

Information Manipulation: a Framework

Extracts



From: [Master ADVANCED Digital Tools for Research](#) (author: Christine Gardiol), **available on AMAZON marketplaces**

To tackle information manipulation “an **integrated response from all stakeholders** is necessary... Policymakers should consider implementing regulations that mandate companies to protect user data from such manipulations. Developers of these AI models could design APIs that automatically add perturbations to users’ images, providing an added layer of protection against unauthorized edits”ⁱ. Iencaⁱⁱ abounds with this MIT News about PhotoGuard: “governments and regulatory bodies can play a role in mitigating the risk of digital manipulation by enforcing laws and regulations that protect user privacy, prevent misinformation and disinformation, and promote transparency and accountability”. So where do we stand with **regulatory measures**, especially with AI?

Information manipulation regulation

The [European Parliament](#) adopted the **EU Artificial Intelligence Act**ⁱⁱⁱ, a comprehensive regulation on artificial intelligence, in March 2024, followed by the [European Council](#) in May 2024. This act does not negate the benefits of AI but aims at ensuring better conditions for its development and use. Not specifically about image regulation, one of its requirements is that “Content that is either generated or modified with the help of AI - images, audio or video files (for example deepfakes) - need to be **clearly labeled as AI generated** so that users are aware when they come across such content. A good start. According to Ienca^{iv} earlier mentioned, the Act “covers practices that have a significant potential to manipulate persons through subliminal techniques beyond their consciousness or exploit vulnerabilities of specific vulnerable groups such as children or persons with disabilities in order to materially distort their behavior in a manner that is likely to cause them or another person psychological or physical harm.” Ienca also talks about **ethical design** which should be enforced. For more details on the applications of the EU AI Act, check the many guides that have followed its acceptance, especially from large consultancy firms (Ernst & Young, PWC, etc.). Also, websearch *EU AI act*.

In the **US**, according to the global law firm White & Case LLP (as of May 2024), “there is no comprehensive federal legislation or regulation that regulates AI development or specifically prohibits or restricts its use. However, some federal laws or recommendations with limited applications exist. One is the “Draft No FAKES Act”^v, a law that would protect voice and visual likenesses of individuals from unauthorized recreations from Generative AI. Whitecase.com proposes a good overview of where AI regulations are in various countries

(check their AI Watch: Global regulatory tracker)^{vi}. Not specifically AI or image-focused (just digital), a special milestone was reached in June 2024, when Dr. V. Murphy, the US surgeon general, announced he would push a warning label on social media platforms that these can harm teenagers' mental health^{vii} (similarly to the labels on cigarette packs). As in Europe, things are moving in the US; even if it has been slowed down under Trump presidency. Certainly, because many powerful digital stakeholders are based in the US.

Under the new administration of President Trump, some major changes are expected in 2025, which is likely to result in less regulation.

In **Asia**, according to legalnodes.com, China leads the game^{viii}. It stands at the forefront of jurisdictions that are actively introducing AI regulations, especially with its soon-to-come holistic AI framework. Existing rules are, for example, the [Ethical Norms for New Generation AI](#). As to Japan, still according to the same source, it has no strict AI regulations, instead some guidelines, such as the [Guidelines for Implementing AI Principles](#) or [AI Governance in Japan Ver. 1.1](#). For other countries, check legalnodes.com, which has reviewed ten countries so far.

Regulatory measures are emerging to streamline content manipulation and abuse, particularly with artificial intelligence. In his review, Ienca^{ix} (mentioned earlier) stressed the need for **increasing transparency, providing clear disclosures and explanations of how data is collected**, used, and shared, as well as features to opt in and out of content. He also speaks of more **ethical design**. Legalnodes.com is rather optimistic about the future of global AI regulations: *"the fairly recent [pledge](#) from G7 leaders highlights their dedication to setting AI standards. They emphasized the need for inclusive AI governance and interoperability, aiming to foster trustworthy AI that aligns with their shared democratic values. It seems likely that closely connected regions, like the EU and the US, will work towards harmonizing their legislation... Unfortunately, a unified global approach to AI regulation seems elusive in the near future. Considering this, a more practical solution might be to focus on the fundamental ethical aspects of AI, which are more universally agreed upon compared to specific AI regulations"*^x. Several papers discuss its dangers and costs, both socially and in many fields (finance, health, technology, etc.). Websearch *digital regulations* or *ai regulations* or *cost information manipulation examples*.

To conclude

Tools, techniques, and regulations are slowly coming into place (even if there might be some backtracking under the new Trump administration). Many see media and digital education as a critical axe of development. Both De Marvel, who teaches fact-checking^{xi}: *"No matter how much fact-checking we do or if all newsrooms are verifying all content, it will be of little use if people are not educated"* and Ienca *"One focal area is certainly user education and digital literacy. Educating users about the risks and harms associated with **digital manipulation** can help them to identify and resist manipulation attempts. This could include providing information on common manipulative **tactics**, such as fake news and phishing scams, and promoting **critical thinking skills**"*^{xii} highlight the **importance of education and digital**

literacy. The best way to prevent people from falling into the trap of information manipulation is to educate them about how manipulation occurs and the fact-checking tools and techniques that can prevent it. There is an increasing need to foster digital literacy everywhere and at all ages.

