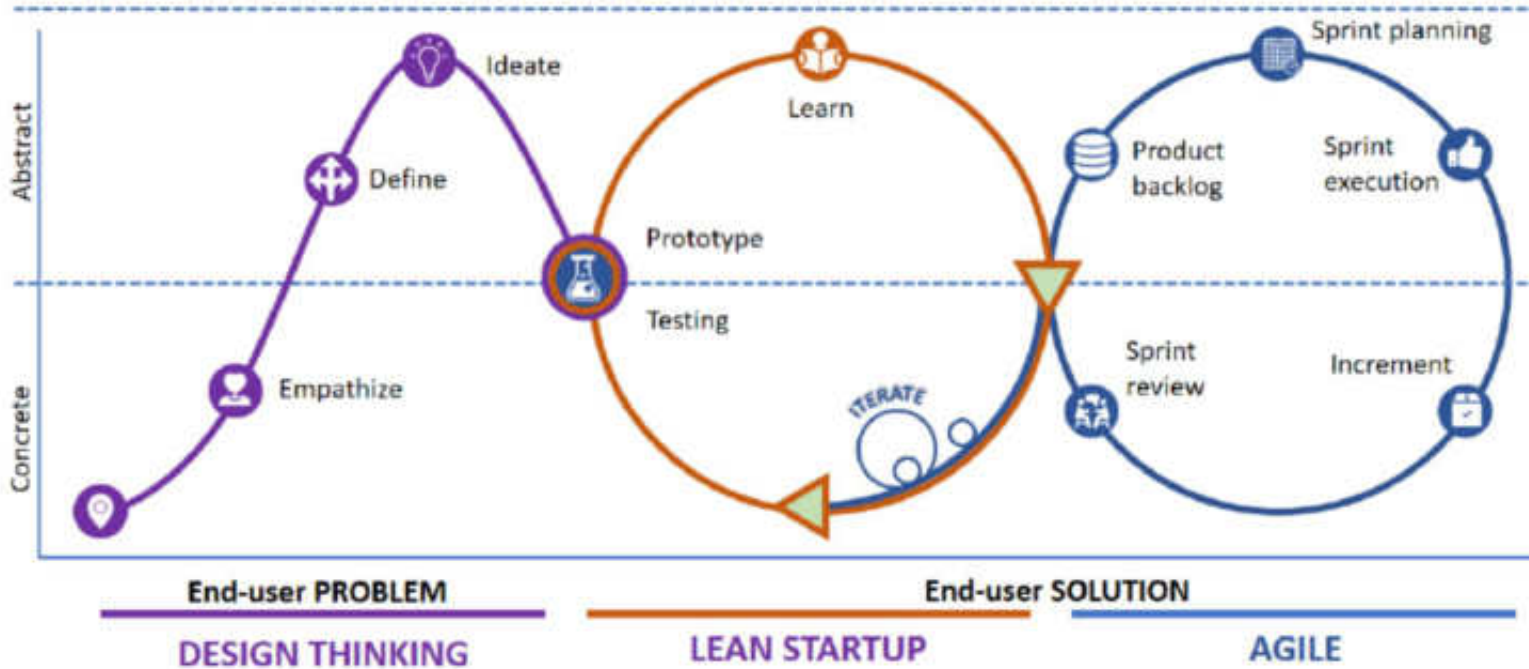
Early involvement of users
And...

