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**Advancing AI-Enhanced Democratic and Inclusive Deliberations: From Co-Creation** to Scalable Solutions

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

HORIZON-CL2-2022-DEMOCRACY-01-02 The future of democracy and civic participation

https://cordis.europa.eu/project/id/101094765



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Total cost € 2 498 882,50

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Coordinated by POLITECNICO DI MILANO

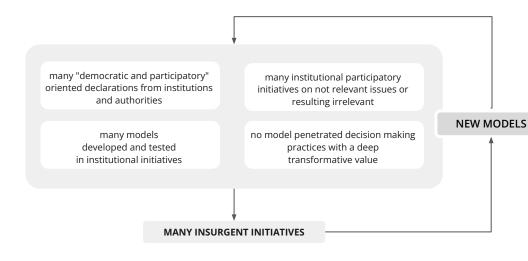
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## Challenge

Lack of **democratic ecosystems** that are both expansive and inclusive Issues of **effective and inclusive engagement** Failure to meet **user expectations** Gap between deliberation and outcomes **implementation Misalignment** between democratic needs and tech features





















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Discussions

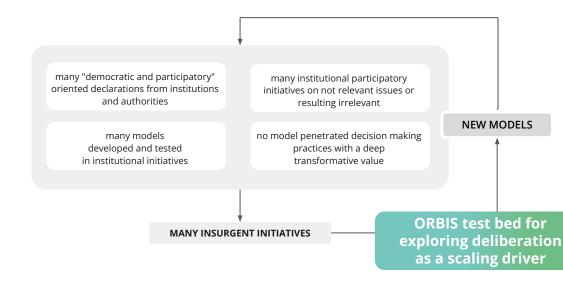
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### Challenge

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Discussions

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# MAPPING ACTIVITIES AND NEEDS OF PIOTS

### TO UNDERSTAND HOW TO SUPPORT THEM IN THEIR DEMOCRATIC PROCESSES

# Democracy

### LEVERAGING AND TAILORING A TOOLKIT OF TECH SOLUTIONS

# Technology

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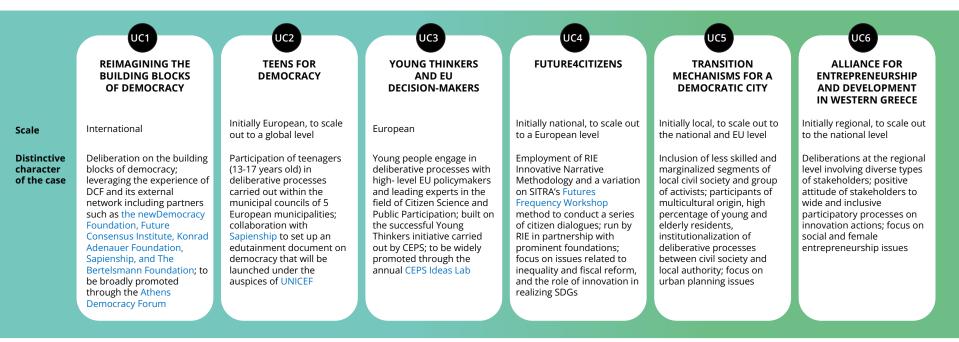
#### HOW DO WE INFORM AI-ENHANCED DEMOCRATIC DELIBERATIONS ENSURING AI INCLUSION IS TRUSTWORTHY?

- **Co-creation with pilots' communities** > requirements, deliberative and scaling journeys
- Ethical approach with cross-disciplinary fundations > ethical task force
- Inclusivity of less engaged population > toolkit and guidelines
- **Privacy, data protection, explainability**> pseudonymisation, minimisation, clear communication
- Iterative, participatory design
  > cycles of co-design



