TUM THINK TANK

www.ethicaldatainitiative.org

Accessible & Open Educational Resources in Data Ethics

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The

Data

Ethical

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#1 bring together diverse actors and stakeholders to shape the future of data governance.

POLICY AND NETWORKS

#2 bolster training in ethical data science and ethical Al across the globe.

#3 foster equity and responsibility in data practices.

EDUCATION

RESEARCH

ENGAGEMENT

What do we mean by data ethics? HUMANITY AND COMPUTING

- Not a universal set of principles but a *living ethos*.
- In context, what decisions are made at every step on a data journey?
 Collection, field, lab, storage, reuse.
- Sensitivity to the implications of those decisions.
- Values are sometimes in tension. (Openness vs ownership, etc.)
- Strong grounding in philosophical, historical and social scientific studies of data use.





How to Foster Responsible and Resilient Data: The Ethical Data Initiative

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It is more important than ever to advance data ethics. Informed by science studies, the Ethical Data Initiative uses open and inclusive discussions to foster a responsible and resilient approach to data creation, transmission, and use.

Our activities

- Education:
 - Data Clinics
 - Data Stories
 - Data Ethics Cluster on Harvard's LabXchange
 - Data Science Glossary
 - Resources Listing
- Policy:
 - Promoting data curation efforts!
 - GESDA foresight exercise
 - CODATA/COARA-ERIP on research assessment (seminars and reports)
 - ICS/CODATA Data Ethics + Ethical AI for Science
 - UNESCO/RORI on responsible open science and related metrics



- Research:
 - Data Ethics Seminar Series with African Universities Association
 - Data Stories
 - Continuing research on interoperable, equitable data semantics and open practices
- Engagement:
 - Newsletter and updates on social media
 - Research Data Alliance Data Ethics Working Group
 - EDI Affiliate network
 - EDI Ambassadors programme

• WHAT COULD WE WORK ON TOGETHER?

Resources on our website



Home 🗸 Data Ethics 🗸 Resources 🗸 Get Involved 🗸 Events About Us 🗸 Join Our Networks 🖬 ¥

- A place for practitioners to access curated and reliable information about data ethics
- Why worry about data ethics?
- Blog Posts (reports, reviews, summaries, etc.)
- List of initial educational resources (OS tools, academic studies, glossaries, books and reports, ...)
- Data Ethics Glossary: first initial terms



Data Clinics: Main Principles

- Interactive collaboration and teaching format designed to bridge theory and practice
- Bring together **invited partners and practitioners with TUM Masters students** to work together in a structured way on real-world ethical challenges and decision-making processes
- Part of the teaching programme at the TUM Chair for Philosophy and History of Science and Technology
- **Goal**: empower participants with actionable insights to handle complex data governance and ethics issues like privacy, discrimination, transparency, openness, and accountability, and **foster wider cultures of ethical data work.**



Data Clinics: Concept

- Invited partners present a real-world challenge drawn from their actual data practices and issues (based on a template we provide them with)
- Collaboration: student teams explore the challenge from multiple perspectives of data governance and ethics, develop tailored insights leading to desired future outcomes, and propose best-case solutions
- Their results can be one or several of a variety of different outputs and should ideally revolve around practical advice on navigating sensitive questions around responsible data practices.
- Has the potential to build from an engagement activity into research collaborations with the partner and/or teaching material (e.g. data story).



Data Clinics Partner in Summer 2025

A Certa Foundation Center

CENTER for LAW & INNOVATI @ N







Challenge Questions / Title

How can we foster transparency and explainability in the use of AI within the African fintech ecosystem to ensure fairness, accountability, and user trust?

Introduction

Fintech innovation is booming in Africa, with Al-powered solutions transforming access to financial services. However, using Al in crucial areas like credit scoring, fraud detection, and identity verification often lacks transparency. Many fintech companies operate Al systems, making it difficult for users to understand how decisions impacting their financial lives are made. This lack of transparency raises ethical concerns about fairness, accountability, and potential unintended consequences.

What is the Challenge?

it will focus on transparency and explainability in Al-driven fintech services across Africa. Students will examine the ethical and practical implications of using Al in this sector, examine current practices, and develop solutions for responsible Al adoption.



Data Stories

- 2-minute video exploring a particular case study & its implications
 - $\,\circ\,$ from real-life situations
 - $\,\circ\,$ informed by academic research in data studies
 - $\circ\,$ interactive: predict the issues ; pop-up explanations ; branching structure ('choose your own adventure') ; final quiz/reflections
- component of Data Ethics Cluster on LabXchange
 - <u>www.labexchange.org</u>
 - modular education platform, reaching across the globe

Case study courtesy of Nathanael Sheehan

"People think it's a really easy thing to just send files from there to there. But no, because we have **different types of files**, **different types of processes**, you need validations."

Data Curator, ENA.



