

Digital trust and ethical standards

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Defining Artificial Intelligence (AI)

" It is the science and engineering of making intelligent machines, especially intelligent computer programs. It is related to the similar task of using computers to understand human intelligence, but AI does not have to confine itself to methods that are biologically observable" (McCarthy,2004);

"Systems that act like humans" (Turing,1950);

"The power of AI and machine learning (and deep learning) is underestimated. The speed of advancements is incredible and will lead to automating of virtually all processes (Epping,2020);



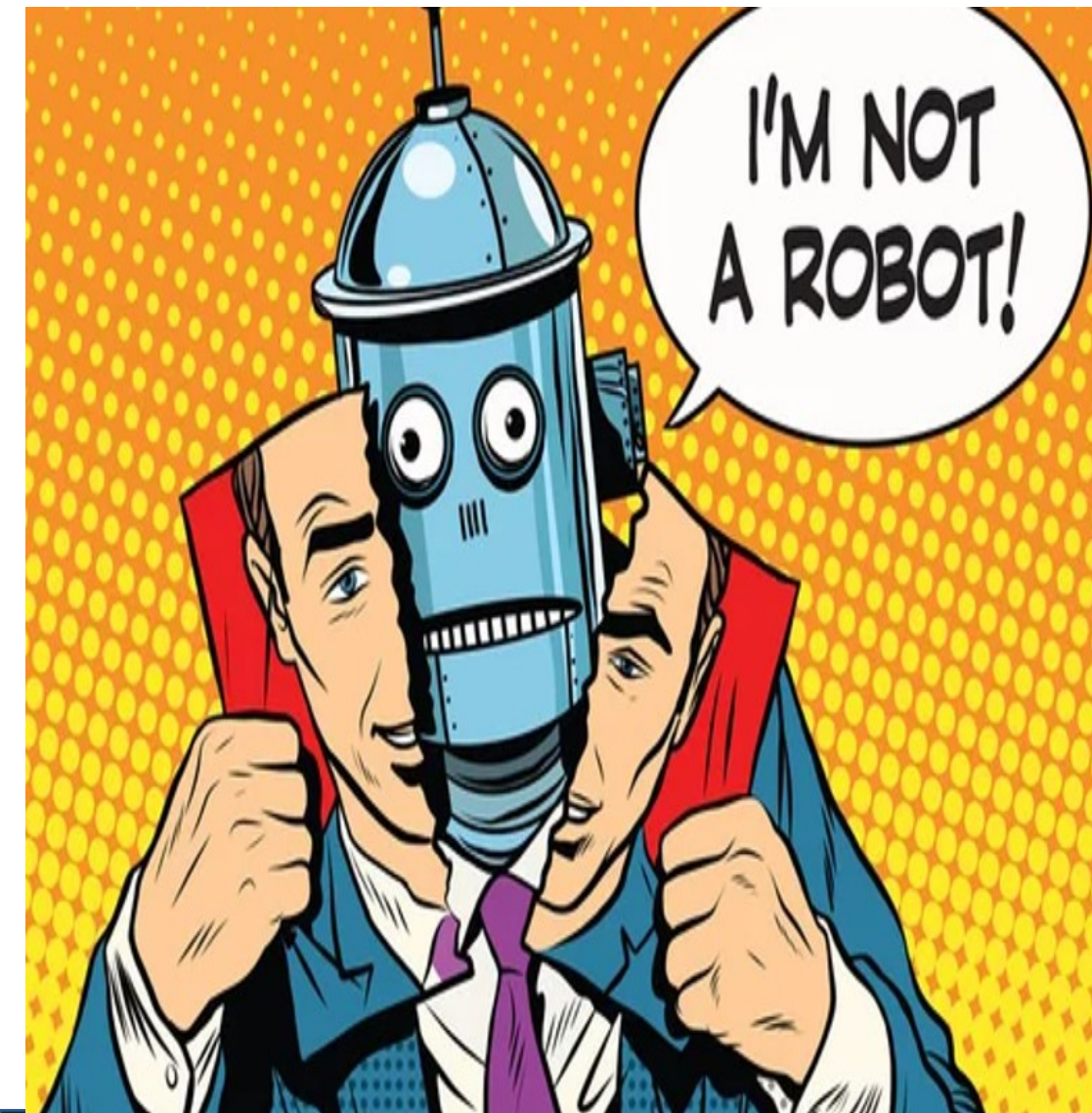
Ethical dimensions of using AI

Worries about developments in AI - It would be quite difficult – some might say impossible – to design broadly adopted ethical AI systems. A share of the experts responding noted that ethics are hard to define, implement and enforce.

