



Inclusive
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This project has received
funding from the European
Union's Horizon 2020 research
and innovation programme under
Grant Agreement No. 960366.



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ISEED Project Overview

JULY 2022

Communicating ISEED results

Edited by WP7



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WP7

Dissemination and Responsible Research and Innovation: Inviting, Sharing and Engaging Stakeholders in Project Outcomes in an Inclusive and Reflexive Manner

Lead Partner: NTNU

WP Leader SOPHIA EFSTATHIOU

WP Communication and Information
Architect SARAH SANTOS



Summary

1. WP2: From participation to deliberation: Towards a new model of "public sphere" for knowledge societies
2. WP3: Mapping and interpreting deliberative and participatory processes
3. WP4: Understanding and upgrading citizen science practices
4. WP5: Investigation of the prospects for deliberation using digital technologies
5. WP6: From citizens and science to citizens and democracy: scaling up and policy recommendations





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WP2



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WP2

*From Participation to
Deliberation:*

*Towards a new model of "public
sphere" for knowledge societies*

Lead Partner: Ca' Foscari University Venice
(UNIVE)



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WP2 – Commitments

Key step

Focus on **Deliberative Participation**:

Analysis of the active, informed, engaged processes leading to making choices in public debate.

Model of analysis:

Citizen Science participatory activities to be 'scaled up' as forms of democratic participation.

Objective

Featuring a model of **Public Sphere** most conducive of **political effectiveness** in democratic societies.



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Task 2.1 Citizens' participation in science in knowledge societies

UNIVE (Leader) + MNHN/TP3 ENS + UPF. (M1 –M18)

Task 2.2 Assessing the dynamics of democratic participation and civic engagement

UNIVE(Leader)+TP2 UNIPA+ TP1 UNIPI. (M6-M24)

Task 2.3. Deliberative public spheres in knowledge societies

UNIVE (Leader)+TP1 UNIPI+ DBT (M6-M31)



Conceptual Analysis

- Provide a framework for the relation between citizens science and deliberative processes
- Identify key aspects of people's engagement in deliberative processes
- Identify key aspects of the model of public sphere relevant to the project

Experimental Analysis

- Set up questionnaires to assess people's drivers to participate in deliberative processes
- Test key variables of people's engagement in deliberative processes
- Make predictions





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WP3

Mapping and Interpreting Deliberative and Participatory Processes

Lead Partner: The Danish Board of
Technology (Denmark)

Overview

In WP3 we study existing participatory and deliberative practices, with a specific focus on those, [including science-driven problem solving](#), in order to create a typology of public engagement.

The first year of work focused on mapping participatory and deliberative practices and developing a novel theoretical framework for interpreting such activities.



