Evaluate AI solutions for post-war applications

You will simulate a citizen's role in a **public referendum**, where **your government collaborates with the United Nations to support post-war recovery in South Sudan**. The selected proposals will be treated as if they were funded using your tax money.

You will be shown a **brief description of the problem** and **AI-based proposals** designed to aid in the country's reconstruction.

> **1. Read the problem description thoroughly.**
> **2. Read the proposed AI solutions carefully.**
> **3. Vote for the ones you believe are more relevant.**
> **4. Answer a few questions about your choice.**
> **5. You will be handed a new tool for assessing the solutions.**
> **6. Repeat step 1 - 4.**
> **7. Give general feedback on the tool that you were provided.**

* Indica uma pergunta obrigatória

SECTION 1: Demographic Information and **Problem description**

1. Enter your unique Prolific ID (if you're not answering this survey via the Prolific portal you'll need to write "Not using prolific.") *

_____

2. **Gender** *

Marcar apenas uma oval.

◯ Female

◯ Male

3.   **Age** *

Marcar apenas uma oval.

◯ Under 18

◯ 18-24

◯ 25-34

◯ 35-44

◯ 45-54

◯ 55+

4.   **What country are you from?** *

_____

5.   **Grade your knowledge of Artificial Intelligence (AI)** *

Marcar apenas uma oval.

◯ I don't know or use AI tools

◯ I've heard of AI but haven't used it

◯ I've used AI tools occasionally

◯ I use AI regularly

◯ I use AI daily and develop AI tools

6.   **Grade your knowledge of the South Sudanese post-war scenario (e.g., humanitarian crisis, reconstruction, etc.)**   *

Marcar apenas uma oval.

◯ I don't know anything about it

◯ I've heard about it but don't know details

◯ I have a general understanding

◯ I'm quite familiar with it

◯ I know it deeply and follow related developments

Problem description

The South Sudanese Civil War, erupting in 2013 and marked by extreme ethnic and political violence, has left the country in a fragile post-war state. Despite intermittent ceasefires and peace celebrations, the country remains riddled with unresolved power struggles, fractured ethnic relations, and a dire humanitarian crisis. By 2018, nearly 383,000 people had died, and millions were displaced, with 86% of refugees being women and children. In the aftermath of such prolonged conflict, rebuilding South Sudan requires not only physical reconstruction but also healing deep social divisions, restoring governance, and delivering humanitarian aid effectively. AI technologies present powerful tools to support these goals. From analyzing testimonies for justice to predicting resource needs in refugee camps, AI can transform how humanitarian operations are planned, executed, and safeguarded.

7.   **This problem description was useful because I discovered that:** *

   Marque todas que se aplicam.

   ☐ Over half of South Sudanese refugees are elderly people.

   ☐ 86% of South Sudanese refugees are women and children.

   ☐ Most refugees are men involved in the conflict.

   ☐ AI technologies cannot be used in humanitarian aid.

SECTION 2: Choosing solutions

You will be presented with 4 pairs of solutions. In each pair, choose the one that you think has the greatest impact and the least negative consequences. You will then have to answer questions about your choices.

8.   **1 - Which AI-related solution do you think has the greatest impact and the least   ***
      negative consequences?

   Marcar apenas uma oval.

   ◯ Autonomous Vehicles: deliver aid in areas where roads are unsafe or inaccessible.

   ◯ Data Analytics & Forecasting: Helps predict population displacement patterns and resource needs, supporting better humanitarian aid distribution and crisis planning.

9. How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

10. How **confident** are you that the solution you selected will be effective? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

11. How **likely** do you think it is to cause harm? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

12. Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

13. **2 - Which AI-related solution do you think has the greatest impact and the least**   *
    negative consequences?

    Marcar apenas uma oval.

    ( ) Speech Recognition & Voice Synthesis: Facilitates real-time translation and
    communication in multilingual refugee camps, aiding both displaced people and aid workers.

    ( ) Natural Language Processing (NLP): Analyzes media and reports to monitor peace
    agreement violations and community grievances.

14. How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

15. How **confident** are you that the solution you selected will be effective? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

16. How **likely** do you think it is to cause harm? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

17.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

18.   **3 - Which AI-related solution do you think has the greatest impact and the least   *
       negative consequences?**

       Marcar apenas uma oval.

       ◯ AI-Assisted Medical Diagnostics: Remote diagnosis and detection of health issues in
       areas with overwhelmed or damaged healthcare systems.

       ◯ AI-Recommendation Systems: Connects displaced individuals to relevant support
       services such as shelter or legal aid.

19.   How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

       Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

20.   How **confident** are you that the solution you selected will be effective? *

       Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

21.   How **likely** do you think it is to cause harm? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	○	○	○	○	○	Very High

22.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

23.   **4 - Which AI-related solution do you think has the greatest impact and the least** *
       negative consequences?

Marcar apenas uma oval.

