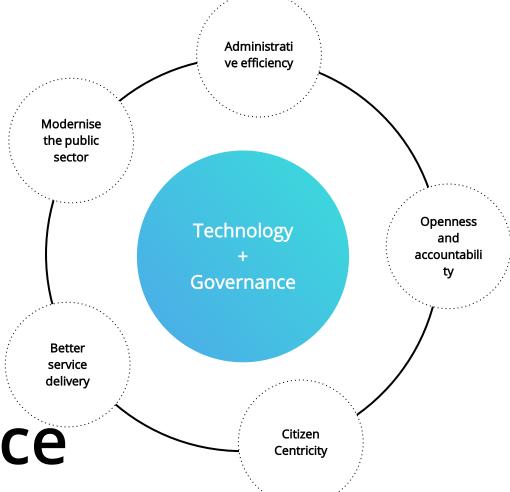
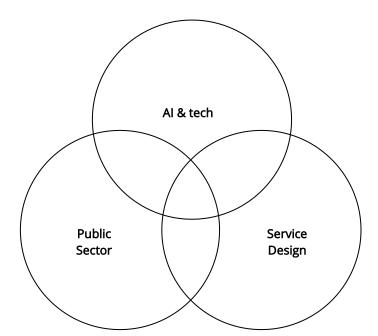
## Citizen and Stakeholder Engagement for Service Design A Coin with Two Sides

Ilaria Mariani, PhD, Assistant Professor Department of Design, Politecnico di Milano The integration of digital technologies and innovative approaches in the public sector is underpinned by the goal of improving government services, optimising administrative efficiency, and streamlining overall governance, addressing evolving challenges and demands faced by governments.

# Bridging Technology & Governance





## Challenges in the field

#### THEORETICAL CHALLENGES

Adapting to evolving scenarios. Governments often lack frameworks and models to adapt quickly to evolving digital scenarios and user needs.

Cultivating dynamic capabilities. Developing the necessary dynamic capabilities for continuous innovation and transformation.

**Governance models.** Models for effective governance structures that facilitate digital transformation are not yet fully developed.

#### PRACTICAL CHALLENGES

Implementing user-centered approach. Challenges in training Public Administration to understand and user-centered approaches to better answer users' needs.

Integration of stakeholder engagement. Frameworks for effectively integrating and operationalising stakeholder engagement are still evolving.

Resistance to change. Practical resistance within organizations, especially those with rigid and hierarchical structures, impedes the adoption of new practices.

The subject involved when seeking solutions to a problem is not only part of the problem, but also part of the solution

Burns et al., 2006

Connecting the dots and building relationships between different citizens, stakeholders and partners

#### DESIGN **PRINCIPLES**

1. Be People Centered 2. Communicate (Visually & Inclusively) 3. Collaborate & Co-Create

4. Iterate, Iterate, Iterate

OUTCOME

Iterate and improve.

Framework by the Design Council, licensed under CC BY 4.0





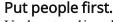
**METHODS BANK** 

Explore, Shape, Build

Creating the conditions that allow innovation, including culture change, skills and mindset

LEADERSHIP





Understanding the needs, aspirations and expectations of the people using a service.

#### Collaborate and co-create.

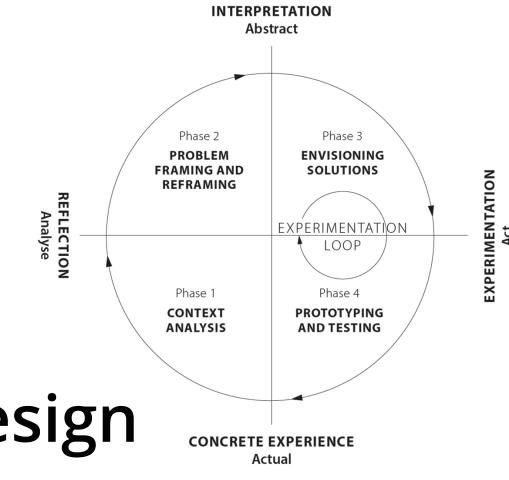
Work together and leverage diversity as a plus.