The democratization of machine learning, simple libraries and embedded products will allow many people who have not learned to apply this technology in careful ways to build problematic tools and perform bad data analysis for limited, but meaningful distributions that will be hard to hold to account.

A patchwork of regulations across national and international jurisdictions and fights over ethical AI standards will undermine attempts to independently regulate technology companies and their code through auditing and clear mechanisms for accountability.

The Ethical dimensions of using AI



- Historically, ethics have evolved as new technologies mature and become embedded in cultures; as problems arise so do adjustments.
- Expert panels concerned about ethical AI are being convened in many settings across the globe.
- Social upheavals arising due to AI problems are a force that may drive it closer to the top of human agendas.
- Political and judicial systems will be asked to keep abuses in check, and evolving case law will emerge (some experts are concerned this could be a net negative).
- AI itself can be used to assess AI impacts and hunt down unethical applications.
- ***A new generation of technologists whose training has been steeped with ethical thinking will lead the movement toward design that values people and positive progress above profit and power motives and the public will become wiser about the downsides of being code-dependent.***

The Ethical dimensions of using AI

- “We need to understand ethics well enough to program AIs so they behave ethically. More importantly, we need to understand that corporations, including nonprofits, governments, churches, etc., are also artificially intelligent entities participating in society, and they need to behave ethically... We need an ethical society, not just ethical AI”

(Pew Research Center, June 16, 2021).

“Experts Doubt Ethical AI Design Will Be Broadly Adopted as the Norm in the Next Decade”

Ethical guidelines in the application of Artificial Intelligence

- "Ethical Guidelines for Trustworthy Artificial Intelligence" of the European Commission (Pekka et al. 2018),
- "Report on the future of artificial intelligence" of the Obama administration (Holdren et al. 2016),
- The OECD Principles on AI (2019 Organization for Economic Co-operation and Development) due to their transnational nature.
- Various Scientific papers or texts that fall under the AI ethics category but focus on one or more specific aspects of the topic e.g. Thilo Hagendorff (2020);

As for the practice, for example, large companies such as Facebook and Twitter have not yet published any systematic guidelines on artificial intelligence, but only individual statements of good conduct.

The research results

Digital trust and Artificial Intelligence

Figure 1. Gender
Sources: own research.

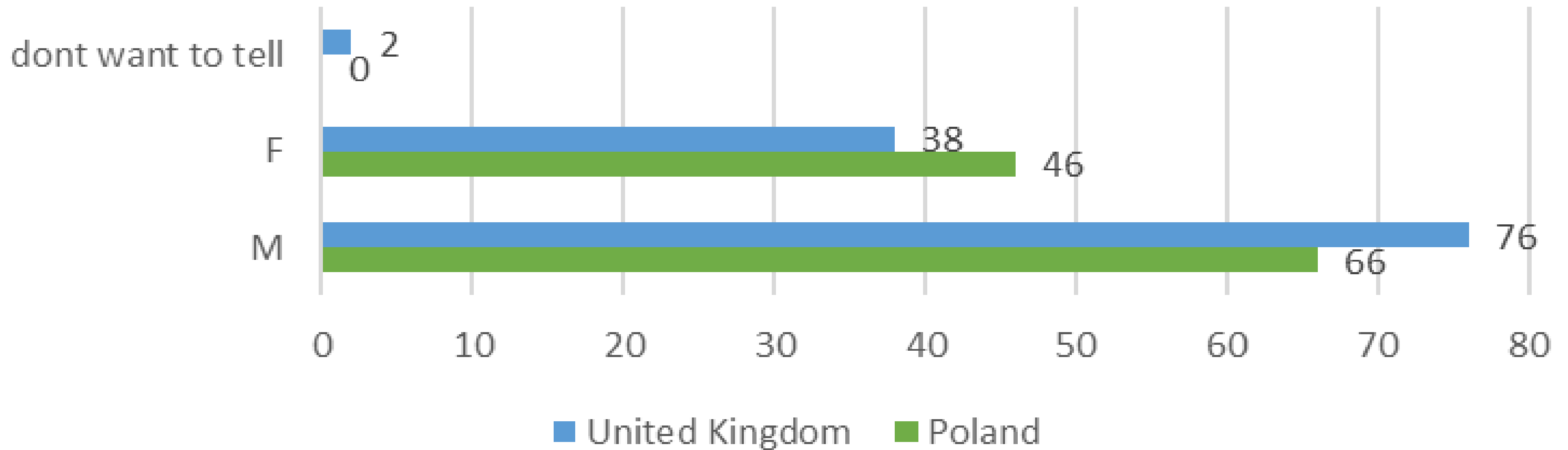


Figure 2. Do you trust products/services that use artificial intelligence solutions?

