

Getting people involved in welfare automation

Background

European states are increasingly automating their welfare services. The automation of welfare varies across European countries as does the way welfare provision is organised. The systems for automation range from static decision trees to natural language processing applications including large language models (LLMs) and predictive risk scoring. The implementation of these systems has far-reaching consequences both for the daily work of caseworkers in public institutions as well as for the equal and just treatment and social rights of the people. Considering the perspective of the people who are affected by automation, the AUTO-WELF project has identified several challenges and gives procedural recommendations to address them.

Our recommendations are intended to foster democratic control over digital public infrastructures, ensure that these infrastructures are resilient, and align innovation with long-term public interest in welfare and human flourishing.

What are the challenges?

Welfare automation includes fully and semi-automated systems that are static, rule-based, e.g. decision trees and systems that are dynamic, knowledge-based, e.g. the use of chatbots that integrate LLMs.

Caseworkers must regularly adjust their work practices to accommodate new automated systems designed to support decision-making, all while navigating shifting organizational demands. Often the implementation of automated systems goes hand in hand with shifts in work tasks and responsibilities, leading to both additional work assignments and stress as well as shifting skill requirements. Many case workers experience a de-skilling when it comes to their domain-specific knowledge. Hence the implementation of automated systems has a direct impact on caseworkers working conditions and professional development.

For affected people, automated systems are often opaque. They lack information and knowledge on what systems are in use, how they work and impact their rights, including access to benefits and services. In addition, the way citizens interact with public institutions is changing from inter-personal contact to digital self-services and chatbots. Although this shift is welcomed by some, many affected people, including the most disadvantaged, experience it as burdensome and their trust in welfare institutions erodes.

Crucially, caseworkers and affected people are rarely directly involved in the development, design and implementation process and are hence excluded from shaping the very technologies that affect their lives.

What is to be done?

In order to tackle these challenges on a European level, we urge European policy makers to

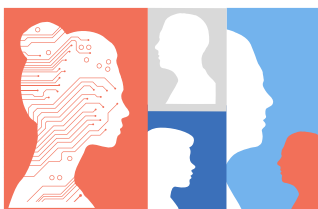
- 1. Open the design and implementation process to the affected people:** The development and implementation of automated systems should foreground people's perspectives, requirements and needs. European institutions

should work towards inclusive and participatory design by oblige public administration to ensure diverse participation of case workers and citizen representatives in the design process – those who have the domain expertise and direct experience with the systems.

2. **Foster transdisciplinary research and capacity:** Moreover, the development of algorithmic systems should be enriched with expertise from interdisciplinary research and civil society actors, including unions, and professional associations. To foster transdisciplinary research, EU funds should focus on research dedicated to academic and civil society collaborations that survey the perspectives of affected people and professionals directly implicated in the automation of welfare.
3. **Establish an Algorithm Ombudsman in member states:** Concerning the implementation and use of algorithmic systems, an Algorithm Ombudsman should be established. As a public institution representing peoples' perspectives on automation in welfare services, the Ombudsman should safeguard civic rights and mitigate harm on a national level. The Ombudsman should further document and archive experiences and expertise from national contexts to create a basis for building a European registry on algorithmic systems that are used in EU member states.
4. **Build a European registry of algorithmic systems in welfare:** Given that many automated systems are operating in the background – invisible to affected people – their visibility should be raised. A European registry should provide a public and openly accessible overview of algorithmic systems used in the public sector, including simple systems that do not fall under the AI Act and semi-automated systems that are operated by caseworkers. To ensure that the registry is comprehensive and regularly updated, a duty of documentation shall be installed.
5. **Account for local and contextual specificities:** To successfully implement the above-mentioned instruments and measures, national institutions, stakeholders, and local expertise need to be consulted. This is important to account for the diversity of European welfare states and their states of automation, as well as institutional specificities that may vary across contexts. It further helps to embed new sociotechnical practices in existent institutional contexts and organizational routines.

Basic data on AUTO-WELF

- ◆ Three-year, comparative project on the algorithmic automation of core welfare services and communal welfare infrastructures in 8 European countries (Austria, Denmark, Estonia, Germany, Italy, Poland, Portugal and Sweden)
- ◆ Ethnographic research on the implementation of automated systems
- ◆ Workshops with affected people and caseworkers including future visions, data dreaming and mind scripting for algorithmic automation that supports human flourishing



The AUTO-WELF project is supported by Austrian Science Fund: [I 6075-G], Austria; Independent Research Fund, Denmark; BMBF, Germany; National Science Centre, Poland (grant no.2021/03/Y/HS5/00263); FORTE, Sweden, under CHANSE ERA-NET Co-fund programme, which has received funding from the European Union's Horizon 2020 Research and Innovation Programme, under Grant Agreement no 101004509.

The recommendations are an outcome of the AUTO-WELF project and were developed together with AlgorithmWatch during among others a joint workshop at the Institute of Philosophy and Sociology of Polish Academy of Sciences in 2025.

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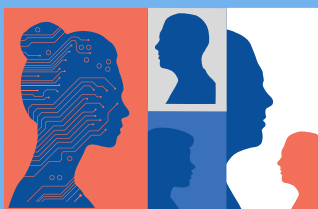
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