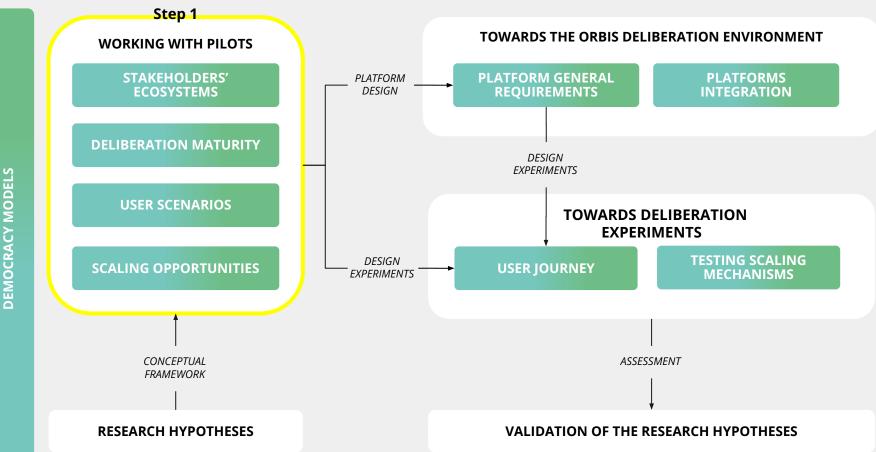
#### **EXPERIMENTATION**

6 use cases for piloting, where to experiment with Al-enhanced deliberative democracy tools, methods and processes



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Step 1



#### Step 1 **ONE-TO-ONE ACTIVITIES WITH PILOTS** WP2

- INTERVIEWS 1.
- 2. **ELABORATION OF SCENARIOS**
- 3. WS IN PRESENCE

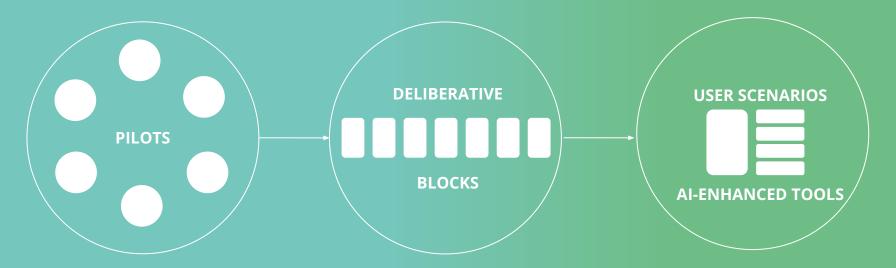
### Step 2 **ONE-TO-ONE CO-DESIGN WS PILOTS** WP3

- PILOTS INTERPRETATION THROUGH SCALING 1.
- 2. **CO-DESIGN SESSIONS**
- 3. **REALABORATION BY PILOTS**

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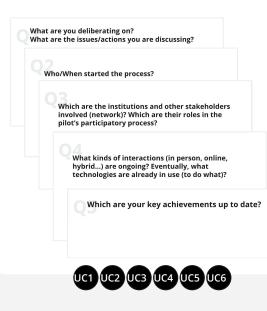
### Step 1

first one-to-one activities with pilots The deliberative processes are broken down and framed in seven modular building blocks, understood as components support the engagement and participation of citizens in issues of public concern. Deliberative Blocks are used to understand Pilot deliberative features and have been used as starting point to create User scenarios



Which are pilots activities and practices towards democratic deliberations?

How are they positioned against **Deliberative Democracy Building Blocks**?





 Crowdsourced Individual Participation in public interest problems

 Collective Sensemaking / **Reflection on the** public interest problem

ideation /

 Collective options generation via open discussion and natural language communication

 Collective Assessment of ideas and options via structured argumentation and discourse analysis

 Collaborative creation of possible solutions, policy recommendation s, actions as integrated super-sets of individual ideas

 Making explicit choices / agreements / pacts, reaching consensus, via group prioritisation / idea selection between alternatives