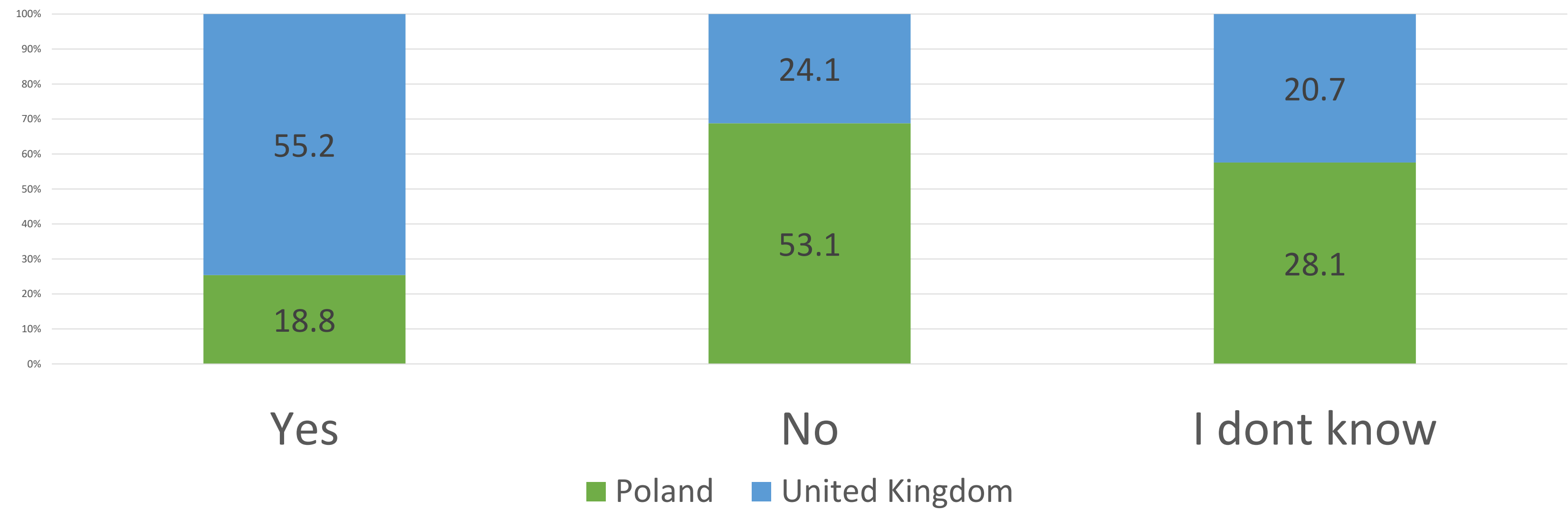
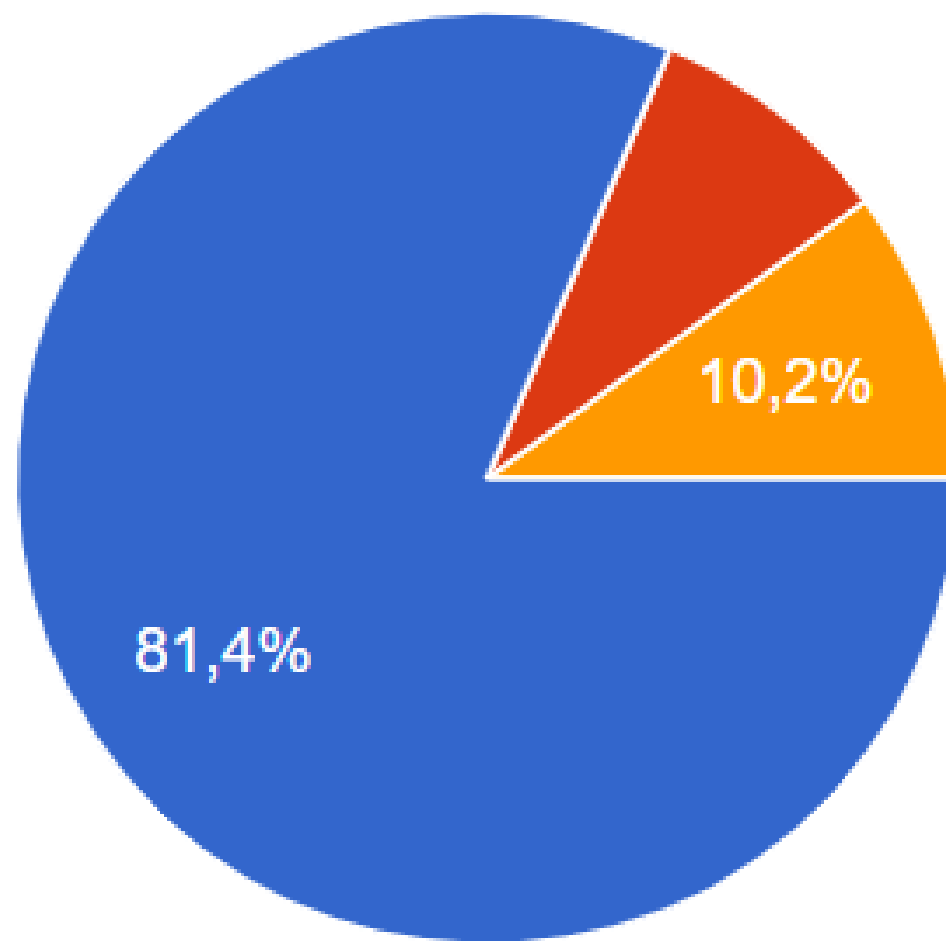