Spotting errors early to fix them earlier!

ILARIA MARIANI. PhD, Department of Design, Politecnico di Milano

Integration of two frameworks in an iterative process of experimentation and learning:

- The Design Thinking process (Brown, 2009) for co-creating solutions
- The experiential learning process (Kolb, 1984) depicting new knowledge acquisition



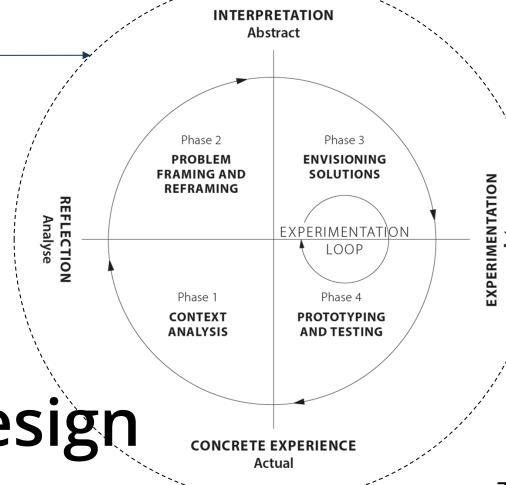
Approach to service design

**HUMAN-CENTRED DESIGN + ENGAGEMENT** 

WHEN + WHY+ WHO + HOW

RQ: How the use of design thinking methods for the effective engagement of different service users can enhance the development of more desirable and solutions for supporting public sector innovation?

Approach to service design



## From theory to practice: experimentation and piloting



**H2020 EU RIA** GA: 870980

Facilitate migrants' access to rights through more inclusive services



Horizon Europe RIA GA: 101094765

Facilitate citizens participation to decision-making leveaging AI



Tender DG Connect CNECT/LUX/2021/OP/0053

Supporting SMEs and startups in designing better GovTech solutions



CEF program 2020-EU-IA-0064

Master in AI for Public Services

EUROPEAN DIGITAL SKILLS AWARDS 2023



Executive Masters for public administrations

- AI for Public Services
- ♦ City Management and public sector innovation

**CO-DESIGN** 



### Socio-technical approach to innovation

Render the 'social' component a central concern throughout the entire process.

### Small-scale experimentation

Controlled environments where to experiment innovation before going public

### Multistakeholder settings and ecosystems

Environments featuring multiple stakeholders with different needs, to be engaged for steering desirable innovation

Innovation. Organisational change. Learning

## Study settings premises & limits

Possibilities and opportunities that arise when citizens and stakeholders actively participate in shaping services Potential pitfalls and challenges that arise when citizens and stakeholders actively participate in shaping services easyRights aims to facilitate migrants' access to their rights and thus their exercise of these rights:

- reducing language barriers for access to services
- improving services to reduce/eliminate problems due to bureaucratic procedures.



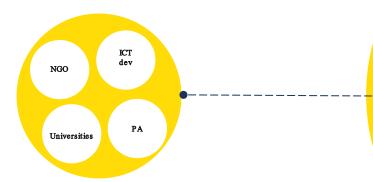
Al-enhanced services for supporting migrants

## easyRights



NATIONAL AND GLOBAL MIGRATION RELATED INITIATIVES

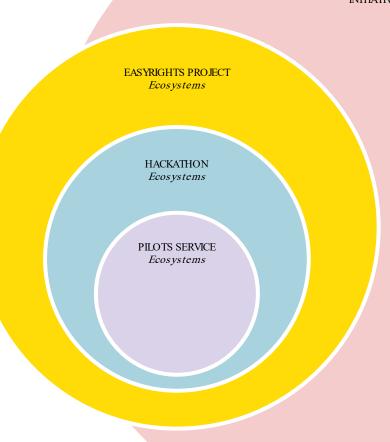
The consortium and its 4 pilots as ecosystems with quadruple-helix actors