User involvement and engagement



Active involvement of users

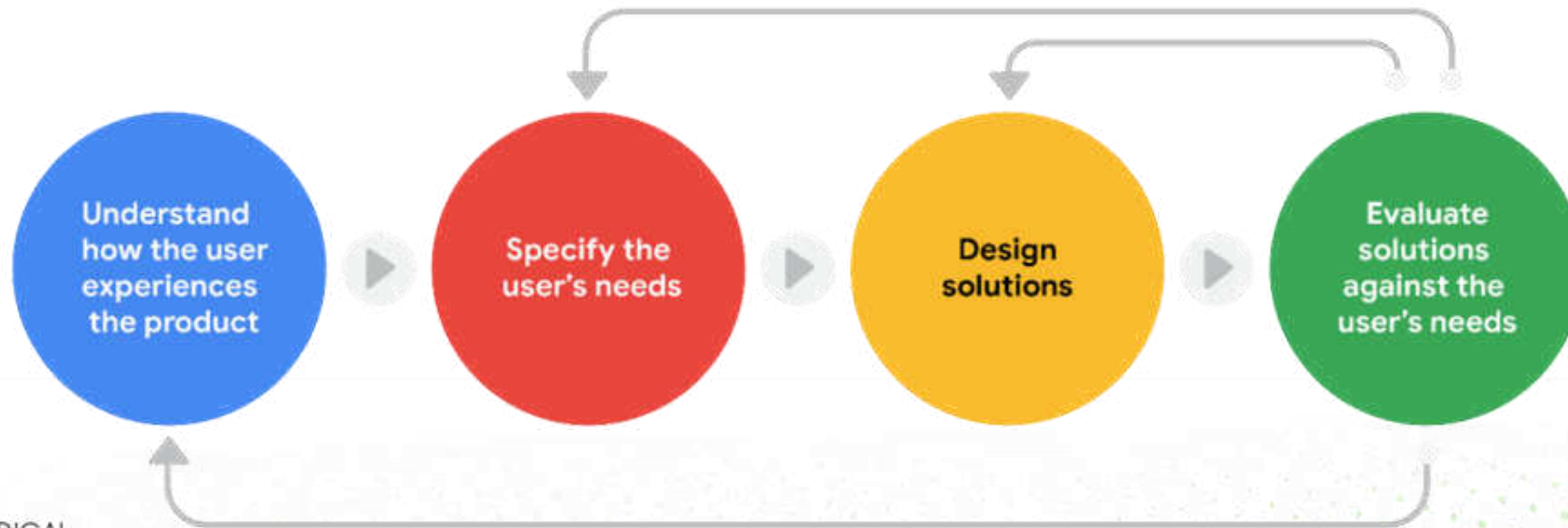
Participatory design



User-centred design (UCD)

Design focus on the users and their needs

“Not only analyse how users use a product/service, but also to test the validity of their assumptions”

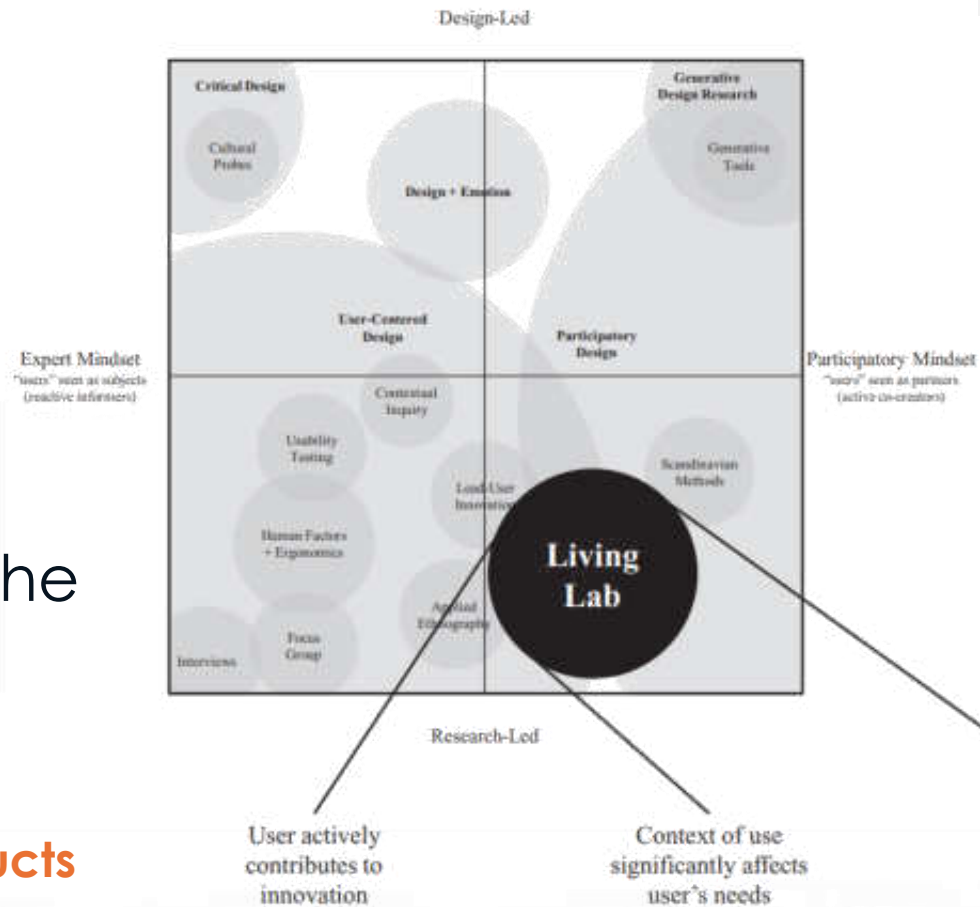


UCD in Living Labs

Provides a new perspective to the participatory approach

Users are subjects and objects of the innovation

Design and development of services/products centered-on and oriented by the patient



TECHNIQUES

Newest techniques

1. **Design thinking** - bring together **different experiences, opinions and perspectives** on a problem in order to create innovations that focus on the user and solve his problems in the best possible way.
2. **World café** - the actors involved in the innovation process can be brought **into conversation with each other** in order to discuss problems and questions in small groups
3. **Open Space** - participants **communicate topics** (e.g., frailties due to age) they have **chosen themselves** to the plenum and initiate their own working groups.
4. **Service blueprint** - is a method for **visualizing integrative processes**, i.e. processes that are characterized by the integration of resources of several actors. This allows customers and other stakeholders to be included in the process map and their view of the process.
5. **Usage tests** - understood as the intention of potential users to **adopt an innovative offer**, is a necessary condition for market success.

