TRILATERAL RESEARCH®
Ethical AI

CESIUM: Safeguarding Children from Exploitation with Ethical AI

www.trilateralresearch.com

The challenge

- Constant firefighting
- Manual and Subjective reporting process
- 16,000 children are at risk of being sexually exploited in England every year
- At least 27,000 are at risk of being exploited by organised crime.
- Poor risk assessment was flagged in 41% of serious incidents review in 2018/19

1 in 6 girls and 1 in 20 boys experience CSA before the age of 16

No consistent strategy, leadership and focus on tackling criminal exploitation

Early intervention is essential

A decade of funding cuts in early intervention services

Lack of data on exploitation makes it difficult to identify, prevent and respond to exploitation

CCE is a factor in 14,420 child social care assessments. An increase of 42% from 2022 - 2023

Overall cost of contact CSA
at least **£10 billion**

- Victims of criminal and sexual exploitation is incalculable
- Long-lasting adverse effects
- Enormous psychological, ethical, societal, and economic costs
- Children may pay with their own lives
- Depression & post-traumatic stress
- Mental health and wellbeing

Our response

WHO WE ARE

Ethical AI company
based in UK/IE
Est. 2004

AI SaaS Solutions
Law enforcement
Government
Local Authorities
Private & Third Sector

Services
Data protection
Cybersecurity
Responsible AI
Innovation & Research

Ministry of Defence
University of Cambridge
The Alan Turing Institute
Department for Business Innovation & Skills
Sláinte Leanaí Éireann ag Sráid an Teampaill
Children's Health Ireland at Temple Street
GMCA Greater Manchester Combined Authority
Lincolnshire Police
West Yorkshire Police
Home Office
Bord Bia Irish Food Board
European Central Bank Eurosystem
ico. Information Commissioner's Office
UNHCR The UN Refugee Agency
NATO OTAN
V&A
World Health Organization
EBA European Banking Authority
dstl The Science Inside
enisa European Union Agency for Cybersecurity
An Roinn Leanaí agus Gnóthaí Óige Department of Children and Youth Affairs

Our design approach

We take a sociotechnical approach to responsible AI. The design of our AI takes into consideration **technical & social factors. Underpinned by rigorous approach to research.**

Designers who care - include:

- Social scientists & legal experts
- Ethicists, data protection & human rights experts
- Data Scientists
- Data Engineers
- Software & Dev/Ops Engineers
- UI/UX Designers

Our approach builds **trust** in the use and adoption of AI, and **confidence** in the insights and interventions that can be derived.

TRILATERAL RESEARCH®
Ethical AI

"How do you develop AI systems that are aligned to human values, including morality?..This is why I think the development of this needs to include not just engineers, but social scientists, ethicists, philosophers, and so on". Sundar Pichai, Google CEO, April 2023

Research Context

- Trilateral Research has 15+ years of research experience
- CESIUM emerged from research projects on child safeguarding

- In the EU-funded HEROES project, Trilateral Research supports the co-design of legally compliant, ethical, and socially acceptable technologies for assisting in the reporting and investigation of child sexual abuse/exploitation crimes
- Research outputs, incl. evidence-driven user needs, AI auditing and child-centered impact assessment methodologies continuously enhance our products, such as CESIUM

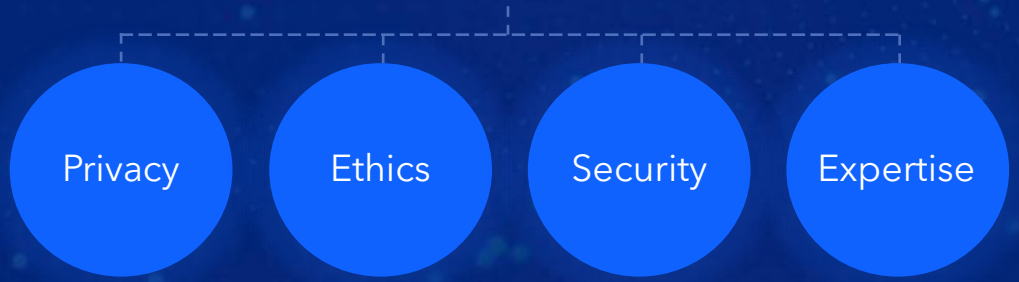
This project has received funding from the European Union's Horizon 2020 research and innovation programmed under grant agreement No. 101021801

Building Responsible AI

TRILATERAL RESEARCH
Ethical AI

Our Ethical AI solutions are built from the ground up with strong **ethics-** and **privacy by-design**. We focus on transparency, explainability, accountability, non-discrimination, and enhancing human decision-making.

