

How to use Google AI to Understand Large-Scale Conversation

Jigsaw, an incubator within Google, developed an <u>open-source library</u> using **Google AI** to facilitate the analysis, summarization and categorization of data, to <u>make sense</u> of large-scale conversations. The technology takes a high volume of statements & votes, and summarizes the inputs into topics, themes, and areas of alignment. The output of this data is a report that **equips participants, facilitators, and leaders** to uncover clear, actionable insights within minutes. This technology was developed to help community conversations and was recently applied to a large-scale conversation in Bowling Green, Kentucky.



How did this program begin?

Be? conversation from February 14 - March 17, 2025. The conversation was an initiative within BG2050, a project founded by Warren County, KY, and Bowling Green-based innovation process strategy firm Innovation Engine to plan for the next 25 years as the county faces dramatic population growth, predicted to double during that time. Warren County leaders' goal was clear: in order for this growth to happen for them, and not just to them, they needed to engage their best resource; their community. Traditional town halls proved difficult for the county to generate community engagement in a meaningful and productive way. As a way to get all those who live, work, or spend time in Warren County's input, Innovation Engine, decided to use the deliberative tech platform, Polis, to host an accessible conversation for participants to weigh in on what they wanted to see in Bowling Green in the next 25 years, and then utilize Jigsaw's open source sensemaking library to help make sense of all the input.

What happened next?

Nearly 8,000 Bowling Green residents participated, submitting thousands of unique ideas that fellow community members weighed in on over one million times! As the conversation concluded, Innovation Engine partnered with **Polygraph**, a data visualization design studio who utilized Jigsaw's open source sensemaking library to categorize the ideas submitted into topics (and subtopics) and summarize the overall findings **into an interactive public report**. As part of the report, Google AI highlighted ideas with highest alignment and areas of mixed opinion.

What was the impact of using Google AI?

With Google AI's ability to make sense of the community's input, 90% of local leaders surveyed shared that they achieved a better understanding of what the community wants for the future. They also estimated the report saved them an average of 28 days of manually sifting through the public input and feedback. With Jigsaw's technology, a report can be generated in a matter of minutes. Warren County Judge Executive Doug Gorman, stated, "Their technology helped increase the scale of what we are doing, and we're now looking forward to the hard work ahead of incorporating this public feedback into a comprehensive and ongoing vision for our fast-growing community." Within a month of the conversation concluding, local leaders – from the City-County Planning Commission to the Southcentral Kentucky Community & Technical College Dean – began plans to take action on the insights generated from the report.

Step-by-Step Process



Define your goals

What is the intended outcome of your conversation? (ie. informing public policy, determining budget allocation, peacebuilding, solving a specific community problem, getting stakeholder buy in etc.)



Design your conversation

Key things to consider when designing your deliberation include: defining your audience, desired participants, duration of conversation, and key milestones to measure success, guided by your budget and goals. Deliberations can happen in-person, digitally, or a combination. This guide demonstrates the approach for a digital conversation specifically.



Choose a deliberative tech platform

A "deliberative tech platform" is a digital tool designed to facilitate public discussion and decision-making, often involving small group discussions and expert input, to create informed and reflective public opinions. These platforms aim to replicate the function of traditional public squares by providing a venue for citizens to engage in dialogue, share ideas, and participate in decision-making processes on various social, political, and cultural issues. There are platforms available publicly, to get started, check out the various options here from People Powered.



Design your outreach campaign and recruitment strategy

Once the design is established, determine how you will reach your target audience, and motivate participants to join the conversation. You may wish to partner with a community advisor or recruitment firm or other thought partner on this process. Deeply understanding the community, and building trust with participants is a critical precondition for a successful conversation.



Launch the conversation & monitor engagement

Kick off your conversation using the deliberative tech platform of choice, and begin engaging with participants on the topics you've selected.