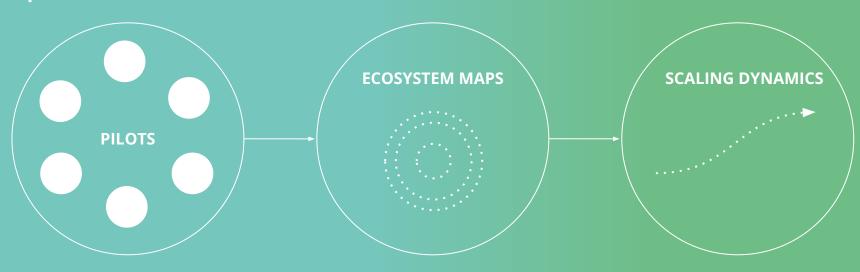


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### Step 2

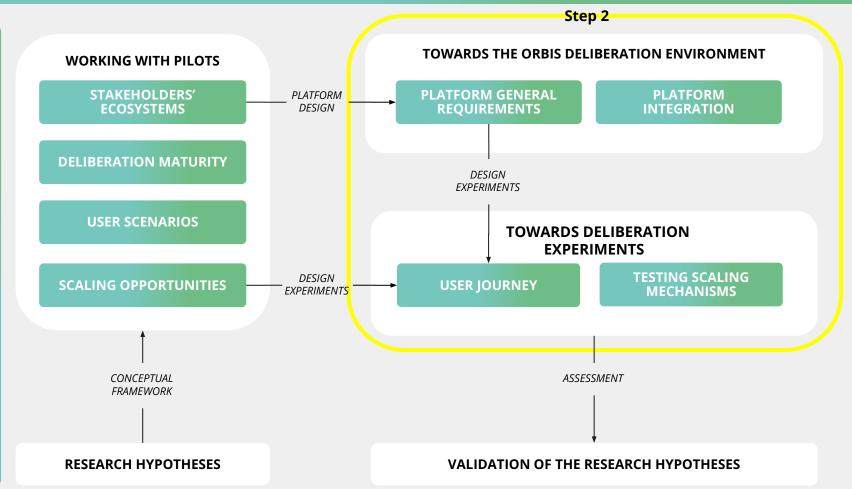
second one-to-one activities with pilots The scaling perspective produces a complementary narrative of pilots macro-and-micro deliberative processes, described through two dedicated tools: the Ecosystem Map and the Process Graph, co-designed with pilots representatives



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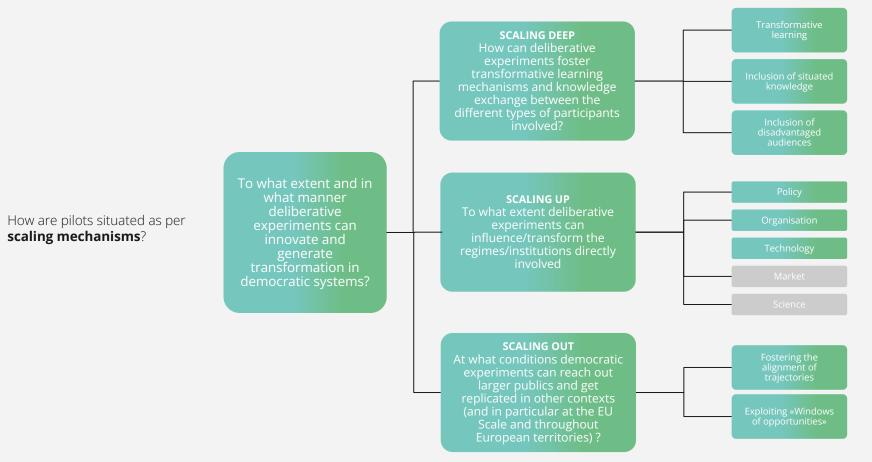
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RESEARCH HYPOTHESIS: DELIBERATION AS DRIVER FOR SCALING DEMOCRACY MODELS



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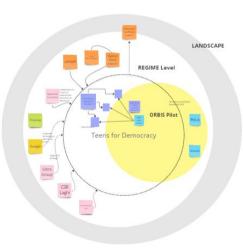
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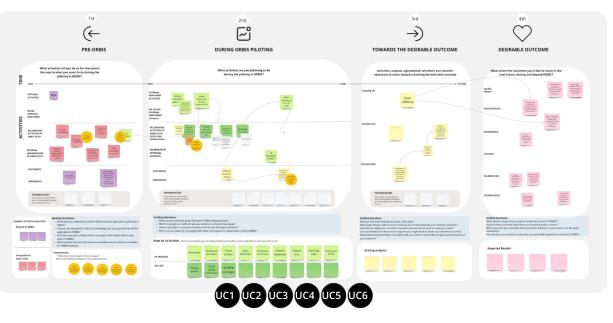


### Which is Pilots' **ecosystem of stakeholder**?









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### Step 3

The co-created user scenarios are used to derive tech requirements and initiate the design of the toolkit. They also serve as the starting point to create user journeys for each pilot, which in turn offers input for the components' development.



