Data, technology, and AI tools for enhanced accountability

How to leverage new technologies in project / complaint assessment



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Agenda

- New Assessment Technologies
 - Satellite mapping
 - Testing (sensors, cameras, etc.)
- Stakeholder Engagement
 - Remote messaging / surveys
 - Information sharing tools
 - Chathots
- Large Language Models (LLMs)
 - Optical Character Recognition
 - Translation / transcription tools
 - Artificial Intelligence

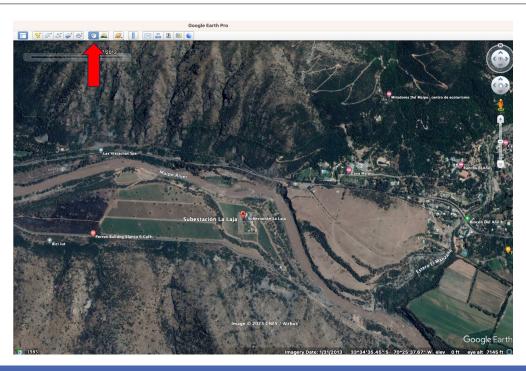
New Assessment Technologies

What can the data tell us?

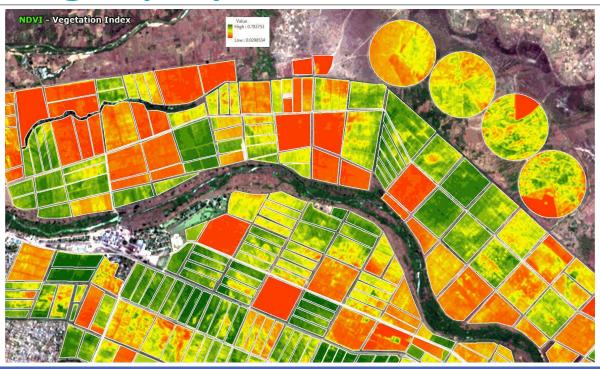
Satellite Mapping - Aerial Imagery



Satellite Mapping - Time Series



Satellite Mapping - Spectrography



Satellite Mapping - Bands

- Multispectral Imaging: Multispectral imaging captures data at specific frequency bands, to identify changes in vegetation, soil and water contamination, and other environmental effects.
- Hyperspectral Imaging: Hyperspectral imaging is capable of distinguishing between different surface materials and is useful for assessing the impact of mining projects.
- **LiDAR (Light Detection and Ranging)**: LiDAR uses lasers to create very precise, three-dimensional information about the shape of the Earth and its surface characteristics. It's often used to *identify landslides or other terrain changes*.
- **Radar Imaging**: Radar imaging can be used to monitor *structural stability over time*, especially for structures like bridges or dams.
- **Thermal Imaging**: Thermal imaging can be used to *detect heat leaks* from transmission lines and other infrastructure. It can also detect *changes in the temperature of the earth's surface*, which can be an indicator of certain types of environmental impact.
- **Satellite Imagery Analysis**: Detect changes in landscapes, such as *deforestation*, *erosion*, *or new construction*. This can be useful in monitoring the progress of development projects and their impact on the surrounding area.

Satellite Mapping - Sources

- Google Earth Engine
- <u>EarthExplorer</u> Govt Space Agencies
- <u>EOS Data Analytics</u> Private Firm (with Free Tier)
- <u>Maxar Securewatch</u> Gold Standard (but expensive)

Satellite Mapping Considerations

- Cost
- Complexity
- Temporal resolution
- Causality (particularly in spectrography)
- Absence of evidence is not evidence of absence

Sensors / Testing

- Can take many forms: visual, air, water, noise, etc.
- Verify complainant claims
- Quantify subjective concerns
- Establish baselines
- Monitor commitments