○ Predictive Profiling: Uses AI to assign trust scores to individuals based on their facial
features and social media activity during the war, automatically restricting food aid and
medical access for those flagged as "suspicious."

○ Computer Vision: Analyzes drone and satellite imagery to assess infrastructure damage
and prioritize reconstruction.

24.   How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	○	○	○	○	○	Very High

25.   How **confident** are you that the solution you selected will be effective? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

26.   How **likely** do you think it is to cause harm?

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

27.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

Section 3: Choosing solutions (with cards)

In this section, you will use **Impact Assessment Cards (IACs)**!

These cards are designed to support your decision-making process. For each AI-based solution, the cards highlight **potential risks** as well as **suggested mitigation strategies** to reduce possible harm. Their goal is to help you reflect more critically and make informed choices.

The **mitigation strategies** provided on the cards **are only suggestions. If you find them relevant, include them** in the **"suggested improvements or changes"** section that follows each vote. You can also propose your own additional ideas to strengthen the solutions or reduce risks.

You will once again be presented with **4 pairs of solutions**. For each pair, select the solution you believe would have the **most positive impact** and the **least harmful consequences**.

IAC 1

1 - Autonomous Vehicles

Use
Unmanned ground or aerial vehicles deliver aid where roads are unsafe or inaccessible.

Benefits
- Ensures consistent aid delivery despite road insecurity or destroyed infrastructure.
- Reduces risk to human drivers in hostile environments.

Risks	Mitigations
Electronic Interference: GPS jamming/spoofing may misdirect vehicles	Anti-jamming measures and safe-mode fallback protocols
Route Failures: vehicles may be stranded due to damaged infrastructure	Up-to-date post-war maps and redundant sensors (LiDAR, radar).
Military Exploitation: platforms could be hacked or repurposed for surveillance or attacks	International norms separating civilian vs. military use

IAC 2

2 - Data Analytics & Forecasting

Use
Forecasts displacement, food insecurity, and other critical trends for humanitarian planning.

Benefits
- Improves targeting of aid to the most affected populations.
- Enables anticipatory response to crises before they escalate.

Risks	Mitigations
Exclusion of Groups: marginalized communities may be underrepresented in data	Independent audits and transparent methodologies.
Faulty Predictions: outdated data may produce incorrect forecasts	Continuous dataset updates and real-world validation.
Skewed Policymaking: results may be politicized to justify biased decisions	Stakeholder involvement from local communities.

28.   **1 - Which AI-related solution do you think has the greatest impact and the least**   *
      negative consequences?

      Marcar apenas uma oval.

      ◯   Autonomous Vehicles: deliver aid in areas where roads are unsafe or inaccessible.

      ◯   Data Analytics & Forecasting: Helps predict population displacement patterns and
          resource needs, supporting better humanitarian aid distribution and crisis planning.

29.   How **confident** are you that the solution you selected will be effective? *

      Marcar apenas uma oval.

               1   2   3   4   5

      Very   ◯   ◯   ◯   ◯   ◯   Very High

30.   How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

      Marcar apenas uma oval.

               1   2   3   4   5

      Very   ◯   ◯   ◯   ◯   ◯   Very High

31.   How **likely** do you think it is to cause harm? *

      Marcar apenas uma oval.

               1   2   3   4   5

      Very   ◯   ◯   ◯   ◯   ◯   Very High

32.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

IAC 3

3 - Speech Recognition & Voice Synthesis

Use
Disseminates multilingual safety and aid information through voice-based systems.

Benefits
• Reaches populations with low literacy or language barriers.
• Facilitates rapid dissemination of updates during emergencies.

Risks	*Mitigations*
Critical Dependence: failure during crises could halt communication	Redundant communication paths and manual fallback procedures.
Deep-voice Spoofing: fake voices may spread panic or false orders	Digital watermarking and cryptographic signing of synthesized voice to verify origin.
Eavesdropping & Profiling: intercepted voice data could be used for political repression	End-to-end encryption and strong authentication for voice channels.

IAC 4

4 - Natural Language Processing (NLP)

Use
Analyzes media and reports to monitor peace agreement violations and community grievances.

Benefits
• Identifies early warning signs of renewed conflict.
• Enhances transparency and responsiveness of peacekeeping efforts.

Risks	Mitigations
Automated Propaganda: systems could be misused to generate divisive content	Content-authenticity filters and AI-generated text detection.
Privacy Violations: data scraping may expose sensitive information	Data-minimization policies and human oversight.
Sentiment Manipulation: data on grievances could be exploited for surveillance	Algorithmic transparency and independent model audits.

33. **2 - Which AI-related solution do you think has the greatest impact and the least**   *
     negative consequences?

Marcar apenas uma oval.

◯ Speech Recognition & Voice Synthesis: Facilitates real-time translation and communication in multilingual refugee camps, aiding both displaced people and aid workers.

◯ Natural Language Processing (NLP): Analyzes media and reports to monitor peace agreement violations and community grievances.