Amatryoshka model

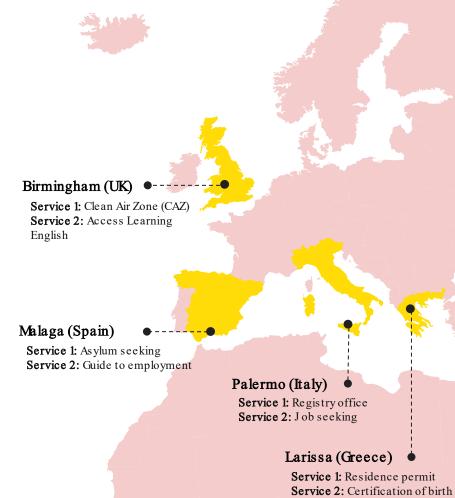
## Ecosystems

 $|\langle \rangle \rangle$ 



4 experiments in 4 pilot cities codesigning with migrants, public authorities, civil servants, ICT developers, researchers, and other key stakeholders.

## 4 pilots in EU, 8 services



4 experiments in 4 pilot cities codesigning with migrants, public authorities, civil servants, ICT developers, researchers, and other key stakeholders.

## 4 pilots in EU, 8 services

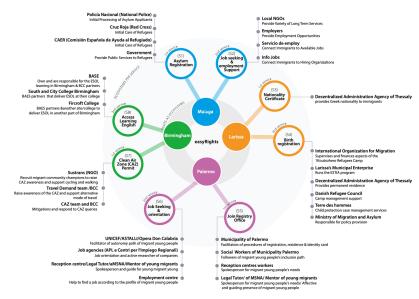
- 1 ONTEXT ANALYSIS
- · Stakeholder map
- Ecosystem Map
- Participant observation
- User research interviewsJourney map (initial)

- PROBLEM FRAMING AND REFRAMING
- Exploring the problem
- Expert workshop
- From needs to insights

- 3 ENVISIONING SOLUTIONS
- Hackathon for idea generation
- User stories
- Storyboard
- Service blueprint
- Expert workshop

- 4 PROTOTYPING AND TESTING
- Validation
- Participant observation
- Talk aloud
- Qualitative questionnaire

- Stakeholder map
- Ecosystem Map
- Participant observation
- · User research interviews
- Journey map (initial)



Prototype

• Participant observation

Talk aloud

• Qualitative questionnaire



METHOD: first stage of the questionnaire

As-Is. The first stage of the questionnaire is aimed at assessing the user experience of the situation "as-is", as to say prior to the intervention on the services that the pilot identified as in each of implementation. The questions should tap into different aspects of a service, describing and assessing the experience.



METHOD: the solution developed

Pilots conduct participant observation while end-users are testing the solution.

Migrants can be asked to explore the tool through a **Thinking Aloud testing** 



METHOD: second stage of the questionnaire

What-If. After testing the solution, the second stage of the questionnaire explores how the use of the solution developed would have impacted their experiences of the service. The aim is grasping to what extent their experience would have changed/improved if they could have gone through the service supported by the solution developed.



EasyRights has received funding from the EU H2020 research and innovation programme under grant agreement No 870980