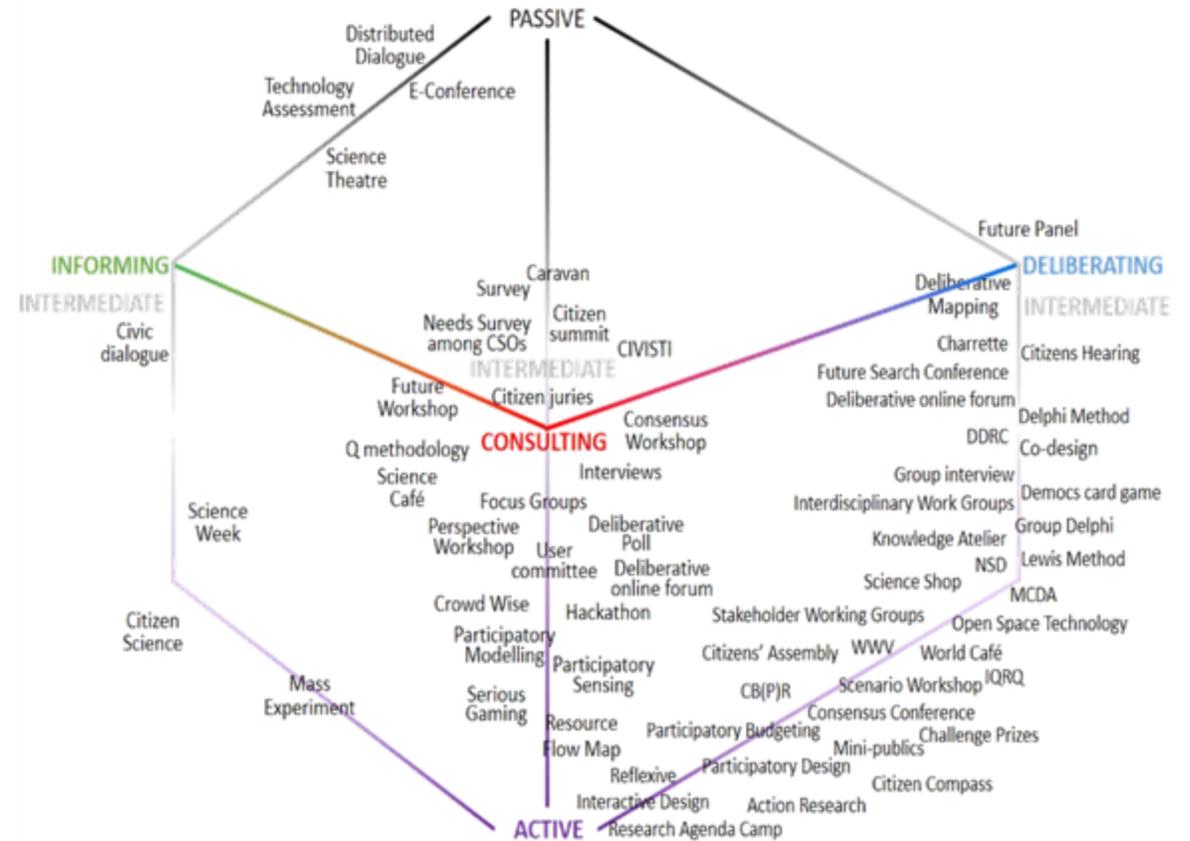


WP3 – Task 3.1

Task 3.1 Mapping existing participatory and deliberative practices in science-informed public discussion and problem.

Is it possible to increase the level of inclusion and involvement of people in political, administrative or civic life choices with a specific focus on those that include scientific topics?

Yes! 64 tools and practices mapped using three classification criteria, two of these were used as axes in the figure (*aim* and *citizen role*).



Most relevant tools/practices for ISEED: Citizen Science; Science Week; Technology Assessment; Citizens' juries; Deliberative Poll; Science Café; Action Research; Citizens' Assembly; Consensus Conference; Deliberative Workshops (mini-publics); Future Panel; Participatory Budget; Scenarios Workshop; Science Shop; World Wide Views (WWV).



WP3 – Task 3.1

Task 3.1 Mapping existing participatory and deliberative practices in science-informed public discussion and problem.

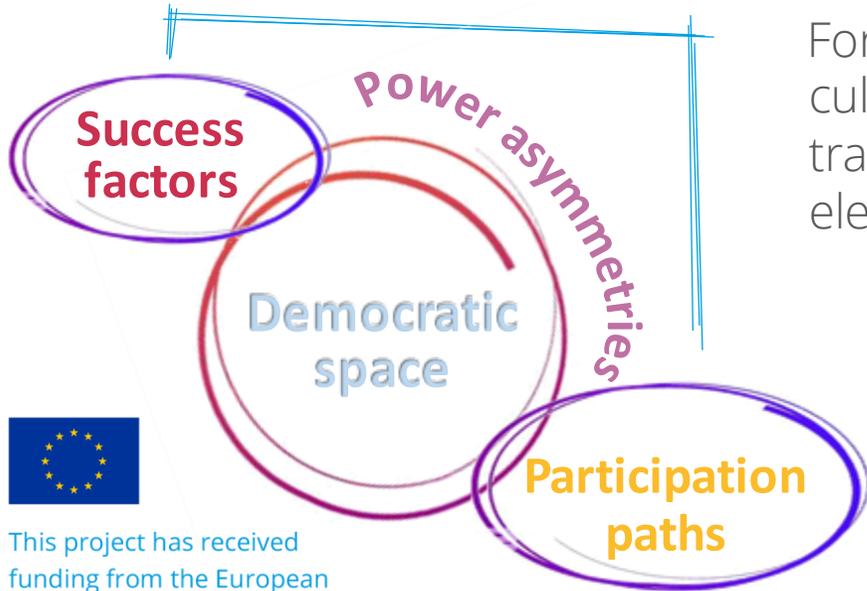
Is the implementation of these tools sufficient to guarantee the effective inclusion of citizens in the public sphere and democratic choices?

