AI in Digital Participation Tools – Where Do We Stand?

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Almost two years after the launch of ChatGPT propelled the topic of AI into the spotlight, we take stock of AI in digital participation tools. What features are well established, what is in development, and what are visions for the future? As it turns out, the functionalities in actual widespread use are few but tools in development and visions for the future are many.

AI generated using Midjourney.

The basic AI functionalities

The most common AI-based functionalities in participation tools are toxicity screening, analysis of inputs and translation. The first two in particular are meant to lighten the workload of people who administer digital participation processes. They tend to be most relevant for large-scale projects with high participation rates, where the large number of inputs makes it challenging to keep up and organise the information. These are the functionalities that are in relatively widespread use.

Toxicity Screening

Toxicity screening is used on many popular digital participation platforms including make.org, Your Priorities, Go Vocal, Assembl and others. It is used to flag hateful or inappropriate inputs. Flagged entries are typically sent to a human administrator who decides whether to take them down or react otherwise. Participation platforms often rely on outside tools developed for this purpose. For example, Your Priorities uses the popular tool Perspective AI which is also used by several big media sites such as the New York Times.

Your Priorities also uses a similar tool to scan images and videos uploaded to the platform. When content is flagged, it is blocked immediately. It is then sent to a human administrator who can then decide whether to unblock it. Robert Bjarnason, the CEO of Citizens Foundation who built the platform, explains the difference "While text can be harmful, it is rarely illegal, unlike images and videos, which can more easily cross legal lines."

Analysis / Organisation of inputs

Most of the platforms that offer toxicity screening also offer some form of AI-based analysis of participants' inputs. In its simplest form, these tools automatically sort inputs into different categories. In some cases, inputs within each category are then grouped with similar ideas.

It is worth noting that toxicity screening and the automated organisation of inputs are actually nothing new. In most cases, they apply Natural Language Processing (NLP) instead of the more complex and recent LLMs. However, the development in the field of LLMs has allowed for the introduction of new ways of analysing inputs. Besides clustering inputs into categories, some of these tools now also provide written summaries of the inputs or allow users to interact with them via chatbots (in the case of Your Priorities).

While better at producing coherent-sounding text, LLM-based tools have the problem that they are less reliable than NLP-based tools, where the same input consistently produces the same output.

The popular open-source participation platforms do not offer this functionality yet. However, projects such as the Helsinki youth budget, which is using are already using external AI tools to analyse citizens' contributions.

AI translation

Through the inclusion of AI translation, these platforms can also be used for multilingual processes. Participants can write in their own language, and read automated translations of comments written in other languages. Once again, this is not typically a built-in feature in the larger open-source platforms. However, they allow for existing machine translation services to be integrated. For example, users of Decidim work with DeepL Pro or, in the case of EU institutions, with the EU's E-Translation.

Anomaly detection

On the make.org platform, users typically do not have to log in to participate, helping keep the barriers low. Instead, the platform uses AI-based anomaly detection to identify potential trolls whose votes can then be removed from the platform. It also uses an algorithm to ensure that all proposals are shown to the same number of participants. This way they avoid a situation where early proposals have a better chance of gathering high numbers of votes.

Applications in development and future visions

With the widespread availability of generative AI, the providers of participation tools have become creative in coming up with new applications for the technology. While some are already in a beta testing phase, none of them are in widespread use.

Image generation

The makers of the map-based participation tool Senf.app are developing a tool called Urban Utopia. It uses AI image generation to visualise ideas for urban design. In the beta version, users can upload a picture or google street view screenshot of a place they would like to re-design and then use simple prompts to create visualisations of how it might be transformed. In an interview with Democracy Technologies, the people between a partnership between Senf.app and Urbanista told us about their vision of adding virtual reality to such a tool. It would allow participants and city planners to take a walk through alternative visualisations together.

