

## Master Thesis “AI and Social Impact Measurement”

### Background

Artificial Intelligence (AI) is increasingly integrated into social impact measurement, offering opportunities for automation, improved data analysis, and predictive capabilities. However, AI also raises concerns about bias, ethical considerations, and the exclusion of qualitative aspects of impact that are difficult to quantify. This thesis is closely linked to an EU-funded research project in collaboration with the software venture Leonardo. and Impact Hub network, focusing on developing AI functionalities for social impact measurement and designing a market-ready product. This project involves multiple stakeholders, including developers, impact investors, entrepreneurs, scholars, and experts, offering a rich empirical setting to explore the role of AI in shaping the field of social impact measurement. The thesis includes both a structured literature review and an empirical investigation. The empirical component may take the form of a case study on the first phase of the EU project or an in-depth analysis of how AI changes narratives around social impact measurement.

### Introductory Readings

- Tomašev, N., Corneise, J., Hutter, F., Mohamed, S., Picciariello, A., Connelly, B., ... & Clopath, C. (2020). AI for social good: unlocking the opportunity for positive impact. *Nature Communications*, 11(1), 2468.
- McKenzie, D. (2018). How can machine learning and artificial intelligence be used in development interventions and impact evaluations. *Development Impact*, 5.
- Abad-Itoiz, N., Solórzano-García, M., & Hernández-Marí, D. (2025). Innovative approaches to social impact measurement: a focus on the potential of artificial intelligence solutions. *Social Enterprise Journal*, 21(2), 336-353.

### Tasks and Goals

- Conduct a systematic literature review on AI applications in social impact measurement.
- Analyze the benefits and limitations of AI in capturing and interpreting social impact.
- Conduct an empirical investigation by interviewing key stakeholders (developers, impact investors, entrepreneurs, scholars, and experts) to explore how AI is transforming social impact measurement OR Develop a case study on the first phase of the EU research project, examining the AI functionalities being developed and their potential market applications.

### Requirements

- Strong analytical and critical thinking skills.
- Interest in sustainable entrepreneurship, AI and social impact.
- Excellent English skills.
- Independent and structured working style.
- Successful completion of the Advanced Seminars Sustainable Entrepreneurship Theoretical Foundations or Sustainable Energy Entrepreneurship with a minimum grade of 2.0 is required

### Details

- Supervisors: Dr. Alessia Argiolas
- Start: Flexible / As of now.
- Working time: 6 months

### Contact

If you are interested in writing your thesis at our Chair or have questions about this topic, please contact Alessia Argiolas ([alessia.argiolas@tum.de](mailto:alessia.argiolas@tum.de)). To apply, send an email including your CV, and the current transcript of records (as one PDF file). We are looking forward to working together with you!