Newest techniques

6. **Focus groups - to analyse and gather feedback** on products, services and marketing campaigns. It usually brings together 5 to 10 people and always has a moderator to lead the exchange of ideas.
7. **Workshops** – a type of event that brings together people interested in **learning more about a particular topic**. It is a kind of training for the development of specific skills through practical activities.
8. **Interviews - a structured conversation** where one participant asks questions, and the other provides answers. In common parlance, the word "interview" refers to a one-on-one conversation between an interviewer and an interviewee.
9. **Surveys** - a research method used for **collecting data from a predefined group** of respondents to gain information and insights into various topics of interest.
10. **Usage tests** - monitoring users using your solution witnessing what turns up.
11. **Persona** – a fictional character, which is created based upon research to represent the different user types that might use your service, product, site, or brand in a similar way.

Conclusion

Exploring stakeholder's needs and requirements is fundamental to the success of LL. It ensures that innovations are:

- Relevant to real-world challenges
- User-centered, not technology centered
- Inclusive, embracing diverse perspectives
- Sustainable, by fostering long-term stakeholder commitment

By combining direct engagement, observational research, participatory methods, and collaborative tools, Living Labs creation and social value generation.

Thank you



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Co-Creating Smart Health: The SHIFT-HUB Approach and Thess-AHALL Living Lab

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The SHIFT-HUB Approach

SHIFT-HUB aims at establishing a **pan-European Smart Health Innovation Hub**, to foster the uptake of Smart Health technologies and services. A strong patient-centric community is developed to enhance digital literacy and behavioural change.

Diverse range of high-quality services tailored to meet the stakeholders' unique needs.

The services are built around three key pillars:

- Build & Boost
- Connect & Thrive
- Learn & Grow



The **Living Lab methodology** and an online **gamification-based e-learning journey** ensuring an immersive experience for patients and citizens.

The SHIFT-HUB Living Labs

1st Living Lab, Day Care Center of Kalamaria, Thessaloniki, Greece

Interactive session using the Living Lab approach to raise awareness and promote Smart Health adoption among patients and caregivers.

2nd Living Lab, Aristotle University of Thessaloniki, School of Medicine, Greece

Explore collaborative solutions that promote accessibility, support, and community engagement.

3rd Living Lab, Innovation and e-Health Center, University of Medicine and Pharmacy "Carol Davila", Bucharest, Romania

Real-time interaction between health technology developers and end-users, enabling co-creation and feedback loops involving physicians, patients, and citizens testing Smart Health solutions in simulated conditions.

4th Living Lab, University of Porto, Portugal

Interactive session, gathering feedback from end-users to validate the development of digital platforms, co-creating the final versions of the interfaces and the features to be offered.

The SHIFT-HUB Living Labs

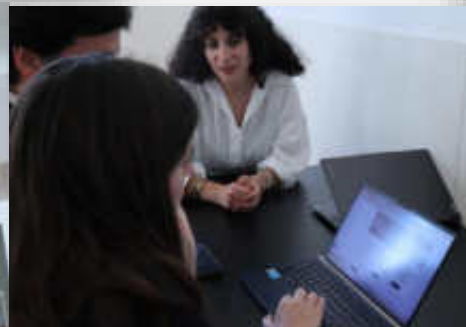
1ST & 2ND LL,
Thessaloniki



3RD LL, Bucharest



4TH LL, Porto





Thessaloniki Action for Health & Wellbeing Living Lab

Lab of Medical Physics and Digital Innovation,
Aristotle University of Thessaloniki