ILARIA MARIANI. PhD, Department of Design, Politecnico di Milano

## Lessons learnt

#### Hackathons as early engagement means

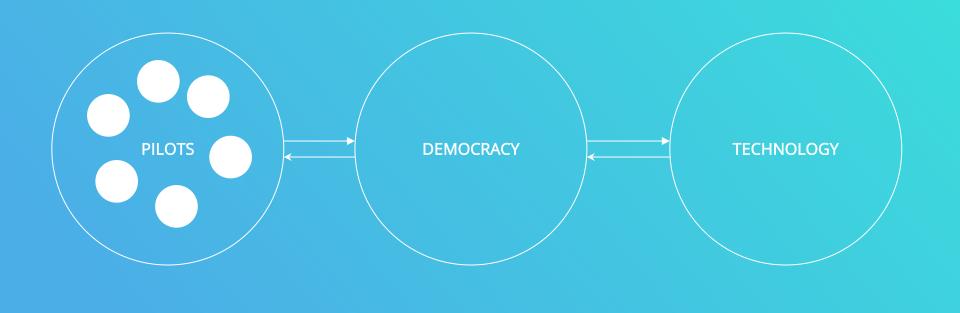
- Bridging incomprehensive between diverse groups by having diverse perspective at the same table
- (+) Fostering real collaboration that steered innovation

#### Challenges in multilingual and multisectoral communication

- Difficulties in bridging communication across various sectorial and domain-specific languages (beyond those of our migrants!)
- Designing inclusive, accessible, and desirable solutions spanning across various levels of digital literacies and language proficiency

#### Frictions due to stakeholder dynamics

- \_ Stakeholders with established habits and mindset
- Stakeholders with varying interests and levels of influence bring power dynamics to be managed to ensure equitable participation



Augmenting participation, co-creation, trust and transparency in Deliberative Democracy at all scales

### **ORBIS**

ORBIS has received funding from the European Union's Horizon Europe Framework Programme under grant agreement No 101094765.

A human-centered and socio-technical approach for user-driven rather than technology-driven innovation. Elaborate novel democratic models and develop new Albased tools for an inclusive deliberative democracy.

#### **EXPERIMENTATION**



#### REIMAGINING THE BUILDING BLOCKS OF DEMOCRACY

Democracy and Culture Foundation

Scale International

Org.

Objective Proposing policy recommendations to enhance democratic resilience, initiating global debates via DCF community and Athens Democracy Forum.

Team 2 persons from pilot

Method Employs citizen
assemblies, structured
workshops, and policy
advocacy sessions.
Integrates top-down and
bottom-up approaches.

**P** 2

#### TEENS FOR DEMOCRACY

Democracy and Culture Foundation

Initially European, to scale out to a global level

Engages teenagers (aged 13-17) in policy design through municipal councils in five cities. Aims to bridge the intergenerational gap.

2 persons from pilot

Annual Teens' Athens Democracy Forum, preparatory meetings, and collaborative sessions with policymakers. P 3

#### YOUNG THINKERS AND EU DECISION-MAKERS

Center for European Policy Studies

European

Provide a platform for young minds to express innovative ideas and perspectives on the policy scene.

4 to 5 persons from pilot

Workshops, online webinars, in-person sessions, and Ideas Lab sessions for public events. P 4

#### FUTURE4CITIZENS

Re-Imagine Europa

Initially national, to scale out to a European level

Enhance dialogue between citizens and policymakers to foster inclusive, transparent, and trustful deliberative democracy in Europe.

4 persons from pilot

Listen-Reframe-Act methodology integrated with ORBIS platform functionalities. P 5

#### TRANSITION MECHANISMS FOR A DEMOCRATIC CITY

Rob De Matt

Initially local, to scale out to national and EU level

Collect diverse voices in Milan to foster democratic processes and participation in urban planning and policy-making.

3 persons from pilot

Structured dialogues, codesign workshops, and public consultations facilitated by RDM in collaboration with associations.

