

MISSION4.0

Semi-structured interviews with key stakeholders on socio-ethical aspects of the use of intelligent robotic systems in Serbia

SUMMARY REPORT

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Project acronym:	MISSION 4.0
Project full title:	Deep Machine Learning and Swarm Intelligence-based Optimization Algorithms for Control and Scheduling of Cyber-Physical Systems in Industry 4.0
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Abstract	<p>During May and June 2022, semi-structured interviews were conducted with representatives of relevant stakeholders: companies that use technologies based on artificial intelligence (AI), as well as representatives of scientific and research institutions that participate in the development of technologies based on AI and/or deal with the social, legal and ethical implications of the implementation of these technologies in the business settings in Serbia.</p> <p>In addition to the interviews, Jelisaveta Petrović has conducted desk research with the aim of mapping key stakeholders and AI projects implemented in Serbia. In this regard, she also participated in a presentation of the findings of the OSCE study “Spotlight on Artificial Intelligence and Freedom of Expression: A Policy Manual”, held on June 30.</p> <p>The findings of the research will be presented and discussed in depth in the final report, while in this summary report we will present key topics discussed with the interviewees.</p>
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1. INTRODUCTION

Within Work Package 3 (activity 3.5.) sociological research of potential social risks (e.g., loss of jobs, environmental hazards, safety, ethical considerations) and benefits (e.g., economic development, employee burden reduction, etc.) of introducing technology based on artificial intelligence in the companies in Serbia was conducted. More precisely, between May and June 2022, a total of 15 semi-structured interviews were conducted with key stakeholders (developers, company management, and representatives of relevant scientific and research institutions in Serbia). This research was accompanied by a desk analysis of existing AI-based projects and policy frameworks in Serbia.

The rationale for this research design stems from the fact that different actors/stakeholders have different perceptions about artificial intelligence (AI). Therefore, in this research, we started from the assumption that it is essential to bring together all the alternative views - from communities of developers, researchers, business leaders, and policymakers - to properly start acknowledging AI and implementing it in Serbian society. Moreover, it should be noted that the interest in applying sociological tools to analyzing the benefits and consequences of artificial intelligence (AI) has been actualized in recent years due to the widespread use of AI technologies in a broad spectrum of social domains (Liu, 2020¹).

The findings of the research will be presented and discussed in depth in the final report, while this summary report will present key themes discussed with the interlocutors.

¹ Liu, Z. (2020) Sociological perspectives on artificial intelligence: A typological reading, *Sociology Compass*. 2021; 15:e12851. <https://doi.org/10.1111/soc4.12851>

2. KEY THEMES DISCUSSED WITH THE INTERVIEWEES

The proper development of AI needs a multidisciplinary community. It should be noted that when the field of Artificial Intelligence was first established at the Dartmouth Workshop, although hosted at the mathematics departments, the participants included psychologists, political scientists, and economists. Over the years, however, the focus of the field shifted to technical performance, ignoring the ‘socio’ part in the socio-technical systems. Potential social impacts and implications received insufficient attention, although AI has already entered and altered the ways individuals, firms and public institutions organize processes of production, distribution, and exchange as well as consumption, public opinion, and politics (Liu, 2020). Therefore, it is important to bring back the analysis of various social and ethical implications of the development and implementation of AI in industry and everyday lives.

Given the need to encourage the development of a strong socio-technical perspective for trustworthy AI, within the scope of the research the following topics were discussed in depth with the interviewees:

1. Definitions and misconceptions of AI;
2. Development of AI research in Serbia since the 1980s;
3. Economic benefits and risks of implementing AI in business settings in Serbia;
4. Cooperation between companies and research institutions in Serbia in developing technologies based on AI;
5. State support for scientific AI projects;
6. State support for the implementation of AI in companies in Serbia;
7. Legal and policy framework for implementing AI-based technologies in Serbia;
8. Ethical considerations (potential biases and unfairness) of implementation of AI-based technologies;
9. Environmental considerations of implementation of AI technologies;
10. Examples of good practices in the field of AI research and implementation in Serbia;
11. Plans regarding the development and/or implementation of AI-based technologies in Serbia;

12. Potential risks and threats of implementation of AI-based technologies in Serbia and preventive measures.