Sensors / Testing







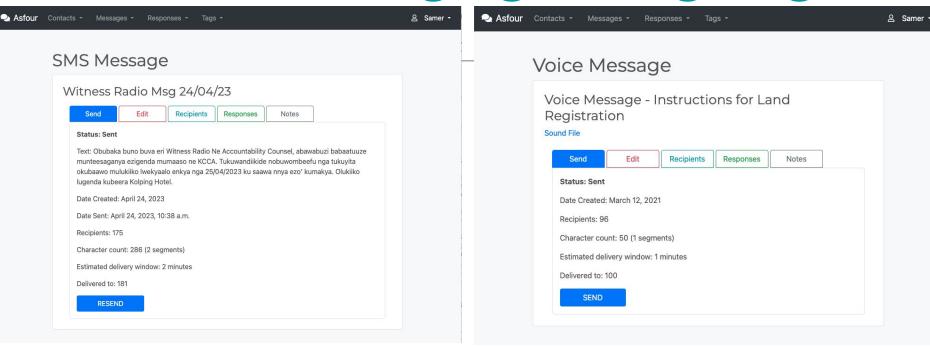
Sensor Considerations

- Usability / comprehension
- Triangulation
- Data retrieval
- Batteries / durability
- False readings
- Absence of evidence is not evidence of absence

Stakeholder Engagement

What can the people tell us?

Remote Messaging - Outgoing



Remote Messaging - Incoming

June 30, 2022, 4 р.m.: Та 6-ны өдрийн 9 цагаас болох уулзалтад Зүмээр холбогдож оролцох сонирхолтой бол өөрийн мэйл хаягийг энэ хаяг руу илгээнэ үү megumi@accountabilitycounsel.org. Та утсаар холбогдох бол ямар зүйл хийх хэрэггүй бид шууд утас руу тань залгах боломжтой.

June 30, 2022, 3:59 р.m.: 7-р сарын 6-ны Лхагва гаригийн өглөө 9 цагаас зөвлөхүүдтэй уулзалт хийхээр урьж байна. Цахим уулзалтад Оюу Толгойн Хяналт ТББ, Аккаунтабилити каунсел болон Гоюийг газар шорооны төлөөлөл оролцоно. Энэ уулзалт нь зөвлөхүүдийн эрх уурэг болон хэрхэн хамтран ажиллаж болох талаар асууж ярилцах боломж юм.

June 30, 2022, 3:58 р.m.: Сайн байна уу, өнгөрсөн жилүүдэд Малчдын төлөөлөлтэй ажиллаж ирсэн Аккаунтабилити кауселийн зөвлөхүүдийн нэг Мегуми Цуцуй байна.

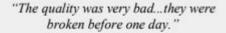
Магсh 8, 2022, 6:50 р.т.: Малчидтай зөвлөлдөх уулзалтын талаар шинэчилсэн мэдээ Баг тус бүрийн малчидтай салангид хийх уулзалтыг нэгтгэн 3 сарын 10-ны өдөр 11.00 цагаас Соёлын төвд хамтарсан уулзалт хийхээр боллоо. Бүх малчдыг уг уулзалтанд хүрэлцэн ирэхийг урьж байна. Энэ уулзалтын үеэр малчдын зөвлөхүүд Малчдын Төлөөлөгчдийу сонгууль, хамтын нөхөн олговрын төслүүдийн талаар малчдын санал бодлыг сонсох болно. Асууж лавлах зүйл, санал хусэлт байвал 99185828 утсаар холбогдоно уу.

March 3, 2022, 4:24 р.m.: Та 3-р сарын 10-нд болох зөвлөлдөх уулзалтад оролцох боломжгүй ч зөвлөлдөөнд хамрагдахыг хүсвэл +976 99 185828 дугаарын утсаар холбогдоно уу. 3-р сарын 10-ны өдөр болох үндсэн зөвлөлдөөнд оролцох боломжгүй малчидтай бусад өдрүүдэд очиж уулзахыг бид ихэд хичээх болно.