P 6

#### ALLIANCE FOR ENTREPRENEURSHIP AND DEVELOPMENT IN WESTERN GREECE

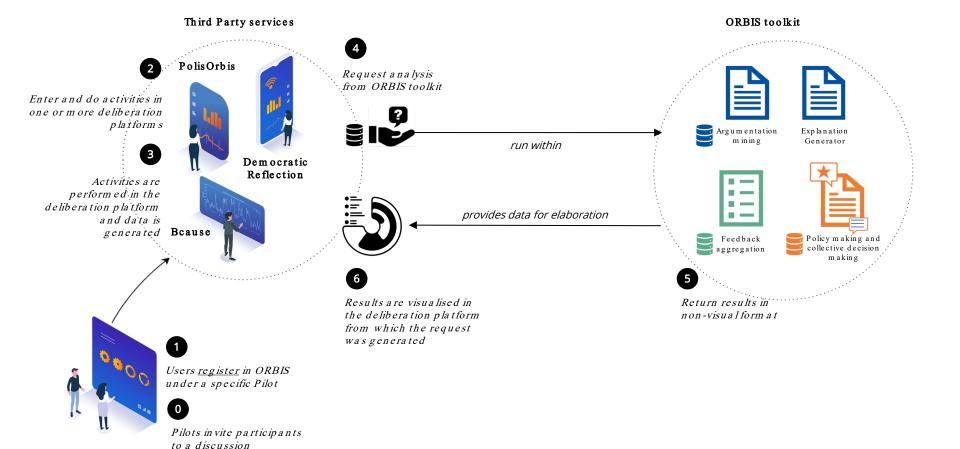
Perifereia Dytiki Ellada

Initially regional, to scale out to the national level

Acts as a network to facilitate the principles of the Small Business Act, promoting economic and social development.

2 persons from pilot

Regional policy recommendation development, collaborative networks of entrepreneurs, and thematic assemblies.



ORBIS has received funding from the European Union's Horizon Europe Framework Programme under grant agreement No 101094765.

Who are pilots?

Which are their deliberation activities and needs?

Which is their ecosystem of stakeholder?

What are you deliberating on?
What are the issues/actions you are discussing?

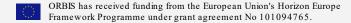
Who/When started the process?

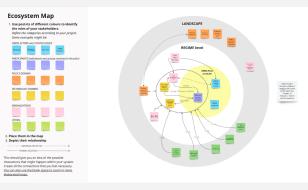
Which are the institutions and other stakeholders involved (network)? Which are their roles in the pilot's participatory process?

What kinds of interactions (in person, online, hybrid...) are ongoing? Eventually, what technologies are already in use (to do what)?

Which are your key achievements up to date?

# Digging into practices





CO-DESIGN WORKSHOPS 1ST SERIES

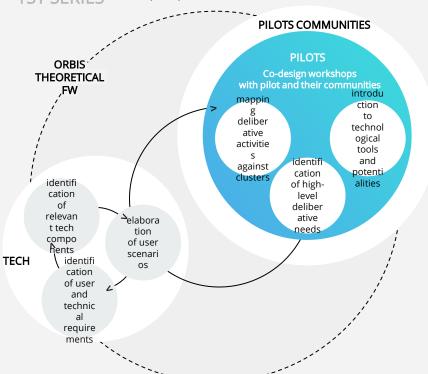
6 workshops, July 2023 35 participants from pilots + tech team

FOLLOW UP: 1 workshop in Milan, October 2023 26 participants from the consortiums

Considering pilot's needs and practices:

How can pilots inform technologies?

How to improve and develop tech solutions to answer real needs?



OUTPUTS

User Scenarios

User Requirements

Technological Requirements

Co-design

 $\langle 0 \rangle$ 

ORBIS has received funding from the European Union's Horizon Europe Framework Programme under grant agreement No 101094765.

Contextualisation

Community challenges

Scenarios cocreation

Validation

How to develop user scenarios of pilots, considering their communities?

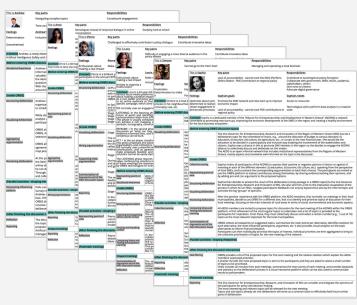


#### **CO-CREATION WORKSHOPS**

# Co-creation of value

ORBIS has received funding from the European Union's Horizon Europe Framework Programme under grant agreement No 101094765.