In a nutshell, we are not far from an encouraging holistic approach to information privacy and manipulation, with the four axes we discussed.

TOOLS	REGULATION
<ul style="list-style-type: none"> Increasing availability and use of fact-checking tools to detect any content manipulation. Some tools to protect images from being manipulated start to emerge. Journalists, university libraries and fact-checking entities are good resources to check. For images, make sure to learn and use reverse image search engines. Forensic tools. 	<ul style="list-style-type: none"> Regulations to better control information tools are pending in many countries. Some to protect users at risk (teenagers, for example). They focus on: opt-in/opt-out mechanisms (accepting or rejecting tracking and cookies), ethical design, transparency, clear disclosures, etc. Artificial Intelligence of high concern.
METHODS & TECHNIQUES	EDUCATION
<ul style="list-style-type: none"> Increase your privacy and limit the tracking of your data: reject cookies; browse privately (or in incognito mode); use privacy focused engines. Understand and work out the privacy settings of all your online tools. Do smart searching (use search commands and carefully chosen keywords) Interrogate any data and information (information assessment techniques such as the 20-questions framework, the “4R”, CRAAP...). Be skeptical and critical in front of any information and data. It should become second nature to you. Diversify your tools. 	<ul style="list-style-type: none"> Greater awareness on how information can be easily manipulation, technically and psychologically speaking. Fact-checking should be explicitly mentioned by more news outlets. Educating all ages about media and digital literacy, and the notion of digital rights. Learn to handle a diversity of information and tools.

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- i Gordon, R. (2023). *Using AI to protect against AI image manipulation*. MIT News. 31 July 2023. Available at: [Using AI to protect against AI image manipulation | MIT News | Massachusetts Institute of Technology](#) [Viewed 24 October 2024]
- ii Ienca, M. (2023). *On Artificial Intelligence and Manipulation*. link.springer.com 20 June 2023. Available at: [On Artificial Intelligence and Manipulation | Topoi](#) [Viewed 18 May 2025]
- iii European Parliament (last updated 18 June 2024). *EU AI Act: first regulation on artificial intelligence*. Available at: <https://www.europarl.europa.eu/topics/en/article/20230601STO93804/eu-ai-act-first-regulation-on-artificial-intelligence> Check as well [https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI\(2021\)698792](https://www.europarl.europa.eu/thinktank/en/document/EPRS_BRI(2021)698792) and <https://artificialintelligenceact.eu/> [Viewed 18 July 2024]
- iv Ienca, M. (2023). *On Artificial Intelligence and Manipulation*. link.springer.com 20 June 2023. Available at: [On Artificial Intelligence and Manipulation | Topoi](#) [Viewed 18 May 2025]
- v *Nurture Originals, Foster Art, And Keep Entertainment Safe (NO FAKES) Act* at : https://www.coons.senate.gov/imo/media/doc/no_fakes_act_one_pager.pdf and https://www.coons.senate.gov/imo/media/doc/no_fakes_act_draft_text.pdf. [Viewed 26 October 2024]
- vi White & Case (2024). *AI Watch: Global regulatory tracker – United States*. whitecase.com. 13 May 2024. Available at: [AI Watch: Global regulatory tracker - United States | White & Case LLP \(whitecase.com\)](#) & [AI Watch: Global regulatory tracker - United States | White & Case LLP](#) [Viewed 18 July 2024]
- vii Barry, E. & Kang, C (2024). *Surgeon General Calls for Warning Labels on Social Media Platforms*. The New York Times. 18 June 2024 (last update). Available at [Surgeon General Calls for Warning Labels on Social Media Platforms - The New York Times \(nytimes.com\)](#) [Viewed 19 June 2024]
- viii The following comments are taken from legalnodes.com. Ponomarov, K (2024). *Global AI Regulations Tracker: Europe, Americas & Asia-Pacific Overview*. legalnodes.com. 24 June 2024. Available at: [Global AI Regulations Tracker: Europe, Americas & Asia-Pacific Overview \(legalnodes.com\)](#) [Viewed 18 July 2024]
- ix Ienca, M. (2023). *On Artificial Intelligence and Manipulation*. link.springer.com 20 June 2023. Available at: [On Artificial Intelligence and Manipulation | Topoi](#) [Viewed 18 May 2025]
- x Ponomarov, K (2024). *Global AI Regulations Tracker: Europe, Americas & Asia-Pacific Overview*. legalnodes.com. 24 June 2024. Available at: [Global AI Regulations](#)

[Tracker: Europe, Americas & Asia-Pacific Overview \(legalnodes.com\)](#) [Viewed 18 July 2024]

- xi Kahn, G. (2023). *Will AI-generated images create a new crisis for fact-checkers? Expert are not so sure*. reutersinstitute.politics.ox.ac.uk. (Reuters Institute for the Study of Journalism, University of Oxford). 11 April 2023. Available at: <https://reutersinstitute.politics.ox.ac.uk/news/will-ai-generated-images-create-new-crisis-fact-checkers-experts-are-not-so-sure> [Viewed 20 July 2024]
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