No! Tools/practices, although studied with specific purposes and processes, are just tools. We interviewed 50 experts from European countries and thanks to these interviews we know that there are many elements that can interact.

For example, the context **democratic space**, in terms of geopolitical, cultural and historical background (e.g. former socialist bloc or neoliberal tradition), and the **power asymmetries** among social actors are the main elements to pay attention to.

These elements have their roots in the "way of thinking" of a country; thus they offer different meanings of basic concepts such as democracy or participation and that is related to the way in which tools are implemented.

Thus, *political systems, infrastructures and funds* represent more relevant **factors of success** because they realize the articulation of democracy.





WP3 – Task 3.1

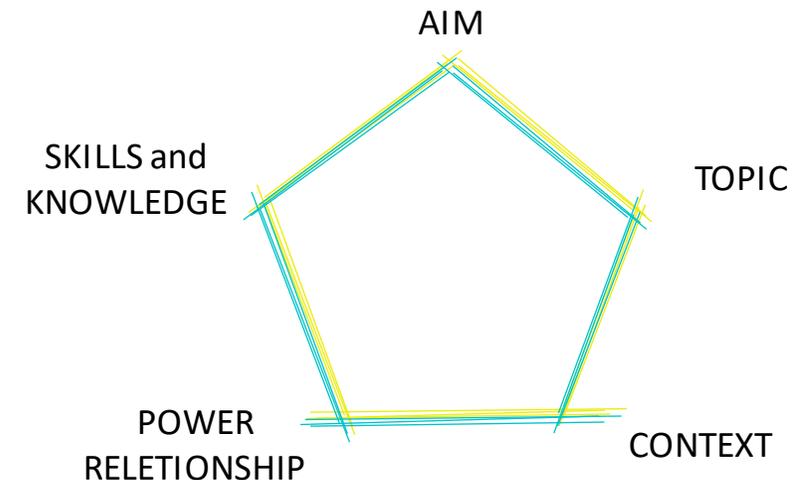
Task 3.1 Mapping existing participatory and deliberative practices in science-informed public discussion and problem.

However, among these, *trust* and *openness* can make the difference. In fact, it is essential that people feel welcomed and listened to and, in the meanwhile, it is necessary for those who manage the processes to approach them with open mind and active listening.

Finally, the elements that characterize the **participation path** (e.g. *aim*, *direction of influence* and *role of technology*) should be balanced in relation to the topic and hybrid solutions can be taken into account.

To improve and disseminate the use of participatory and deliberative tools/practices, the next step is to create a typology of them. From our research we suggest paying attention to five dimensions:

- Context (democratic space concept and factual conditions, also online/offline environment)
- Power relationships, as well as the level of inclusion (who is involved and what role have)
- Skills and knowledge to apply the tools
- Topic
- Aim



WP3 – Task 3.2

Task 3.2 Typology for public engagement and deliberative processes

Our team has developed a [novel typology of civic engagement](#) (D3.2), which can be applied to establish principles of observation and categorization in the service of structuring our analytical perspectives on civic engagement policies and practices.

The typology-development will be [inspired by the triple/quadruple helix model](#) for innovation partnerships straddling science, private sector, public sector, and civil society; a model, which comprises many of the main ingredients for developing a typology for civic engagement.



WP3 – Task 3.2

Task 3.2 Typology for public engagement and deliberative processes

The typology offers a [prism for deepening](#) our understanding of the institutional complexities and dilemmas of participatory and deliberative democratic practices. It also contributes to the understanding of the features and role of the idea of the public sphere.

In addition, as part of 3.1 and 3.2, a complementary study has been launched that focuses on the [barriers for scaling up participatory and deliberative democratic practices](#).



WP3 – Task 3.3

Task 3.3 Interpreting forms of inclusive and effective communication between scientists and citizens

Based on the outcome of WP3 T3.1 and T3.2, our team has [launched a study](#) of the political dynamics of different communication processes between citizens and scientists in order to identify and examine tool and processes that can be used in democratic deliberation and decision making.

A survey has been designed that focuses on three cases and surveys and semi-structured interviews will be conducted during autumn 2022 to [build a comprehensive empirical foundation for developing a report and an academic paper](#). (D3.4).





