

Placing citizen engagement at the heart of AI R&I

1 *Grehan, Laura; 2 Clarke, Emma; and 3 Martínez Segura, Núria

1, 2 ADAPT Centre, Dublin City University, Dublin 9, Ireland

3 Computer Vision Center, Universitat Autònoma de Barcelona, Campus UAB, 08193 Barcelona, Spain

*(corresponding author: laura.grehan@adaptcentre.ie)

Abstract

The development and use of Artificial Intelligence (AI) poses complex socio-scientific issues, particularly with regard to ethics and privacy¹. There is a need to engage communities in research and innovation around emerging technologies in order to ensure responsible development of AI and leverage its potential for good². We examine two examples of initiatives designed to engage citizens and researchers in dialogue and knowledge exchange around emerging AI research and innovation (R&I): Citizens' Think-Ins on AI in Ireland and open forums on AI prototype experimentation and discussion in Spain. We conclude that there is demonstrable value in such engagement initiatives for citizens and researchers alike to ensure that inclusive, resilient and sustainable communities thrive in the Age of AI.

Keywords:

Citizen participation, Community Engagement, Smart Communities, Resilience, Artificial Intelligence

1. The Issue

Artificial Intelligence (AI) is one of the most transformative technological advancements of our time. However, despite widespread adoption of AI, questions and concerns exist around the ethical use of this technology and its potential to reconfigure our personal and working lives. AI will undoubtedly have an impact on our future. For communities to remain inclusive, resilient and sustainable into the future, the challenge of understanding and integrating citizens' voices and lived experience in AI research and development in a meaningful way is imperative.

To embolden citizens to have their say on such emerging AI innovation, there is a need for meaningful public engagement initiatives to create discussions, dialogue and deliberation on these topics and address current gaps through knowledge co-creation and public engagement.

2. Research Goals

Taking two case studies: *Citizens' Think-Ins* from Science Foundation Ireland's ADAPT Research Centre, Dublin City University and *ExperimentAI* from the Computer Vision Centre, Universitat Autònoma Barcelona, this research aims to investigate whether participatory public engagement initiatives can improve the public's and researchers' awareness and understanding of the potential impacts and concerns about emerging AI research.

3. Methodology

The ADAPT research centre's *Citizens' Think-in* public discussion forums provide a model of citizen-researcher dialogue in which stakeholders explore collaboratively the potential opportunities, challenges and benefits of emerging AI innovations through a lens of

ethics, trust and privacy. Launched in 2019 and run in the heart of communities across Ireland, Think-Ins have engaged more than 500 citizens and 120 researchers in scenario-based dialogue and deliberation around the role of AI in our lives.

ExperimentAI is an open innovation initiative that enables citizens to experiment with cutting-edge technological prototypes resulting from pioneering research at CVC, led by the researchers themselves. Interactive and educational activities accompany the prototype, to help the public understand how AI and the technology work. Discussions are encouraged with participating citizens to share their thoughts on and perceptions of the presented technology, aiming to collectively identify opportunities, challenges, uncertainties and ethical issues it may generate in society. More than 400 citizens and 45 researchers have participated in sessions hosted at public libraries in Barcelona since 2018.

Co-creation underpins the *Think-Ins* and *ExperimentAI* initiatives. The methodologies applied in the projects place the citizen at the core of every project phase.

4. Preliminary Results

Both projects utilised mixed methods approaches to provide a nuanced assessment of the potential impacts and concerns associated with the technology in focus.

Evaluation of the *Citizens' Think-Ins* revealed positive outcomes for citizens and researchers:

- Public participants felt more informed about AI and more comfortable expressing their views about emerging AI issues
- Public participants had a better understanding of the role of AI in their lives and felt more engaged with AI research
- Researchers had greater familiarity with diverse points of view relating to AI
- Researchers found the opinions of public participants “useful”, “inspiring” and “valuable”.

ExperimentAI questionnaires gauged citizen, library staff, and researcher perspectives on including citizens into research:

- After the session, 85% of participants showed increased interest in AI.
- Public participants consider the opportunity to voice their opinions on AI topics favourably.
- Researchers acknowledge citizen feedback's value in advancing scientific knowledge.
- Library staff endorse libraries as ideal settings for AI dissemination.

5. Preliminary Conclusions

This research leads us to conclude that participatory public engagement initiatives can improve the public's and researchers' awareness and understanding of the potential impacts and concerns associated with emerging AI research, in our case bridging the gap between citizens and cutting-edge computer vision and AI research; and building resilient communities that can respond to future challenges and opportunities presented by AI.

Acknowledgment

ADAPT and CVC thank the citizens, researchers, civil society organisations and libraries (including Consorci de Biblioteques de Barcelona and Xarxa de Biblioteques Municipals de la Diputació de Barcelona) who contributed their time and expertise to *ExperimentAI* and the *Citizens' Think-Ins*. This research was conducted with the financial support of Science Foundation Ireland under Grant Agreement No. 13/RC/2106_P2 at the ADAPT SFI Research Centre at DCU; the SFI Discover programme; and the Spanish Foundation for Science and Technology.

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