Participant observation and Evaluative Thinking: The Case of an Italian Software House

Francesco Amato (Università di Napoli Federico II)

Artificial Intelligence (AI) is increasingly integrated into various sectors, including healthcare (Grote & Berens, 2020), loan approval (Agarwal et al., 2021), and recruiting (Mariani & Vega-Lazada, 2023). This integration lays the foundation for evaluating the social consequences of AI systems. This article presents research conducted within an Italian software house developing an AI system that combines the ethnographic approach with evaluative thinking (Fetterman, 1987). This work aims to understand the practices implemented by developers and their willingness to co-constitute a framework for evaluating the AI system. I conducted both on-site and remote participation in the software house activities to collaboratively develop a shared understanding of the AI system evaluation framework. The continuous interaction underscored the benefits of the ethnographic approach in orienting the co-constitution of the evaluation framework of the AI system. My research considers the rising concerns about the extensive use of AI systems in society; the recent European Regulation, the AI Act (Regulation 2021/206), defines a more responsible and safer use of AI in the EU (Panigutti et al., 2023). However, the AI Act will only gradually become operational, allowing technological innovation to outpace the legislative process (Marchant, 2011). During this transitional period, organisations are encouraged to voluntarily adhere to the AI Act's principles (European Council, Press Release, 2024). My research steps into the challenges organisations face in adapting to regulations and their limited interest in evaluation processes without immediate benefits (Oliver, 1991). The results show that participant observation may help to introduce evaluative thinking in private organisations keen to dialogue with academia and other domain experts, potentially fostering cultural change, openness to evaluation, and offering organisations a promising path towards responsible AI use. In participant observation, the researcher's involvement within the organisation is crucial (Bruni, 2003). This allows for a deep understanding of internal practices shared among stakeholders involved in AI system design, production, and use (Bruni, 2005). This ethnographic approach can bridge gaps between stakeholders and enhance their planning capacity toward a culture of evaluation, providing a comprehensive understanding of the organisation's AI practices. I conclude that participant observation can aid organisations in developing a reflective capacity to reorient motivations and practices (Patton, 2010) and support evaluative thinking. This research strategy may lead the organisational culture to be prone to learning and continuous and systematic evaluation, potentially changing attitudes, motivations, behaviours, and practices regarding AI use, development, and implementation (Stame, 2016). Keywords Ethnography, participant observation, community of practice, evaluative thinking, artificial intelligence.