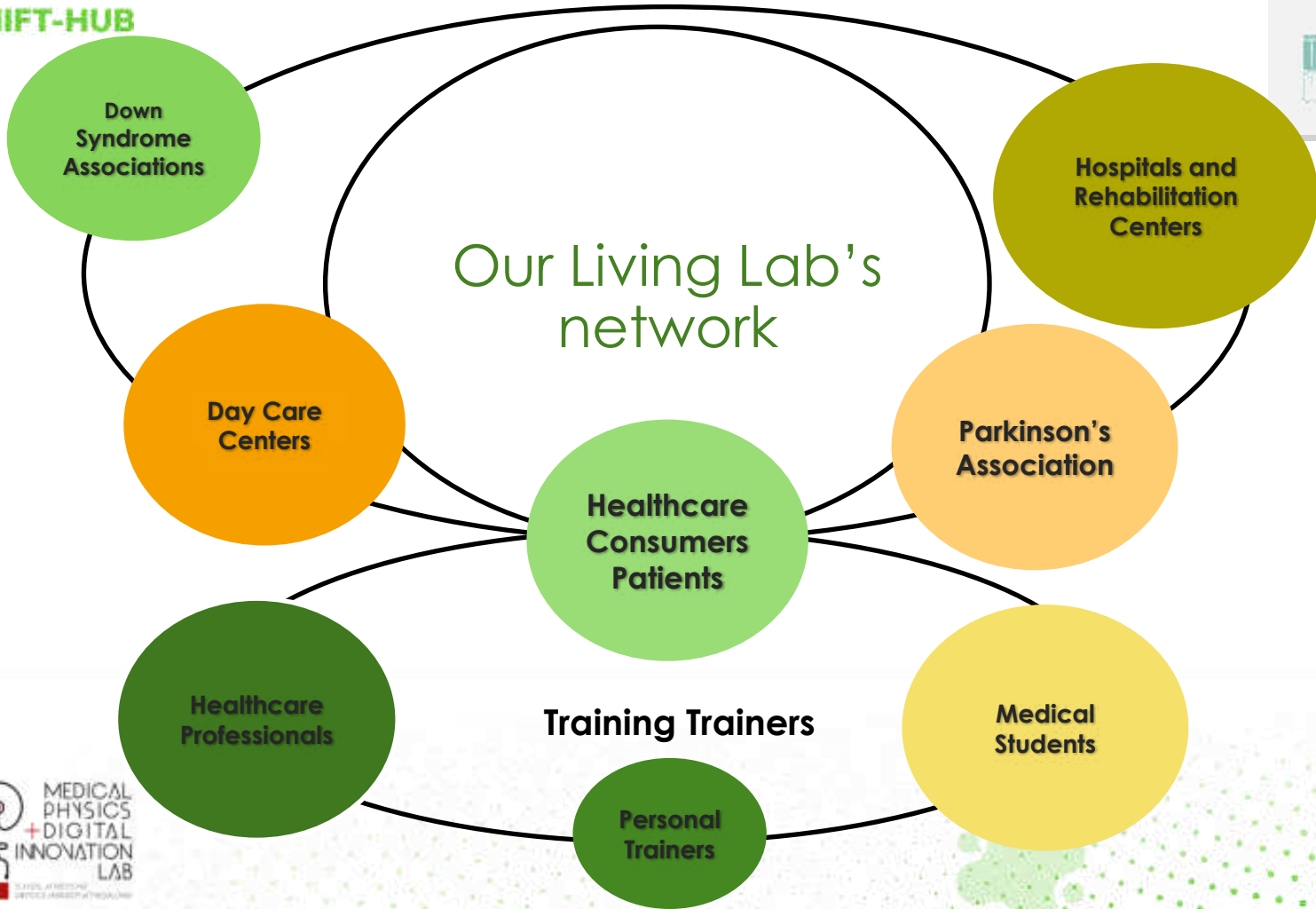
Goals

- Establishment of **interdisciplinary** cooperation
- **Co-creation of innovative** technological solutions and best practices through the implementation of the different methodologies and techniques
- **Open access** and **experimentation** within the infrastructures
- **Knowledge and experience** exchange

Methodology of research & experimentation



“Life's too short to build something nobody wants”
Ash Maurya – LEANSTACK Founder/CEO





ThessAHALL Examples

Overview



DEVELOPING A
TECHNOLOGY OR A SOCIAL
INNOVATION SERVICE



DETERMINING KEY
CONTENTS,
METHODOLOGIES & TOOLS



MEDICAL EDUCATION



DETERMINING KEY CONTENTS,
METHODOLOGIES & TOOLS

DS LEISURE, DS AGEING & ID GAMING PROJECTS



The main objective of the co-creation sessions was to develop the methodological guides with direct participation and involvement Persons with Intellectual Disabilities (PwID) by discussing the training activities, training materials and e-Training platforms and serious games.

- **Methodological Guidelines**
- **Training Materials**
- **e-Training platforms and serious games**





DEVELOPING A
TECHNOLOGY OR A SOCIAL
INNOVATION SERVICE

CAPTAIN Project



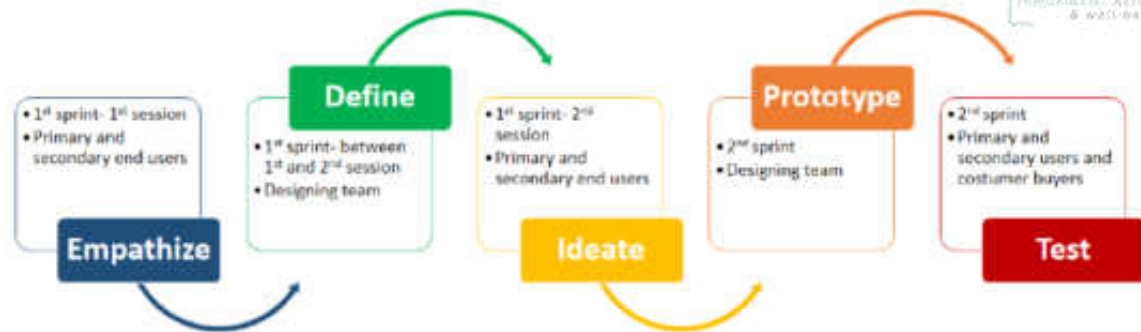
Design and develop micro projectors to provide a smart home assistant for older adults

Stakeholders' community

CAPTAIN built and maintained a cross-border stakeholder's community that remained active throughout the whole project

Agile requirements elicitation

This community was the CAPTAIN system co-designers being the main source of requirements. CAPTAIN has defined a continuous engagement strategy for the creation and maintenance of the community.