Make sense of the conversation using Google AI

Once your conversation has closed, use Jigsaw's <u>sensemaking library</u> to make sense of all your data within minutes. The library can identify, categorize, and summarize topics, themes, and areas of alignment to help you uncover clear, actionable insights. All this is done using Google's latest Gemini models. The library can be used in a variety of ways: running the tools directly, integrating into another codebase, or as an inspiration for how to use Google AI to make sense of large scale conversations.

Review the technical resources below on how you might use Google AI to suit your conversation's needs.

Technical Resources:

- Developer Github Library
- Developer Documentation



Share the report & act!

Based on the findings in your report, determine the actions to take, how and with whom to share the information, and how you might strategically communicate key findings and the impact of your conversation through various channels to reach a wider audience and ensure the public's perspectives are acknowledged and understood.



How do I ensure the right people are part of the conversation and process?

To ensure the right people participate, clearly determine the necessary range of perspectives to thoroughly answer your questions and strive for a participant group that accurately reflects the community's range of viewpoints. From there, map out key stakeholders for your different interest groups, who can connect these groups, foster productive dialogue and build trust.

For example, in the case of the Bowling Green Kentucky "What Could BG Be?" (WCBGB) deliberation, Innovation Engine ran a collaborative "civic imagination" exercise with a community that grew to 100 local leaders and established eight volunteer groups, each focused on one area critical to the community's future development – e.g. public health and economic development– all prior to beginning planning for a public deliberation. These groups will be responsible not only for writing the final vision document for the BG 2050 Project, but also lead the effort to map critical stakeholders in their areas and will assist in filtering public input back to these organizations and institutions.

How do I recruit engaged public participants?

In the "What Could BG Be?" deliberation we focused on recruiting participants based on our research on what motivates engagement. Take a deeper look into our findings >

The "What Could BG Be?" initiative's success also came from developing a campaign that focused on the local community and meeting people where they are, driven in part by the grassroots efforts of the community of 100+ BG 2050 volunteers. Innovation Engine implemented strategies beyond traditional media, focusing on outreach in local churches and mosques, community spaces, 1:1 conversations, and distributing multilingual marketing materials across the county and surrounding rural areas.

What partners were involved in this large-scale conversation?

While there are many types of partners one could potentially include in such a process, in the case of "What Could BG Be?" in Bowling Green, Jigsaw decided to focus our partnerships to a deliberative tech platform, a local organizer, and a developer shop. Specifically, we partnered with <u>Innovation Engine</u>, <u>The Computational Democracy Project</u> (Polis), and <u>Polygraph</u>.

Deep Dive

Recruiting Engaged Participants

In your messaging and outreach:

- Be transparent about the intended outcomes. From the outset, people need to understand and believe that participating will yield a meaningful and tangible outcome. Crucially, you must deliver on this outcome to motivate future participation.
- Communicate clearly and simply what participants can expect at each stage. People want transparency and insight into how the process will unfold, how decisions will be made, and what role they are expected to play.
- Affirm the value of lived experience and remind people that they are qualified to participate. People need to feel safe and valued to authentically show up and speak up.
- Leverage existing community networks to reach participants most authentically. Lean on your key stakeholders to understand your community deeply, which will help you to tailor your messaging, meet your community where they are, and build trust to encourage interest and participation. People want to understand how the conversation connects them to the wider community.

FAQ Process Continued

How do I measure impact?

Your impact metrics should directly mirror your goals (that you defined in Step 1). For example, if your goal is to inform public policy, you could measure the number of policy proposals from your discussion that were implemented. You can also measure the impact of your deliberation through engagement metrics (number of participants, contributions, etc) or satisfaction metrics (community connection, common ground, etc). You can measure impact in a number of ways, including product/engagement metrics measured by your tech platform, marketing metrics, interviews, or surveys.

In Bowling Green, we conducted a survey after 'What Could BG Be?' with participants and local leaders. We studied a number of dimensions, including: participation and engagement, satisfaction with the process, feelings of self-efficacy, feeling heard, coherence, and social norms.

Is it critical to have policy decision-makers involved?