#### **CO-CREATED USER SCENARIOS**



CO-DESIGN WORKSHOPS 2ND SERIES

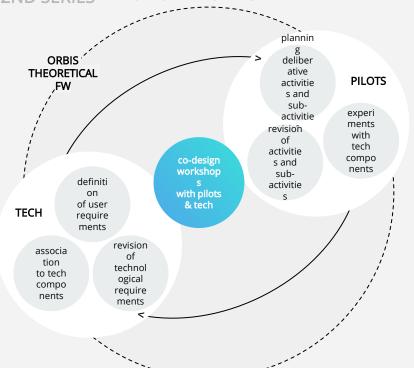
6 workshops, July/September 2024 10 participants from pilots organisations + tech team

FOLLOW UP: 3 workshop September/October 2024 10 participants from pilots organisations + tech team

Considering pilot's needs and practices:

Are needs **really** answered?

Are there additional tech features and tailoring that could improve deliberation?



**OUTPUTS** 

Refined requirements (user and technological)

User Journeys: pilots activities and technologies

## Co-design

 $\langle \langle \rangle \rangle$ 

ORBIS has received funding from the European Union's Horizon Europe Framework Programme under grant agreement No 101094765.

## Lessons learnt

#### Multidisciplinary co-design

- Participants from diverse domains bring distinct vocabularies and perspectives requiring efforts to align ideas and reach consensus, which sometimes slowed the process.
- Pilot organisers, often lacking familiarity with emerging technologies, struggled to grasp the potential of AI-enhanced tools into deliberative activities.

#### Bridging technology and deliberative practices

+ Continuous exchanges and co-design methods to foster a deeper understanding of the diverse contributions of all parties involved.

#### Risks of piloting within real organisation and with real communities

- Real organisations as pilot sites placed them at the forefront of experimentation, carrying risks of potential losses due to the experimental nature of the projects.



Transforming Government, Together

**GovTech Connect** wass a multi-year, cross-border project, created under DG CONNECT of the European Commission **to foster digitisation of public sector and green transition in Europe.** 

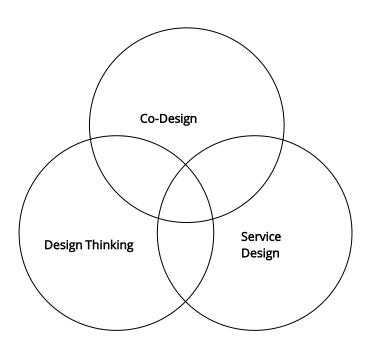
#### **EMPOWERING STARTUPS**

- Implement and disseminate Design thinking methodology and user engagement into startups for better GovTech solutions
- Experiment in 4 European bootcamps for GovTech startups and refine results

## **GovTech Connect**

This study proposes a **structured DT methodology** that combines (i) **DT** with (ii) **co-design** and (iii) **service design** to support the establishment of an ecosystem rooted in the **involvement of various user groups and stakeholders** to enhance the design and governance of GovTech solutions.

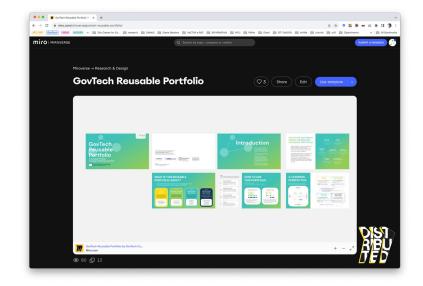
## Approach to GovTech

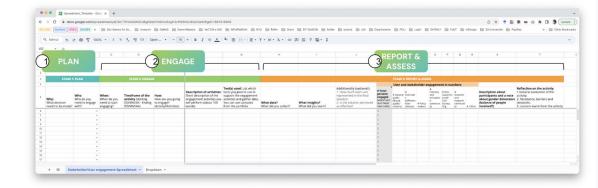


# GovTech reusable portfolio

https://miro.com/miroverse/govtech-reusable-portfolio

# Stakeholder engagement plan





## Lessons learnt

#### Prioritising user needs over technology

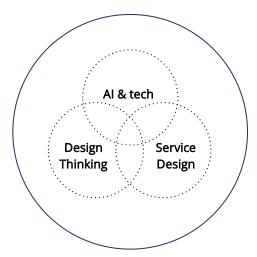


Shifting from a tech-centric approach to a user-centric approach. Start from identifying real needs and practical challenges faced by users, rather than being driven solely by technological innovation.