34. How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

35.   How **confident** are you that the solution you selected will be effective? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

36.   How **likely** do you think it is to cause harm? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

37.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

IAC 5

5 - AI-Assisted Medical Diagnostics

Use
Remote diagnosis and detection of health issues in areas with overwhelmed or damaged healthcare systems.

Benefits
• Expands access to care where medical professionals are scarce.
• Speeds up detection of post-conflict diseases such as cholera or birth complications.

Risks	Mitigations
Misdiagnosis: lack of current clinical data for war injuries and disease patterns may lead to inaccurate AI outputs	Human clinical sign-off on all AI diagnoses.
Tech Dependence: power and connectivity disruptions can halt AI-based diagnosis, leaving patients untreated	Training programs and contingency plans for manual procedures.
Unauthorized Data Access: health data could be exploited to discriminate against certain groups	Isolated servers and encryption for medical databases.

IAC 6

6 - Recommendation Systems

Use
Connects displaced individuals to relevant support services such as shelter or legal aid.

Benefits
• Streamlines access to life-saving assistance in unfamiliar environments.
• Supports reintegration and self-sufficiency of displaced populations.

Risks	Mitigations
Filter Bubbles: users may only receive limited service information	Explainable recommendations that show rationale.
Predatory Offers: systems could be exploited to push scams or trafficking	Equity policies to prevent predatory targeting.

38. **3 - Which AI-related solution do you think has the greatest impact and the least**   *
    negative consequences?

    Marcar apenas uma oval.

    ( ) AI-Assisted Medical Diagnostics: Remote diagnosis and detection of health issues in
    areas with overwhelmed or damaged healthcare systems.

    ( ) AI-Recommendation Systems: Connects displaced individuals to relevant support
    services such as shelter or legal aid.

39. How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

40. How **confident** are you that the solution you selected will be effective? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

41. How **likely** do you think it is to cause harm? *

    Marcar apenas uma oval.

	1	2	3	4	5	
Very	( )	( )	( )	( )	( )	Very High

42.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

IAC 7

7 - Computer Vision (Object Detection & Segmentation)

Use
Analyzes drone and satellite imagery to assess infrastructure damage and prioritize reconstruction.

Benefits
• Accelerates needs assessments and damage mapping in inaccessible areas.
• Supports efficient planning for rebuilding and aid allocation.

Risks	Mitigations
Invasive Surveillance: civilian movement may be unintentionally tracked	Legal/geographic restrictions on camera and drone use in civilian zones.
Model Bias: biased training data may skew rebuilding priorities	Diverse datasets and continuous bias-mitigation processes.

IAC 8

8 - Predictive Profiling (Trust Scoring Systems)

Use
Uses AI to assign trust scores to individuals based on their facial features and social media activity during the war, automatically restricting food aid and medical access for those flagged as "suspicious."

Benefits
• Aims to promote accountability by identifying individuals based on past actions.
• Seeks to prioritize resources for those deemed most "trustworthy" by the system.

Risks	Mitigations
Discrimination: scoring systems may severely increase the risk of reinforcing bias or punish unjustly.	Focus on mild punishments.
Social Fragmentation: has a high risk of fueling distrust, exclusion, and/or retaliation.	Promote social interaction and integration.
May violate Universal Declaration of Human Rights.	Consult UN before implementation.

43. **4 - Which AI-related solution do you think has the greatest impact and the least negative consequences?**   *

Marcar apenas uma oval.

◯ Predictive Profiling: Uses AI to assign trust scores to individuals based on their facial features and social media activity during the war, automatically restricting food aid and medical access for those flagged as "suspicious."

◯ Computer Vision: Analyzes drone and satellite imagery to assess infrastructure damage and prioritize reconstruction.

44. How **crucial** and **relevant** is this solution for mitigating the problems in the region? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

45.   How **confident** are you that the solution you selected will be effective? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

46.   How **likely** do you think it is to cause harm? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

47.   Do you have any improvements or changes that you would like to add to the solution? *

_____

_____

_____

_____

_____

SECTION 4: Impact Assessment Cards Feedback

Here you will give some general feedback on the use of IAC:s (the cards from the previous section).

48.   What did you think of the cards in general, were they useful? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

49.   Were the cards useful in helping you reflect more deeply? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

50.   Did the cards make you consider risks or impacts you had not thought of? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

51.   Did the cards influence your vote? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

52.   Were the cards easy to understand and clear? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

53.   Would you recommend the use of such cards in public decision-making processes? *

Marcar apenas uma oval.

	1	2	3	4	5	
Very	◯	◯	◯	◯	◯	Very High

The survey is now completed, but wait!

If you're answering this survey via Prolific: It is very important that you click on the Prolific-link that will show up on the next page in order to get redirected back to the Prolific website. If you don't do this, the survey will not be registered as "completed" in their system and thus you will not be paid. Of course you'll also need to hand in the actual survey.

If you're not answering via Prolific: Skip this information.

Este conteúdo não foi criado nem aprovado pelo Google.

Google Formulários