Strategically engaging policy decision-makers can increase the impact and relevance of online deliberation, and encourage broader buy-in for potential policy shifts.

In the "What Could BG Be?" initiative, Innovation Engine partnered with the county's Judge Executive and formed a coalition of local "listening partners"—influential community members, such as business owners and nonprofit leaders, who committed to reviewing the deliberation findings. This multi-faceted engagement ensured that relevant insights would be considered for incorporation into the strategic plans of various local organizations and the wider community.

How can I protect against bad actors from participating in the deliberation?

Different deliberative platforms approach this in different ways. Please work with your platform partner to identify the best approach.

Where can I find more information about hosting an online deliberation?

For additional insights and expertise around deliberation best practices, check out <u>Democracy R&D</u> or the many case-studies from <u>Participedia</u>.

FAQ Sensemaking Technology

How can AI help understand large-scale online conversations?

AI is well suited to help participants, facilitators, and leaders alike to delve into even the largest conversations and uncover clear, actionable insights. Instead of requiring leaders to spend weeks reading and analyzing vast amounts of data, AI can identify topics and patterns and surface areas of agreement and disagreement, and provide a map for people to navigate though and understand the conversation and ultimately, make informed decisions, all in the matter of minutes.

How does Jigsaw's sensemaking library use AI?

Jigsaw's open source library uses Google AI with a multi-step approach:

- Topic identification: The library iteratively prompts Gemini to identify the topics throughout the conversation and subtopics within those and sort statements into these categories.
- Summarization: For each subtopic, the library prompts Gemini to summarize the themes, using only the statements from that subtopic. These subtopic summaries are then passed back to Gemini to create an overview summary.
- Common ground and areas of disagreement: Within each subtopic, the library identifies statements with high levels of agreement or disagreement based on vote data.

What are the data input requirements for using Jigsaw's sensemaking library?

Jigsaw's sensemaking library is built to intake statements and vote counts (optional) to generate a sensemaking report. Today, the library supports the <u>Polis</u> data format. However, developers can modify the library to support other platform formats to fit varying data needs.

I'm a developer, where can I learn more about the technical requirements and details?

See the technical documentation, code library, and resource guide linked at our website.

Does the sensemaking library only work with Gemini?

The library has been designed in a way that allows developers to swap in different models and platforms using an object-oriented approach. Learn more **here**.



Sensemaking Technology Continued

I am not a technical user, how can
I still leverage this technology in
my online deliberation?

Collaborate with a developer within your organization: If you have access to software engineers, data scientists, or other technical roles within your team or organization, they can explore the <u>open source library</u> and implement it to process the data from your online deliberation platform.

Engage external technical consultants or firms: There are many skilled technical consultants and firms who specialize in integrating software libraries and building custom solutions. You could explore engaging one of these partners to implement the **open source library** for your specific needs.

Use Gemini directly: You can also use Gemini directly, without using Jigsaw's sensemaking library. You can see more details on how we prompt Gemini in our **README** and apply our work and lessons to your own use of Gemini. This may require more manual work on your end, but can provide you the opportunity to adapt the process to meet your conversation's specific needs.

How much does it cost to run the sensemaking library?

LLM pricing is based on token count and changes often. Find the latest information on our <u>GitHub</u> and <u>Cloud Vertex AI</u> pricing website.

What languages does the sensemaking library support?

The sensemaking library is currently built and tested to support the English language. Gemini does support additional languages, and developers can modify it to fit specific language needs.

What are the steps needed to stand up the sensemaking library?

To stand up sensemaking, please consult our <u>Developer Github Library</u> and our <u>Developer Documentation</u>. Generally stated, the steps include:

1) Installing all listed dependencies

- 3) Downloading the Jigsaw sensemaking code library
- 2) Setting up a Google Cloud Project with Vertex AI enabled
- **4)** Pre-processing the data (only if necessary)

Is the sensemaking library customizable?

The library is open source, and can be modified by developers to fit specific needs.