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WP4

Understanding and Upgrading Citizen Science Practices

Lead Partner: University of Warsaw (UW)

WP4

In WP4 we study the effects of [diverse grassroots](#) knowledge production practices on individual participants and the community.

The first year of work focused on [development of research protocols and tools](#) as well as [establishing relations](#) with representatives of public administration, non-governmental organization and data collaborative.

WP4 team has now moved to the next phase of the research: [data collection](#).



Task 4.1 Grassroots knowledge production – UW, IRMiR

Here, our team interviewed representatives of non-governmental organizations that work in the field of environment protection with a special focus on limiting the felling of old trees in cities and countryside.

The aim of the study is to examine the character of relations between organizations and their view on new technological innovations that allow wide collaboration with citizens.





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WP4 – Task 4.2

Task 4.2 Citizen science in environmental science – MNHN, UCD, UW

Mosaic together with two local municipalities: Libourne (24 800 inhabitants) and Melesse (6 100 inhabitants) has launched a participatory science program to gather input from citizens on the introduction of a new local policy – black corridor (turning off public lights in the night).



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The screenshot shows the SPOT website interface. At the top, there is a navigation bar with the SPOT logo, a menu with items 'Le programme', 'Participations', 'Enjeux de l'éclairage urbain', and 'Actualités', and two buttons: 'Créer un compte' and 'Se connecter'. The main content area features a night cityscape illustration. The text reads: 'Bienvenue sur SPOT. Un programme de sciences participatives mené par la ville de Melesse en partenariat avec le Muséum national d'Histoire naturelle.' Below this, statistics are shown: '245 Participants' and '1715 Recommendations'. A call to action asks: 'Du 1er avril au 30 juin 2022, tout habitant ou personne fréquentant régulièrement la ville de Melesse peut rejoindre la communauté, suivre le protocole, poser des questions et émettre des recommandations en matière d'éclairage public, auprès de la collectivité. Vous souhaitez participer à la construction de la politique d'éclairage urbain ? Alors découvrez ci-dessous comment participer !'. A section titled 'Pourquoi participer ?' contains five circular icons with text: 'Je partage un souvenir d'enfance lié à l'obscurité', 'Je suis le protocole d'observation autant de fois que je le souhaite', 'Je fais la synthèse de mes observations', 'J'atimente les questions de la communauté', and 'Je formule mes recommandations pour chaque type de lieu'. At the bottom, a section titled 'Comment participer ?' is partially visible.



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WP4 – Task 4.2

Task 4.2 Citizen science in environmental science – MNHN, UCD, UW

Inhabitants of any of two municipalities were encouraged to log in and share their experience, feelings, and thoughts on the darkness in their city on the platform from April 1st to June 30th, 2022.



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The screenshot displays a user interface for a citizen science project. It is organized into several sections:

- Les dernières observations:** A carousel of observation cards. Each card shows a user profile (e.g., Audrey, Mikkkkka, Olzo2nuit), a date and time, the number of shared files, and a list of tags such as 'pollution', 'moustiques', 'voiture', 'scooter', and 'veto'. A 'Consulter' button is present on each card.
- Les dernières questions:** A section for user questions. It features a 'Titre question' and a detailed text description. Below the text, it shows engagement metrics: '23 soutiens', '12 commentaires', and 'Évènementiel'. A 'Lire la question' link is also provided.
- Les dernières Actualités:** A section for news articles. It displays two article cards, each with a date (e.g., 'Le 5 Décembre 2021'), a title, a short text snippet, and a 'Lire l'article' link.

At the bottom of the interface, there is a navigation bar with logos for 'Melesse', 'MOSAIC', 'MUSEUM NATURELLE', and 'UNIVERSITE CORDONNE'. It also includes contact information: 'Contactez-nous', 'C.G.U', 'Politique de confidentialité', and 'Mentions Légales'.



WP4 – Task 4.3 and 4.4

Task 4.3 Citizen observatories and data cooperatives – UCD, UNEXE (M2-M28)

- Initial contacts have now been established for the data cooperative case study - MIDATA health data cooperative.
- Background work on citizen observatories and their data management practices is ongoing.

Task 4.4 Science clubs – MEC (M2-M28)

A nation-wide evaluation of science clubs in Uruguay, in which kids and teenagers from local schools look for solutions to the problems that they find important, is just about to start. The tools are ready and in the process of being translated.