EMPATHIZE

The **everyday life problems were discussed** in the 1st session meeting with the stakeholder's community

IDEATE

The main goal of this stage is to **generate knowledge about how older adults imagine** using CAPTAIN technological tools for solving everyday life problems.

TEST

The actual goal is gain meaningful feedback. **Testing, in Design Thinking, involves generating user feedback** as related to the prototypes developed. Gaining a deeper understanding of users' as well as their feedback on the prototype will be the output.

COMFORTage Project



Focusing on two pilot studies:

- Frailty management
- Enhancing digital and health literacy for older adults

Co-Creation **for Innovation Participatory** sessions

were conducted to develop personas:

- Early frailty detection and assessing the impact of multimodal interventions delivered through digital tools
- Digital and health literacy, specifically the ability of healthy older adults to engage with mHealth technologies.



SISCODE Project

SISCODE

In the framework of the context analysis, the ThessAHALL conducted a desk research and multiple **interviews and focus groups** with interested stakeholders to collect both quantitative and qualitative data on the *impact of ageism* on older adults' social health and life.

The **“Partners of Experience”** solution was introduced as a life-long, experiential research programme to address everyday living challenges of older adults. Older adults involved the programme tested and validated the proposed life-long learning activities, divided in three smaller, thematic research groups (**Environment—Health & Social Welfare—Active Citizenship**) guided by the ThessAHALL researchers.

Collaboration & Research Community for the Independent Living “Partners of Experience”

A bunch of applied **Tools & Methods**

- **Participatory Design** (co-creation sessions, design thinking sessions, focus groups)
- **Open lectures** (AUTH School of Medicine & the City of Thessaloniki)
- **Inter-generation Educational actions** (joint courses & research initiatives)
- **Learning by doing** (experimentation, field visits)
- **Public deliberation, consultation**
- **Public & seasonal events** (increase awareness)



Collaboration & Research Community for the Independent Living “Partners of Experience”



Experience – Requirements – Ideas - Feedback



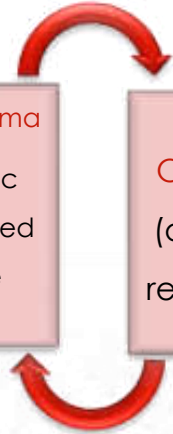
Partners of Experience

The “Partners of Experience” aimed to enhance active citizenship and tackle the risk of ageism in the ageing population and chronic patients, **by introducing a life-long learning program for early-stage researchers over 65 years old.**



Ageism & Cultural Stigma
 (older adults, chronic patients, institutionalized patients → inactive citizens)

Open the Academia
 (open science, social research, co-creation)



Collaboration & Research Community for the Independent Living “Partners of Experience”

AUTH opens its doors to citizens and along with the City, it explores solutions for THEM and with THEM!
Co-creation activities

Learning by Doing



Intergeneration (students, researchers – AUTH premises)



AUTH School of Medicine

Educational Visits



AUTH Cast Museum, NOESIS Science Museum

Field Visits



AUTH Library, Thessaloniki Water Park

Educational Visits

Life-long learning



Intergeneration (students, researchers – AUTH premises)



AUTH Library

AUTH Medical
School

AUTH Medical Education
Class

Co-creation workshops

Learning by Doing



Gatherings to co-design, tests, validate concepts, tools, ideas



Cultural Visits

Cultural/Entertaining Visits



Activities, taking place in museums, galleries, technology parks



MoMus - Museum of Photography



Thessaloniki Concert Hall



AUTH Cast Museum



NOESIS Science Museum & Planetarium

Awareness and Social Offer Actions

Social Offer Campaigns "Play for.../Participate in..."



World Autism Day 2019



World Parkinson's Day 2017



Down Syndrome Association of Greece 27

Seasonal activities



Christmas fest

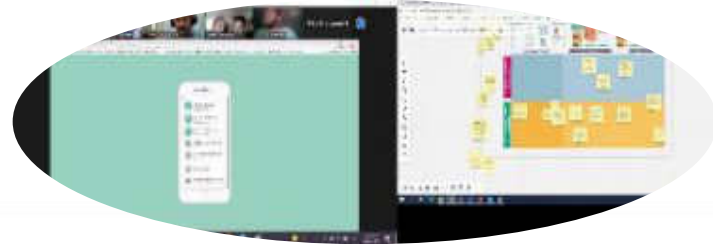
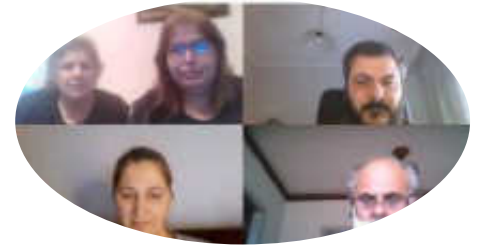