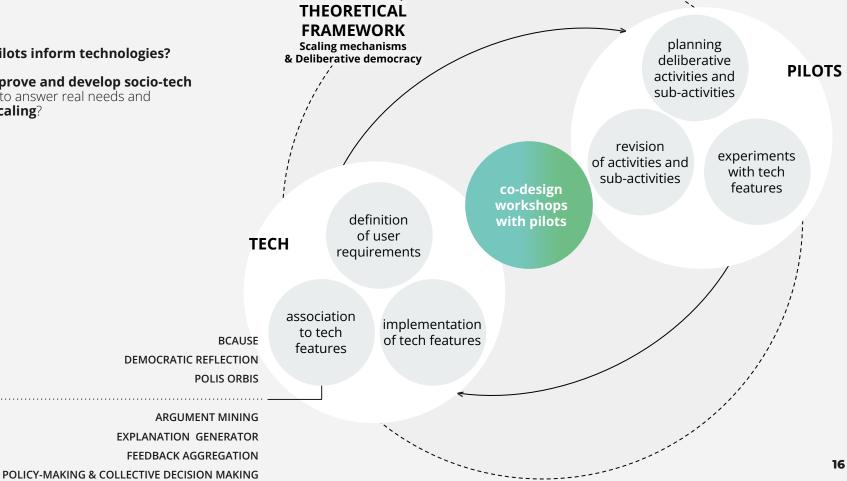
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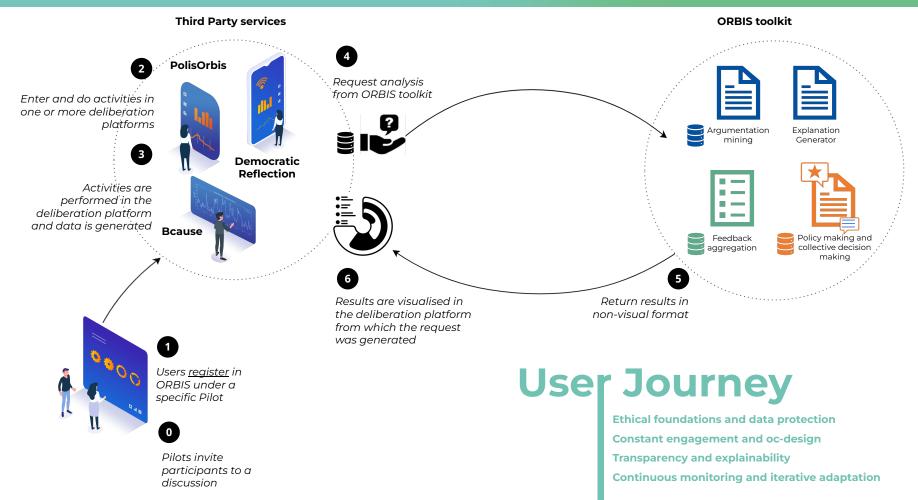
How can pilots inform technologies?

How to **improve and develop socio-tech solutions** to answer real needs and support scaling?



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# **ORBIS technical solution**

#### COMPONENTS OF ORBIS TOOLKIT

components developed within orbis

#### ARGUMENT MINING

Retrieves argumentative components (text fragments) and identified graphs relations between claims or promises

#### EXPLANATION GENERATOR

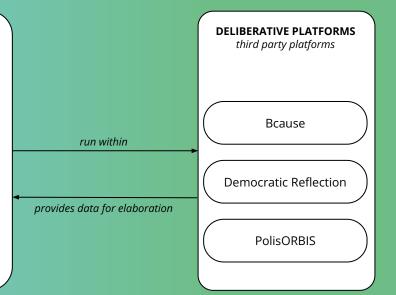
Explains in human language the structure predicted by the model of argument mining component

#### FEEDBACK AGGREGATION

Clusters (groups) arguments, makes summarization, keyphrase extraction and feature enrichment

#### POLICY-MAKING & COLLECTIVE DECISION MAKING

Delivers descriptive or procedural knowledge on action commitment (proposed policy) and useful recommendations for application





## Thanks :)

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