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WP5

*Understanding Deliberation Online:
Developing synergies across
computational and discourse
analysis*

Lead Partner: University of Trento (UNIT)

Objectives

1. Unveiling the explicit and/or implicit structure of argumentation in polarized discourses concerning the uses (and abuses) of science in public debate
2. Proposing ways in which digital communication and social media could act as a platform of knowledge-based communication between equal participants.
3. Making recommendations on how social media could fulfil a promise of greater and more enlightened participation.



It will investigate

- To what extent digital media have contributed to polarising discourses, populist narratives and distrust in science
- In what forms emotions, rather than logical reasoning, are much more likely to be the driver behind decisions and in public dialogue on issue of social relevance
- What are the actual and potential contribution of social media to rational argument and better decision processes in debates concerning scientific issues.
- What are the potential of digital social media to reach vulnerable, alienated and marginalised citizens.



WP5 - Topics for the AE

- Considering all these aspects, the choice was to analyse two topics: [vaccines and COVID19](#) and [the green transition as of preeminent EU concern](#). Both are broad topics that allow all the competencies and skills available in the group involved in WP5 to be used while at the same time sticking to the 'constraints of the project. There will be plenty to do with two large topics such as the ones selected.
- An analysis of these debates would throw light on reasoned versus emotional argumentation, the import of science and scientific uncertainty, the emergence of counter scientific positions, conspiracy theories and the polarization of positions. Moreover, within a broad topic like green transition, there will be space to work on food and sustainability.



ISEED Argument Extractor & Aggregator 0.1 OAS3

<http://127.0.0.1:8888/openapi.json>

This is an OpenAPI for the [ISEED project](#). It can be used to test the functions developed for ISEED's argument extractor and aggregator (ISEED-AEA). Implemented functionalities include the extractions of cause-effect and if-then relations from strings of text.

Servers

default ▼

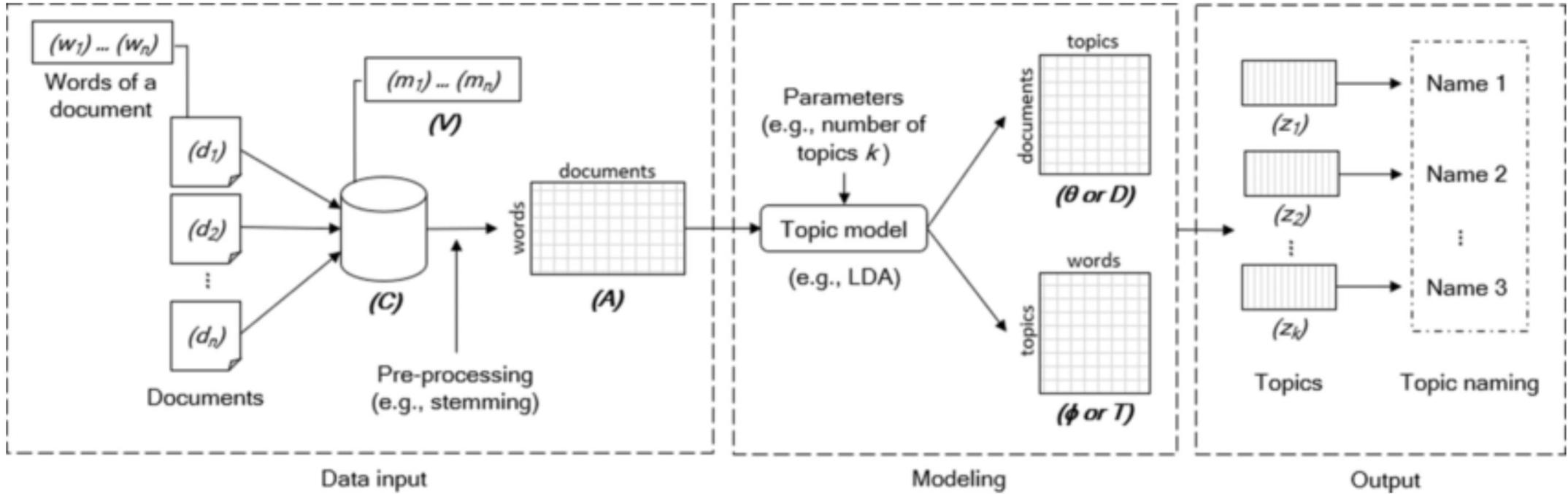
GET `/get_if_then_string` Extracts if-then relations from a sentence using a set of regular expressions, no NLP tool is employed so the function is not aware of Part-Of-Speech or Dependency-Relations among words. This function was designed to be used with short texts from social media. The text string must be a single sentence and must have been already pre-processed to remove non latin-1 characters like emojis, as well as URLs. Remember to set the correct language parameter ("en" by default).