*“Alexander the Great”
International Marathon (5km
health road)*

Co-creation sessions during COVID-19



COVID-19 e-coffee sessions



Extensive use of online interactive means



Online co-creation

The city as a Living Lab

Outdoor Activities



**Participatory research and social innovation activities in the city
(in parks, cafes, outdoor excursions)**

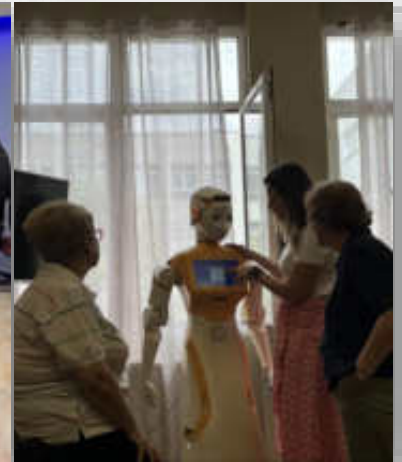


Thessaloniki Water Park



The "pocket" park project

Co-developers in action!



Partners of Experience

“We open the Academia & the City to embrace solutions, developed WITH & FOR citizens!”



MEDICAL EDUCATION

CoviRR and ENTICE Projects

- Use co-creative methodologies to build a solid creation for medical experiential content bringing together a network of academics, medical educators and industrial content creators.
- Stakeholders developed, tested and evaluated educational immersive tangible and intangible resources (AR/VR/MR, 3D printing).
- The co-creation approach promoted innovative practices within medical education and fostered open education.



Our vision

Research



Society



Co-design and co-creation practices

Boost innovation through collaboration among diverse actors

Public dialogue

Better-targeted societal support

Development of sustainable policies and practices

Co-design and co-
create with and for
the society in
innovation and science

In conclusion

The SHIFT-HUB vision emphasizes a transformative model where society and research co-create innovation, ensuring science serves real-world needs. **Thess-AHALL stands as a leading paradigm** of this vision in action—a Living Lab where citizens, researchers, policymakers, and industry actively collaborate to design smart health solutions.

Through **inclusive co-design practices**, Thess-AHALL demonstrates how:

- Innovation is boosted through active stakeholder engagement
- Societal needs are effectively met through inclusive, needs-driven solution
- Sustainable policies emerge from participatory processes

As a living example of SHIFT-HUB's mission, Thess-AHALL not only pioneers smart health innovation—it redefines how we create it: with and for society.

Thank you!

Any questions?

REAL WORLD LAB

(ADDING VALUE TO YOUR HEALTH INNOVATION)

IDIAPJGol

Primary Health Care University Research Institute (IDIAPJGol)



- 8 Territorial Research Support Units (USR)
 - *1.600 researchers* from primary care centres and *36 groups*
- It was the **first primary care research institute** created in Spain
 - **25 years leading primary care research in Spain**

THE REAL WORLD LAB

EIT HEALTH ULABS ACREDITED (since 2022)



SHIFT HUB OFFICIAL PARTNER (since 2023)



ENoLL (2026?)



ISO56001 (2026?)



ISO9001 (2015)

ISO 9001:2015 (ER-0821/2011)



WHY A LIVING LAB IN PRIMARY CARE?

Most solutions that reach the market have not been validated in a **REAL ENVIRONMENT** with the adequate design and resources. This may be the reason why many of them are not successful.



A qualitative & quantitative validation in a **REAL ENVIRONMENT** will add critical value to the solutions.

This real environment is **PRIMARY CARE**, which is the **FIRST STEP TO ACCESS TO THE SNS** (50 M of consultations in 2023)

THE POTENTIAL OF A PC LIVING LAB

- ABOUT 8 M PATIENTS



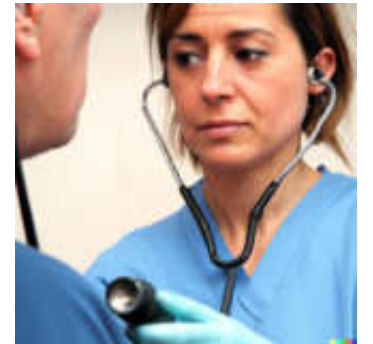
- UP TO 390 PRIMARY CARE CENTERS AND MORE THAN 500 LOCAL CONSULTING PREMISES



- ACCESS TO URBAN OR RURAL AREAS




- ACCESS TO MORE THAN 10.000 HEALTH PROFESSIONALS



- ACCESS TO 36 RESEARCH TEAMS



- ACCESS TO SIDIAP (one of the world largest DDB in Primary care) 

