

## WFP's approach to building an Artificial Intelligence evidence mining tool

# Vision & Objectives

Enable quick extraction and utilization of existing evaluation evidence, and generate insights in response to growing organizational needs for succinct products



Facilitate the thematic search from existing evidence



Increased opportunities to inform programme and policy decision-making, and usability of knowledge generated by evaluations



A scalable and lasting approach that could replicated beyond its application in evaluation



Accelerate the information retrieval, pattern identification and dissemination of information

# 3 Project Phases

## Phase 1 – Document pre-processing and evidence retrieval (on-going)

- **Key deliverables:**
  - Architecture document
  - Automated classification of evaluation documents
  - Semantic search solution
  - Documentation of test and performance
  - Training and documentation for users
- **By end of 2024 solution available to be deployed**

## Phase 2 - Identification of patterns and summarization Generative A.I. (Jan - Jun 2025)

- Exploration of **generative A.I.**
- Identification of **patterns & summarization**
- Connection to Application Programming Interface to make the **solution accessible to other systems**

## Phase 3 - Recommender system (Jul - Dec 2025)

- Integration of recommender system to **facilitate tailored dissemination**
- Provision of the right information, to the right users at the right time and according to user preference

# What have we done so far



**Consultation with UN agencies, international entities and WFP divisions (Technology, Innovations, Programme & Policy)** to map systems, identify opportunities for synergies and ensure alignment to existing standards



Gained the **endorsement of WFP's Technology Division Demand Assessment Board**



**Advised by a Senior Digital Transformation and A.I. expert on technical aspects**

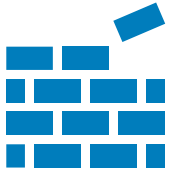


**Demo testing and rating of 'off the shelves' AI solutions**



**Definition of solution features:** document pre-processing; semantic search; automatic classification of docs; machine-learning operations model for identification of issues; future proofing for scale up.

# Where we are now



## Data Scientist supporting back-end of solution development

- ✓ Parsing and chunking



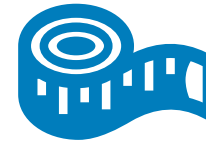
## Development of testing criteria

- ✓ Development of testing criteria to assess accuracy, relevance, speed and retrieval



## Testing of different models, through corporate sandbox environment

- ✓ Google Cloud Platform (GCP)
- ✓ Palantir Artificial Intelligence Platform (AIP)