Магсh 3, 2022, 4:24 р.m.: Малчдыг дараах цаг, байршилд тус тусын багийнхаа өмнөөс зөвлөлдөөнд ирж оролцохыг урьж байна. Гавилууд багийн малчид: 3-р сарын 10-ны 11 цагаас Соёлын төвд Номгон багийн малчид: 3-р сарын 10-ны 11 цагаас 2-р сургуулийн урлагийн танхимд Жавхлант багийн малчид: 3-р сарын 10-ны 14 цагаас 2-р сургуулийн урлагийн танхимд

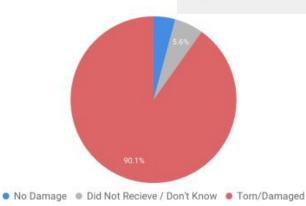
March 3, 2022, 4:23 р.m.: Малчдын зөвлөхүүд 3-р сарын 8 -11-ний өдрүүдэд малчидтай зөвлөлдөөн хийж, МТБ-ийн сонгуулийн талаар тэдний санал хүсэлтийг цуглуулан, хамтын нөхөн олговрзу төслүүдийн хэрэгжилтийн байдлыг хэлэлцэх болно. Гол зөвлөлдөх уулзалтууд гуравдугаар сарын 10-ны Лхагва гаригт явагдана.

Remote Messaging - Case Study



"Both bags ripped by the time we got home."

"They didn't last eight days. Once we put books in them, they ripped."



Findings

Of the 19 in-person interviews completed, 17 said that both backpacks they received had been torn. One interviewee had missed the delivery of the school kits, and asked if he could still get them. One was unsure whether their family had received the school kits or not.

For the automated phone surveys, of the 100 people dialed, 54 answered the phone, of which 41 individuals responded to the prompts. Of the 41 respondents, 36 answered that their backpacks were broken or torn, 3 answered that they were not broken, and 2 said that they did not receive any school kits.

12 additional people were called directly by the *komite* to ensure that the survey reached enough people, of whom 11 people answered. All 11 respondents claimed that both of their backpacks were broken. Several respondents also noted the low quality of the bags. One remarked that his children had been bullied at school as a result.

In all, of the 71 people surveyed, 3 respondents stated that their backpacks were not damaged.³ An additional 4 individuals stated that they did not receive a school kit, or that they were unsure whether their head of household received a school kit. The remaining 64 individuals (90% of all respondents and 95% of yes/no respondents) claimed that their backpacks were damaged or ripped.

Table 1: Count of Responses

Response	Interview	Phone Survey	Phone Call	Total
Undamaged	0	3	0	3
Damaged/Torn	17	36	11	64
Didn't Receive / Don't Know	2	2	0	4
Total	19	41	11	71

Messaging Considerations

- Cultural / social comprehension
- Cost
- Compliance / security
- Absence of engagement is not evidence of disengagement
- Not a substitute for on-the-ground engagement

Chatbots / AI helpdesk

- SA
- ¿Cuál es la dirección de correo electrónico que debo utilizar para enviar una denuncia al MICI?
- SA

¿Cuántos meses pasarán antes de obtener resultados?



La dirección de correo electrónico que debes utilizar para enviar una denuncia al Mecanismo Independiente de Consulta e Investigación (MICI) del Grupo del Banco Interamericano de Desarrollo (IDB) es:

mecanismo@iadb.org1.



Me gustaría presentar una queja, pero el proyecto se terminó hace 4 años. ¿Estoy demasiado tarde?



De acuerdo con las políticas del Mecanismo Independiente de Consulta e Investigación (MICI) del Grupo del Banco Interamericano de Desarrollo (IDB), si han pasado más de 24 meses desde el último desembolso del Banco, la denuncia puede no ser elegible ¹. Si el proyecto se terminó hace 4 años, parece que podrías estar fuera del período de tiempo establecido para presentar una denuncia.

Sin embargo, te recomendaría que te pongas en contacto directamente con MICI para discutir tu situación específica. Pueden ser capaces de proporcionarte más orientación o sugerirte otros canales o recursos que podrían ser útiles en tu caso.



⟨ Finished browsing
 ✓



Una vez que se ha presentado una queja al Mecanismo Independiente de Consulta e Investigación (MICI). el proceso consta de cuatro etapas:

- 1. Registro: Esta etapa consiste en el registro (admisión para el procesamiento) o no registro de la queja. Dura 5 días laborables. Una vez recibida la solicitud, el MICI acusa recibo en uno o dos días y se pone en contacto directo con los denunciantes. En un máximo de cinco días laborables, el MICI revisa si la queja cumple con todos los requisitos formales y no está sujeta a ninguna de las exclusiones 1.
- Elegibilidad: Esta etapa evalúa en detalle si la queja es admisible para un proceso del MICI. La duración puede ser de hasta 42 días laborables. El equipo del MICI analiza los temas presentados en la solicitud con más detalle y verifica si cumple con los criterios de elegibilidad¹.
- 3. Fase de Consulta: El objetivo es resolver los problemas planteados por los denunciantes a través de un acuerdo satisfactorio entre las partes: los denunciantes, el equipo del proyecto y los responsables de la implementación del proyecto. La duración puede ser de hasta 12 meses (para llegar a acuerdos) y de hasta 5 años (para el monitoreo) 1.
- 4. Fase de Revisión de Cumplimiento: El objetivo de esta fase es investigar de manera imparcial y objetiva las alegaciones de daño y posible incumplimiento de las políticas y normas ambientales y sociales del Grupo BID. La duración puede ser de hasta 12 meses (para la investigación) y de hasta 5 años (para el monitoreo) 1.

Por lo tanto, el tiempo total que tomará obtener los resultados después de presentar una queja puede variar bastante, dependiendo de la etapa en la que se encuentre la queja y de la complejidad de la misma. Podría ser tan corto como una semana si la queja no se registra,

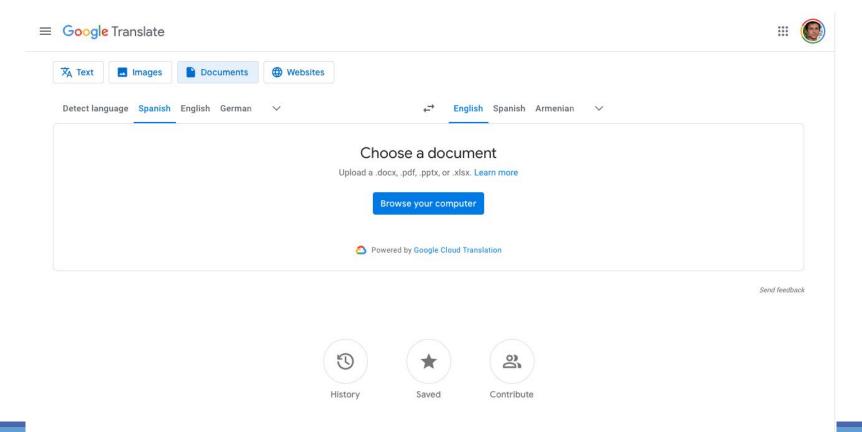
ChatBot Considerations



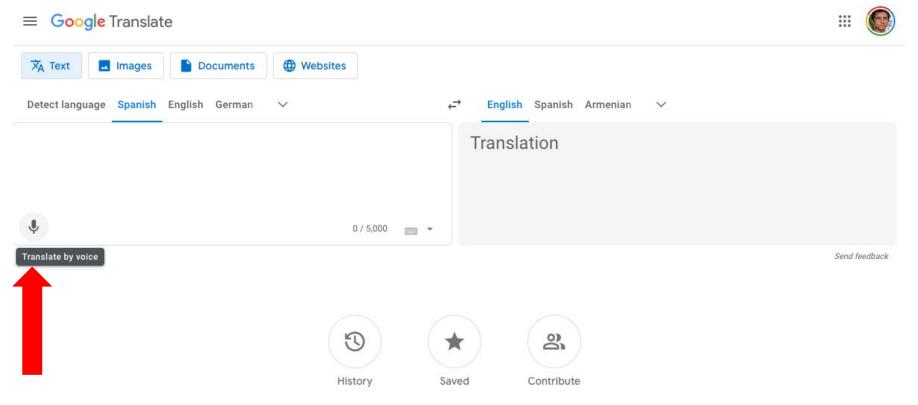
Productivity / Efficacy

What can we do more efficiently / transparently?