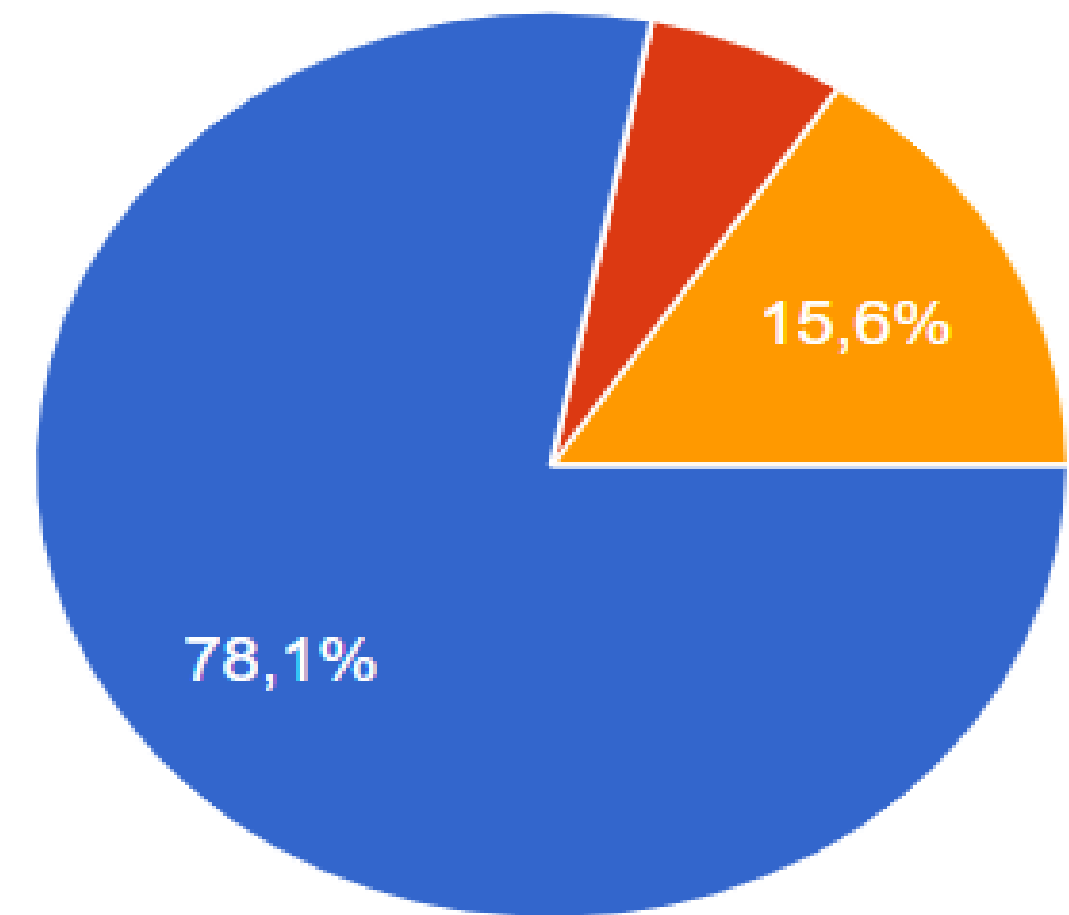
Figure 3. Could a lack of ethics and control over AI have social and economic side effects?

- United Kingdom



POLAND

● Yes
● No
● I don't know



Conclusion

1. Artificial Intelligence is a technology that is both transformative and groundbreaking, and its evolution over the past few years has been galloping.
2. Artificial intelligence systems will continue to influence society and citizens.
3. The healthy and smooth development of artificial intelligence and the ethics of science and technology guidelines have a significantly positive correlation.
4. Deviations from the various codes of ethics have no consequences. Ethical guidelines have no significant influence on the decision-making of software developers.
5. Further research should be enriched with trust in artificial intelligence and the impact of distrust (lack of ethics) on market performance.

References

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Thank you for your attention

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