- A MULTIDISCIPLINARI TEAM

SERVICES



**PATIENT
RECRUITMENT**



**SOCIO ECONOMIC
IMPACT**



**ETHICS
COMMITTEE**



RRI
Responsible
Research Innovation



**CLINICAL
TESTING FOR
MDR OR
SIMILAR**



**USER
EXPERIENCE**



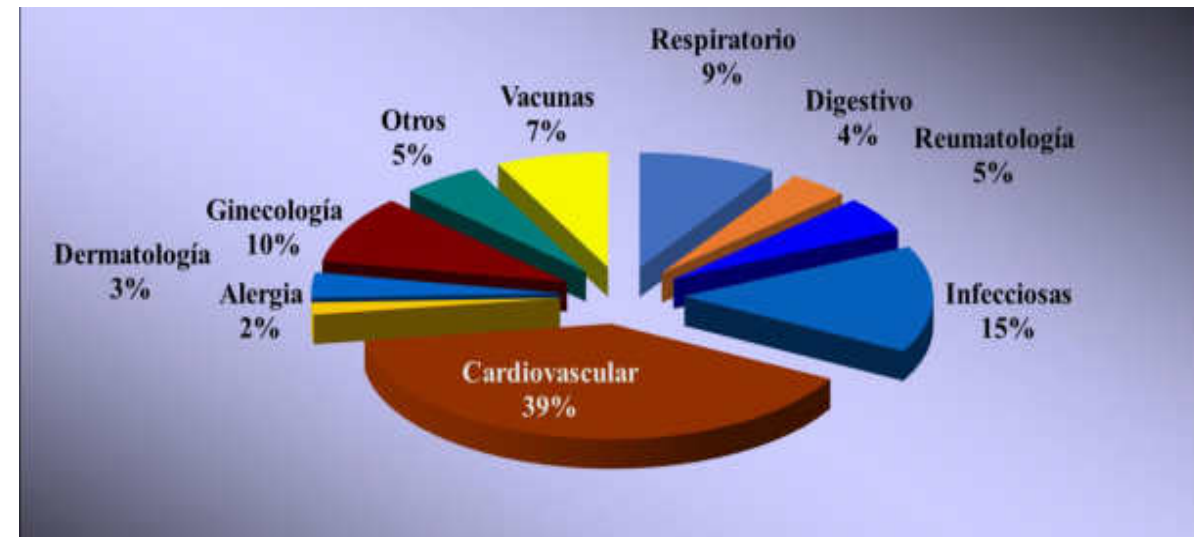
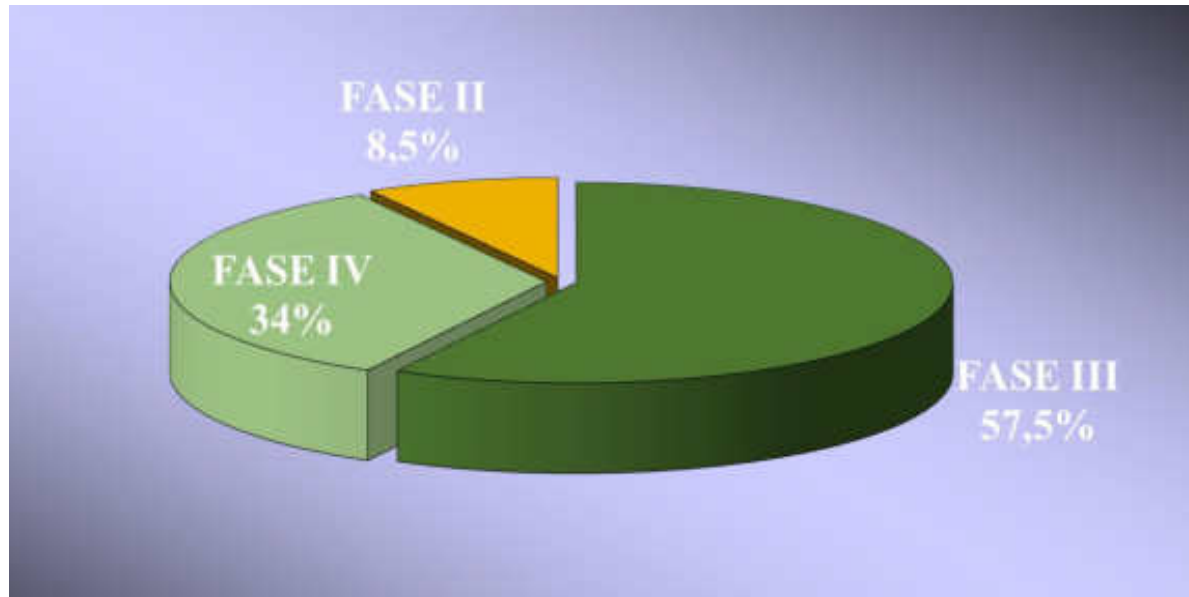
**QUALITY
STAMP**



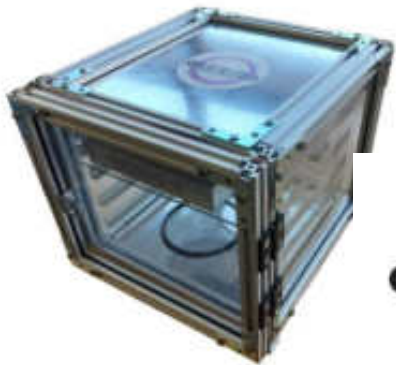
Largest Primary Care
Real World Data Base