## KPIs

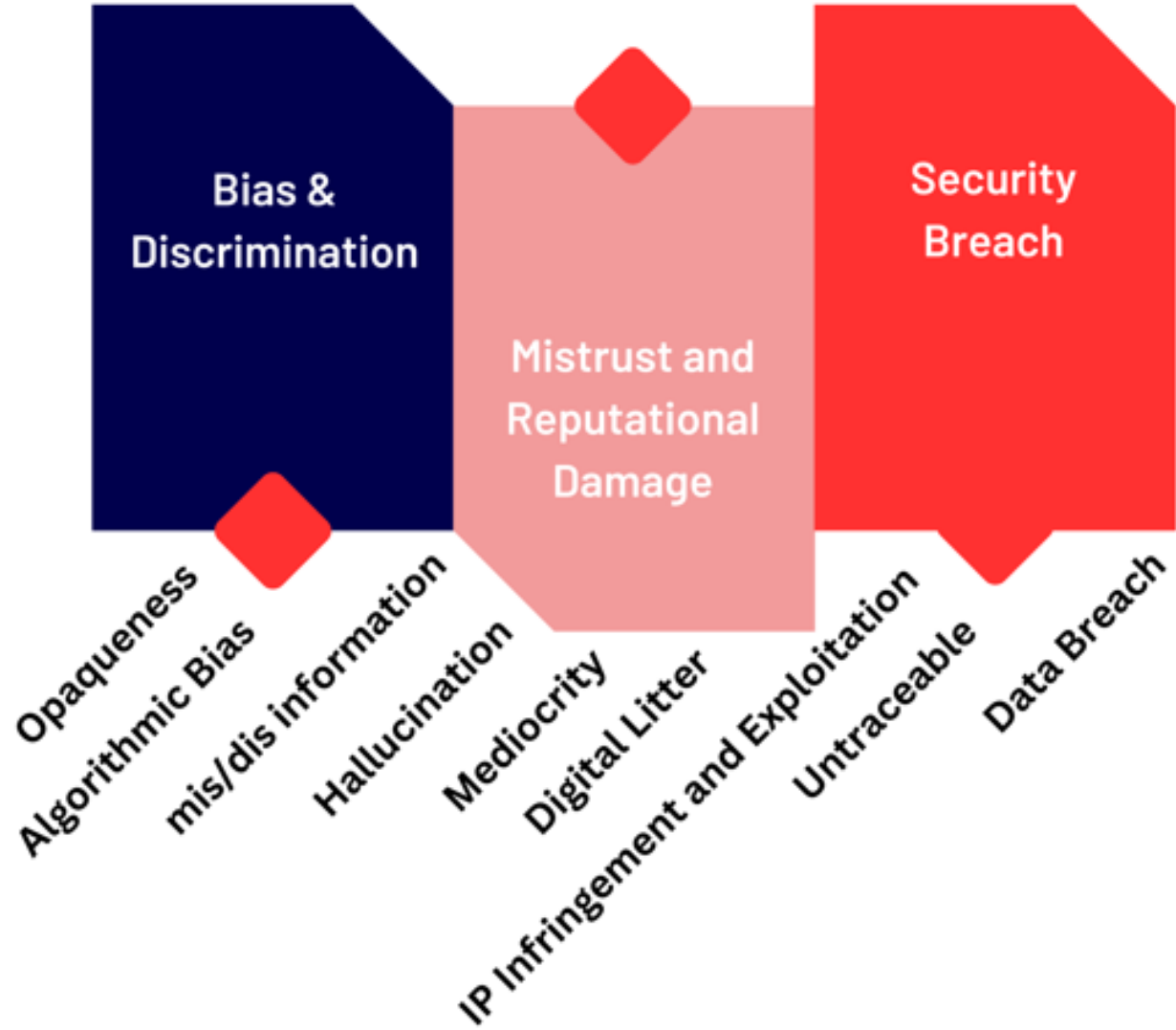
- ✓ Development of metrics to measure gains of AI Solution

# Limitations of readymade off-the-shelf solutions

**Most large language models (LLMs) behind Google’s “Gemini” or Open AI’s “GPT reflect ‘readings’ of the world that**

- Require substantial ‘fine-tuning’ to match our international development lingo (e.g. ‘Social protection’)
- Are biased towards the audiences of these searches over the period it has existed, i.e. channel ‘Western’ perspectives
- May imply undue costs compared to the need

# Risks of AI



IRRC No. 913 March 2021

## Biases in machine learning models and big data analytics: The international criminal and humanitarian law implications

68 min read | Nema Milutinovic

Insight - Amazon scraps secret AI recruiting tool that showed bias against women

By Jeffrey Devlin

October 10, 2016 9:50 PM EDT | Updated 6 years ago

## Google shows far more ads for high-paying jobs to men than women. Is the algorithm sexist – or is it us?

Researchers found that Google showed ads for high-paying executive jobs 1,852 times to a group of male job seekers – but just 518 times to the female group

Washington Post

Published Jul 07, 2015 • 5 minutes read

MIT Technology Review

## Police across the US are training crime-predicting AIs on falsified data

A new report shows how supposedly objective systems can perpetuate corrupt policing practices

By Karen Hao

February 13, 2019

NYC's AI chatbot was caught telling businesses to break the law. The city isn't taking it down



Sorry Netflix, a true crime documentary is not the place for AI imagery

By Joe Foley published 18 April 2024

(Even if it's not quite what people think).

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