GET `/get_cause_effect_string` Extracts cause-effect relations from a sentence using a set of regular expressions, no NLP tool is employed so the function is not aware of Part-Of-Speech or Dependency-Relations among words. This function was designed to be used with short texts from social media.

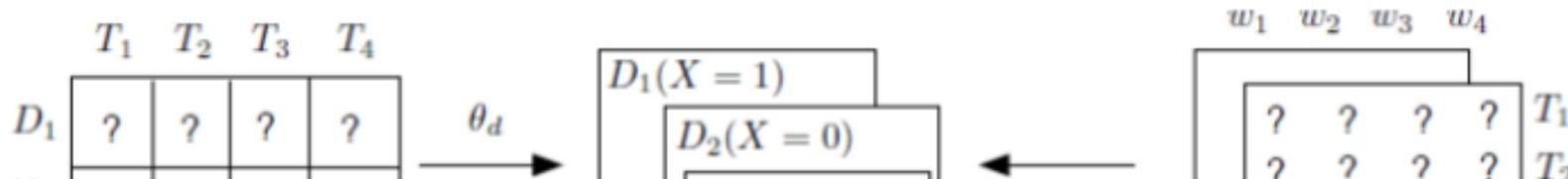
Parameters Cancel

Name	Description
text <small>* required</small>	
string (query)	a character string a vector of strings or a list of strings

Topic modeling workflow



Generative Model



WP5 – Experiment

Based on insights from tasks 5.2 and 5.3 key drivers of polarization on the one hand and compromise on the other will be tested experimentally using online surveys and laboratory studies.

The contrastive vignette methodology and discrete choice designs will be employed to assess the impact of

- fake news and pseudoscience,
- the perception of bias in media content, and
- trigger mechanisms generating emotional responses.

Personal characteristics that influence acceptance of science-based arguments in public debates e.g. scientific curiosity, prosocial motivations and ability to take different perspectives will be examined, alongside demographic characteristics (gender, age, profession).





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WP6

From citizens and science to citizens and democracy: scaling up and policy recommendations

Lead Partner: University of Pompeu Fabra (UPF)

WP6 - Multi Stakeholder Panel

Objective

To contribute with their knowledge and expertise in several parts of the ISEED activities to take first decisive steps towards scaling up the project results.

Composition*

- 12 External Independent Experts
- Chaired by WP4 Leader Gema Revuelta
- 4 subpanels
 - Working with WP 2, 3, 4 and 5
 - 3 people
 - All subpanels constitute the whole MSP

*criteria: stakeholder group (QH), geographical and gender diversity





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Name	Surname	Institution	Stakeholder group	Gender	Country	Region	WP involved
Norbert	Steinhaus	Wissenschaftsladen Bonn (Science shops)	Civil Society	Male	Germany	CE	WP2
Antonio	Florida	Direzione Affari legislativi , giuridici ed istituzionali	Policy	Male	Italy	SE	WP2
Rosina	Malagrida	IrsiCaixa	Academia	Female	Spain	SE	WP2
Rosa	Arias	Fundación Ibercivis	Academia	Female	Spain	SE	WP3
Francisco	Lupiáñez Villanueva	Universitat Oberta de Catalunya	academia	Male	Spain	SE	WP3
Maja	Lalic	Mikser-A multidisciplinary creative platform for social	Industry	Female	Serbia	EE	WP3
Dorte	Riemenschneider	Managing director of the European Citizen Science	Civil Society	Female	Germany	CE	WP4
Meie	van Laar	NEMO Science Museum Amsterdam	Civil Society	Female	Netherlands	WE	WP4
Joanna	Erbel	Cooptech	Industry	Female	Poland	CE	WP4
Francesco	Mureddu	The Lisbon Council for Economic Competitiveness	Policy	Male	Belgium	WE	WP5
Rossella	Chiodo	Facebook Europe	Industry	Female	Belgium/Italy	WE	WP5
Felice	Scalvini	REVES network	Policy	Male	Italy	SE	WP5



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