AGICAP

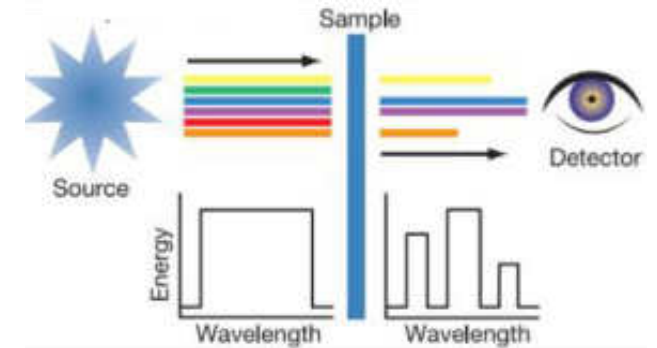
The 'primary care clinical research management agency' is devoted to the **promotion and management of drug clinical trials**
Our **300 certified researchers** network endorses the success of enrollment in your clinical trial.



PROJECTS

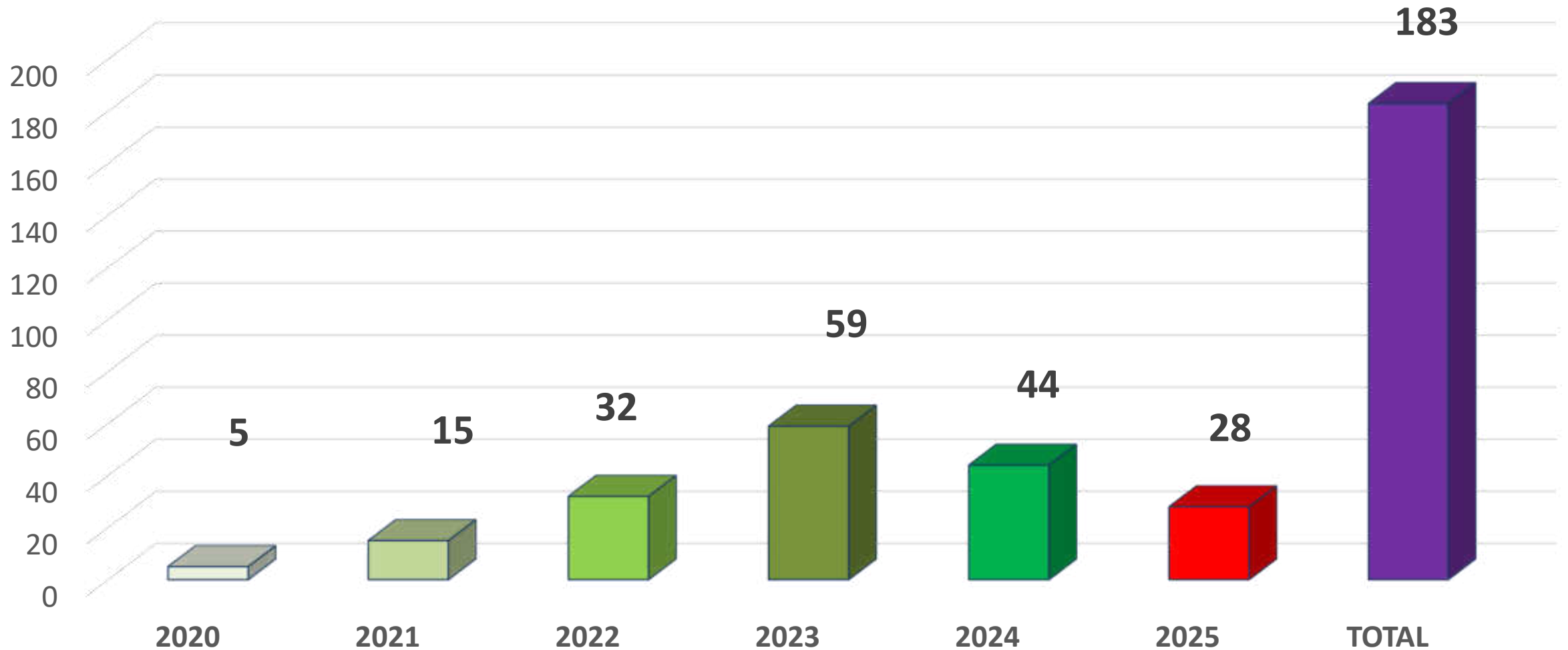


DigiDiab:
Assistant
Domiciliary
Nursing
Care



EXTERNAL PROJECTS

PROPOSTES EXTERNES



FUTURE?



FIIBAP FUNDACIÓN PARA
LA INVESTIGACIÓN E
INNOVACIÓN BIOSANITARIA
DE ATENCIÓN PRIMARIA
Servicio Madrileño de Salud



Conselleria de Salut
Atenció Primària de Mallorca



Fundación Canaria Instituto de Investigación Sanitaria de Canarias



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