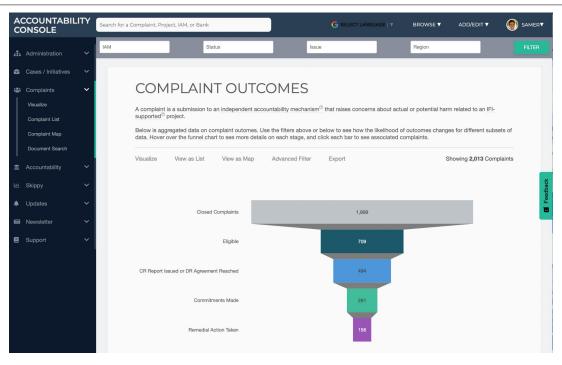
Auto-Translation



Auto-Interpretation



Accountability Console

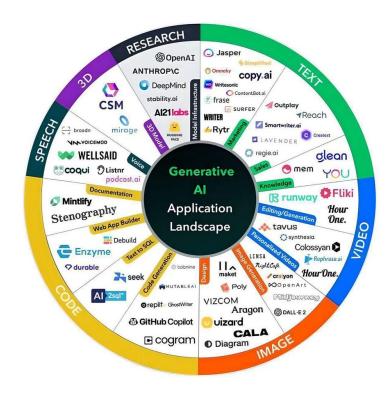


Accountability Console

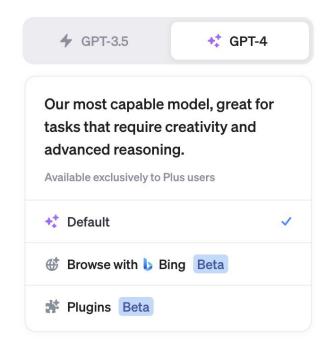


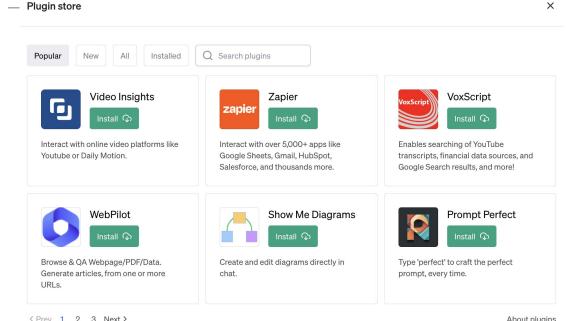
GPT-4 and ChatGPT

- Identify the right questions to ask
- Find authoritative sources
- Parse large information sets
- Train a model with your own data
- Create a work plan
- Book your travel



ChatGPT - Advanced





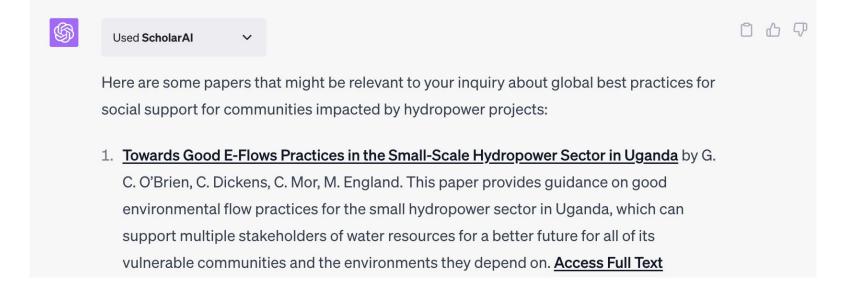
ChatGPT PLUS

About plugins

ChatGPT - ScholarAI



What are global best practices for social support for communities impacted by hydropower projects?



ChatGPT - ScholarAI...

- 2. Equator to Pole: Using Science Diplomacy to Incorporate Best Practices from Latin America and the Caribbean for Sustainable Cruise Tourism in the Polar Regions by J. Campisi, A. Watson, Julianne Yip. Although this paper focuses on cruise tourism, it outlines how science diplomacy can help develop collaborative policies to manage the risks and opportunities of tourism expansion in the polar regions, which might be relevant to managing social impacts of hydropower projects. Access Full Text
- 3. Connecting the Dots: Joint development of best practices between infrastructures in support of bidirectional data linking by W. Addink, Niki Kyriakopoulou. This paper discusses the development of best practices for the generation, management, and curation of linked data, which could be applicable to managing data related to social impacts of hydropower projects. Access Full Text

AI Considerations

Al is not a catalyst. It's an accelerant.



Let's continue the conversation!

Message me your questions or comments in the IAIA25 app.

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