AI and human combined policy making

The Citizens Foundation with The GovLab has developed the tool Policy Synth. Its declared purpose is to create policy-making processes in which humans collaborate with various AI agents. It allows the user to combine different AI agents to scale up processes as the one they call Smarter Crowdsourcing, which has different tasks such as identifying problems and their root causes and coming up and ranking solutions (using pairwise voting) based on selected human inputs-

"The problem today with LLMs is they are not always correct. In the context of democracy and citizen engagement that is a very serious issue," says Robert Bjarnason. He is convinced however that the method of agentic workflows will mitigate this problem. It involves using a combination of several AI agents tasked with correcting each other, thereby minimising the risk of errors.

Proposal writing assistants

A few providers, including make.org, are also working on developing AI assistants that helps participants write better proposals. As their Chief AI officer, David Mas told us, the assistant would "propose reformulation, ask the citizen for context or more details about their proposal".

Participation process design supported by AI

In a recent interview about their rebranding, Wietse van Ransbeeck, founder of Go Vocal, told us about their plan to use AI in the design participation processes. The idea is to use their large database of previous participatory processes to build a tool that guides project managers through the steps of process design.

Scaling up deliberative processes with AI

A lot of hope is also placed on LLMs when it comes to scaling up deliberative processes such as citizens assemblies. Make.org, deliberAIde and others are working on this. In most cases, the idea is that AI facilitators could run numerous small group discussions simultaneously at a much lower cost than with human facilitators.

So far, the only large-scale AI-supported deliberative processes we know of were conducted by Stanford's Deliberative Democracy Lab. In one instance, a small team of researchers was able to conduct a deliberation with over 11,000 participants throughout the world. However, the AI moderator was considerably less active than a human facilitator would be, merely monitoring discussions for toxicity and sentiment, and ensuring that everyone got a chance to speak. It

did not play the role of e.g. inviting people to clarify a point they were making, or adjudicating a discussion.

Choosing a different use case altogether, make.org built an AI-based tool meant to make citizens assemblies more accessible to outsiders. Panoramic is a chatbot-like tool that lets people ask questions on the proceedings of a citizens' assemblies and links directly to relevant sections in video recordings and written documentation. This tool can already be tested for French Citizens Assembly on the End of Life.

Reasons for slower adoption of AI tools in the open-source sector

AI functionalities are less common in most of the established open-source participation platforms. For many of them, this is a matter of staying true to the open-source model and independent from 3rd party models. Your Priorities, which is an open-source platform, constitutes a notable exception. Its AI functionalities rely on several proprietary and open-source models.

AI tools being developed for DIPAS

DIPAS, a map-based open-source participation tool developed by the City of Hamburg, is going to get its own analytics tool for first internal tests next year. Their product owner, Mateusz Lendzinski, told Democracy Technologies that its main purpose is to provide precise clustering into categories and subcategories and aspects within them, as well as showing their numeric distributions. They built a custom pipeline consisting of both NLP and LLM tasks.

To the above-mentioned reasons for the slower adoption of these functionalities, Lendzinski added that it is also a priority to have full control over the architecture, data and fine-tuning. Additionally, they had an external ethics audit done to ensure the tool would comply with legal and ethical standards.

Citizen OS

Similar hurdles have held other open-source providers back from going into this field at all or led them to stop their development after an experimental phase. Sara Sinha from Citizen OS told us that after consulting with AI experts, they were concerned that "Delegating decision-making to algorithms could negatively impact people's critical thinking skills" and that "At the moment, AI applications are too unstable in terms of regulatory and ethical frameworks". They are however exploring the possibility of AI applications to organise citizens' inputs in large-scale participation projects. Nonetheless, they stress that "this is contingent upon the

population having a very high level of trust in AI, as well as a general consensus that all efforts have been made to ensure that AI models are bias-free".

Liquid democracy

Liquid democracy, the organisation behind the open source platform adhocracy+ developed the moderation tool KOSMO based on their own language model developed in cooperation with the German Institute for Participatory Design. Next to flagging harmful content, it was trained to highlight constructive contributions. However, development was halted as it was too difficult to get hold of training data that met their requirements. And again, as they are committed to the open-source approach, they did not want to resort to commercial models.

All an all, one can say that the hype around the developments in LLMs has also sparked new development in the field of participation tools. However, with the exception of translation, hardly any of the LLM-based functionalities are past the beta-testing phase, let alone in widespread use.

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