

Policy Analysis Paper 5 - EU Artificial Intelligence Act (2024) with a Cybersecurity Focus

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While the European Union's Artificial Intelligence Act (EU AIA) strives to address the potential impact of integrating AI into various sectors of European society, and other countries by extension, feedback on the effectiveness of the act varies. The EU AIA was created to ensure that the integration of AI is consistent with the ethics of the EU charter, the social impacts of AI has limited negative implications, while also considering the economic impact that comes with integrating AI into businesses as well as the impact the Act itself would have on the technology industry. While the EU AIA is the first instance of AI regulation, it is unlikely to become "the gold standard" without additional changes being made (Almada, 2025, 1).

The effectiveness of the risk-based approach the EU AIA takes has created a heavily debated social issue. The risk-based approach outlined in the EU AIA is based purely on the intended purpose of an AI model; it is then categorized as baseline, high-risk, or unacceptable risk which results in varying levels of integration (Almada, 2025, 4-5). However, this risk-based approach does not address the potential unintended consequences of an AI model, which is why the categorization method the EU AIA uses is debatable in effectiveness. The EU AIA does little to address the social implications of the risk-based approach, and while soft impacts are "not easily captured by legal regulation," not addressing the soft impacts can lead to larger unintended consequences such as discrimination and exploitation of vulnerabilities (Rudschies & Schneider, 2025, 32; Sillberg et al., 2024, 13; Kim et al., 2025, 144135). A suggested recommendation to help make the risk-based approach more effective is by implementing a social-disruptiveness approach along with it; a combination of the risk-based approach and the social-disruptiveness approach would help to categorize AI models based on their intended and unintended purposes (Marchiori et al., 2025, 36).

While the EU AIA was created to reflect the values of the EU Charter, the EU AIA notes that there are various trade-offs that have to be considered in order for AI to be integrated (Barkane et al., 2025, 50). While the EU AIA claims to take a “human-based approach,” the trade-offs can favor innovation over exploitable vulnerabilities, which is especially concerning for more vulnerable groups of people like children and the elderly or in career fields such as healthcare and law enforcement (Olimid et al., 2024, 8; Kim et al., 2025, 144135-144136). However, technology companies in the private sector would argue that these trade-offs are needed or the narrow constraints of the EU AIA “could take Europe out of the AI race;” stunting economic growth as countries outside of the EU are able to advance AI capabilities without having to adhere to policies of the EU AIA (Cabrera et al., 2025, 234). The trade-off creates an ethical question: is it morally sound to limit the protections among vulnerable groups and industries for the sake of economic growth?

While the EU AIA has created heightened societal and ethical issues, more regulation will be needed as AI continues to grow. Ursula von der Leyen, who is a strong advocate of AI integration into European society, echoed the sentiment of AI manufactures that AI technology’s “hypothetical ability to perform highly advanced cognitive functions and develop reasoning skills that would surpass those of humans” can come “as soon as next year”; this sentiment would be worrying for those in the medium-skills job market as the shift into the “low-skills” job market becomes a reality (Combs, 2025). This viewpoint coming from someone who helped create the EU AIA calls into question the human-based approach entirely, and seemingly implies that economic advancement is the focus of European political leaders. After the implementation of the EU AIA, and the pushback from the technology sector about the new regulations while other sectors continue to find issues while integrating AI, Margrethe Vestager, who was a key

figure in drafting the AIA, stated that she believes that it's "way too soon" to address parts of the AI Act, even though its integration has created unintended social and ethical issues (Haeck, 2025).

Overall, the EU AIA can be considered successful only if it is under the perspective that it was created to be continuously built upon as AI develops. From a social standpoint, it was known while making the Act that AI has a possibility of having negative social implications, and while the EU AIA tried to address those concerns, it is not really possible to address every social issue created preemptively. Similarly, integrating AI into society has the potential to create ethical issues, and trying to preemptively address the issues by taking a "human-based" approach will not be able to fully prevent the unintended negative outcomes of AI. While these are important issues, as long as the body that created the AIA is willing to make the necessary changes to address these issues, the AIA can be considered successful. However, given that the mission of the AIA is to prevent AI from negatively impacting humans, what makes the AIA unsuccessful is the unwillingness of the political body that created it to address the issues with the legislation. Time will not make the AIA more successful, it will only widen the disparities that are already being seen, and the unwillingness to address these issues makes the legislation unsuccessful.

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