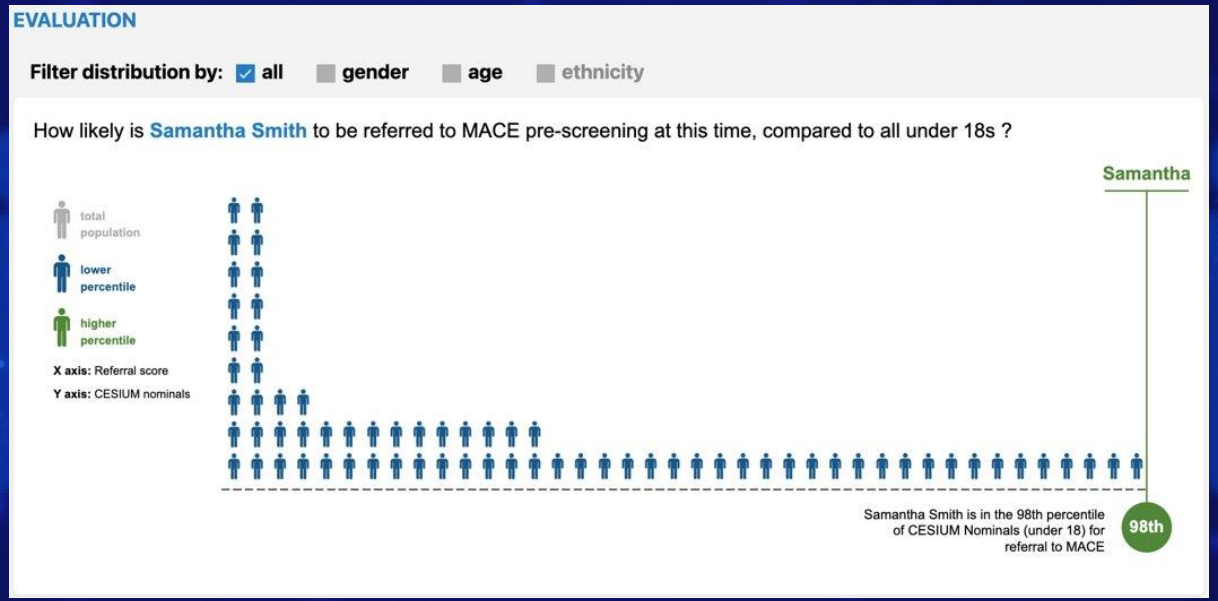
Pillars of responsible AI



CESIUM

- Co-designed with Lincs Police’s Safeguarding Team
- Designed with and for safeguarding professionals
- Highlights risk based on all available information
- Transparent & Explainable AI
- Enhance, not replace, professional judgement
- Managing demand in a dynamic risk environment:
- **Proactively** focus on safeguarding the most vulnerable.

Solutions: Pro-active prioritisation of vulnerability



Solutions: Increased efficiencies

TRILATERAL RESEARCH
Ethical AI

400%

increased capacity

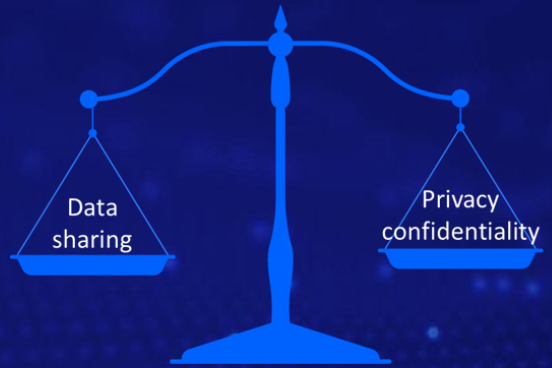
Less time sharing and compiling data, means more time to spend on analysis and safeguarding children.

Data Sharing

- Government guidance and legislation enable the responsible sharing of safeguarding data for collaborative working in a partnership.

- Information Sharing Agreements (ISA's)

- Data Protection Impact Assessments (DPIA's)



TRILATERAL RESEARCH
Ethical AI

CESIUM Benefits

- Early identification of the most vulnerable by 6+ months
- Near real time access to safeguarding partnership data
- Explainable AI to enhance, not replace, professional judgement
- Secure cloud
- Daily risk updates for proactive safeguarding
- Operational capacity uplift
- Dynamic, data driven risk assessments

TRILATERAL RESEARCH®
Ethical AI

Thank you.

www.trilateralresearch.com