#### Reframing engagement as an Integral part of development

- Stakeholder engagement is often relegated to the later stages of the process for purposes of testing and validation.
- Underestimate the need of a clear and strategic engagement plan that defines why, when, and how to involve stakeholders throughout the project, not just at the end.
- + Cases (better same domain!) to showcase the relevance of integrating stakeholder feedback and inputs at all stages

#### CITIZEN & STAKEHOLDER ENGAGEMENT



# Educational settings

4x SETTING 01
Master in Al for Public Services

1 year master program in AI for Public Services

3 YEARS PROJECT FUNDED BY CEF EUROPEAN DIGITAL SKILLS AWARDS 2023 CURRENTLY POLI.DESIGN MASTER

3x ( ) SETTING 02 Executive master on AI for Public Sector

executive masters on public sector innovation at POLIMI GSoM

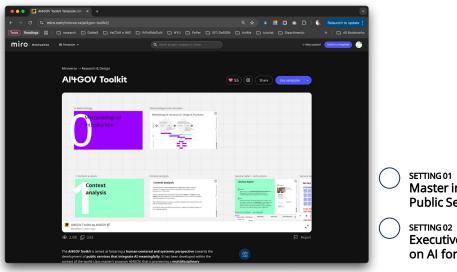
2x SETTING 03 Executive master on City Management

executive masters on public sector innovation at POLIMI GSoM

### AI4GOV toolkit

https://miro.com/miroverse/ai4gov-toolkit/

# Stakeholder engagement plan





- Master in Al for Public ServiceS
- SETTING 02
  Executive master
  on Al for Public Sector

SETTING 03
Executive master
on City Management

## Lessons learnt

#### Enhancing organisational readiness through exposure



Previous exposure to interaction with social actors influenced participants' readiness to adopt new practices.

#### Influence of professional background on openness to engagement

- (+)
  - Participants from NGOs and certain public sectors, accustomed to informal and adaptive practices, quickly grasped how to plan
- (-)
- stakeholder engagement, realising they often do it already.
  Participants unfamiliar with open-ended, divergent approaches often
- (+)
- struggled to understand participation logics and benefits.

  Targeted approaches and similar examples to foster adaptability.

#### Novelty of participatory approaches



Concerns about encountering failure led to apprehension, limiting willingness to experiment and potentially stalling the stakeholder engagement process.

#### Hands-on experimentation as a learning tool



Implement hands-on experimentation for experiential learning to demonstrate the tangible benefits of participatory practices

Traditional forms of civic engagement have typically involved public consultations, town hall meetings, and surveys as a way to involve citizens in governmental processes.

Technology allows for more dynamic interaction between the public and government bodies, overcoming geographical and temporal barriers, but requires open-minded approach and investments.

## Tech-aided forms of engagement

#### **DELIBERATIVE**

#### **ONF-WAY**

#### TWO-WAY

Commitment to keeping the public fully informed

Valuing and reflecting on public feedback

Incorporating public insights directly into decision-making

Comprehensively Integrating public input into the development processes Respecting and implementing public decision to the fullest extent

Provide objective information to assist the public in understanding the problem and options to tackle it Gather public feedback on various options and analyse to influence decisionmaking Directly involve the public, ensuring their concerns and aspirations shape the outcomes Co-develop solutions with the public, considering all aspects of the decision, including alternative solutions

Delegate decisionmaking authority to the public, committing to implementing their choices

Level 1
INFORM

Level 2
CONSULT

Level 3 INVOLVE

Level 4
COLLABORATE

Level 5 **EMPOWER** 

## TKS!

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