Challenges of AI in the law and the risk of stifling Innovation

Contents

“Existing laws relating to data protection, confidentiality and intellectual property are wholly unable to meet the challenges presented by artificial intelligence (AI), particularly generative and general purpose AI. However, any attempt to regulate AI risks stifling innovation." Critically evaluate this statement.

Introduction

Artificial Intelligence (AI) can broadly be defined as the exhibition of intelligence by machines, in particular, Computer Systems.[1] [2] Most commonly, this intelligence is achieved through the use of Neural Networks, a network made up of layers of biases and weights that can take data as input and transform it into more data as output.[3] Neural Networks are used in everything from chatbots and voice recognition to computer vision and self-driving cars.

Chatbots and Image Generators, sometimes referred to as "Large Language Models" (LLMs) use "Generative Pre-trained Transformers" (GPTs), which are a type of Neural Network, to generate text and images, these are often described as similar to human-created text or images.[4] The concept of "Artificial General Intelligence" (AGI) can be defined as the, yet unreached, goal of an AI system that can complete any cognitive task that could be performed by any particular human being, performing better than any individual human could. In other words, a "superintelligence" that could outperform humans in every way.[5]

There are a few key laws and precedential cases surrounding the use of AI in every sector of business and life, including but not limited to, Data Protection, Confidentiality and Intellectual Property (IP). This essay will explore these topics and how they relate to the challenges that are presented by AI, both in its current form and possible future variations, generative and general purpose. The essay will also look at overseas regulation as well as try to understand what effect the current laws surrounding these areas might have on the development of AI and how that might change with future regulation.

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[1] B. J. Copeland, 'Artificial intelligence (AI)' (*Britannica*, 10 April 2024) <https://www.britannica.com/technology/artificial-intelligence> accessed 15 April 2024

[2] Robert McCorquodale 'Artificial Intelligence impacts: a business and human rights approach' (2021) [26] Communications Law 1, 1

[3] IBM, 'What is a Neural Network?' (*IBM*) <https://www.ibm.com/topics/neural-networks> accessed 15 April 2024

[4] AWS, 'What are Large Language Models (LLM)?' (*AWS*) <https://aws.amazon.com/what-is/large-language-model/> accessed 15 April 2024

[5] Reece Rogers, 'What's AGI, and Why Are AI Experts Skeptical?' (*WIRED*, 28 April 2023) <https://www.wired.com/story/what-is-artificial-general-intelligence-agi-explained/> accessed 15 April 2024

Potential Issues and Current Legislation

Data Protection

One of the most obvious issues, with almost any new technology, that uses or transforms data, is Privacy and Data Protection. LLMs can both have issues in the traditional sense (with customers giving a private company their data) as well as new challenges, in the form of an AI model potentially giving away confidential information that they have been trained on.[6] These systems can and will be trained on personal[7] and special category[8] data and it will be difficult to ensure that this data isn't unnecessarily disclosed by those systems.[9] Self-driving cars have a similar issue, where the company that operates a self-driving car can use the data that they generate, both about the passenger and the vehicle's surroundings, however it wants with few limits.[10]

The UK GDPR, Art 6 s. 1,[11] allows organisations to lawfully process personal data under one of six provisions with the aim of ensuring that companies would not be able to arbitrarily process anyone's data. In reality, however, companies most often use s.1(b), which allows them to process data when it is "necessary for the performance of a contract".[12] This has been interpreted very widely and means that as long as the consumer agrees to the company's terms of service, their data can be used with some limit but without further input from the customer.[13] Overall, this part of the law affects almost every person and organisation and will have the most impact on people.[14] While these regulations don't explicitly cover AI; they do require the data controller to make sure that data is sufficiently protected and that can not be found, even by a "motivated enquirer".[15] If data leaks, the only remedy is a fine, but if it wasn't well enough protected to begin with, there are grounds for civil damages, meaning that Data Protection is quite well covered.

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[6] Lily Hay Newman and Andy Greenberg, 'Security News This Week: ChatGPT Spit Out Sensitive Data When Told to Repeat 'Poem' Forever' (*WIRED*, 2 December 2023) <https://www.wired.com/story/chatgpt-poem-forever-security-roundup/> accessed 15 April 2024
[7] Data Protection Act s3 (2)
[8] Data Protection Act 2018 s.10
[9] Hannah R. Kirk *et al.* 'The benefits, risks and bounds of personalizing the alignment of large language models to individuals' (2024) [6] Nature Machine Intelligence 383, 392
[10] Mark Schaub 'Self-driving Cars: How to Deal with Privacy' (*China Law Insight,* 13 March 2018) <https://www.chinalawinsight.com/2018/03/articles/corporate-ma/self-driving-cars-how-to-deal-with-privacy> accessed 7 May 2024
[11] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation) Art.6 (1)
[12] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation) Art.6 (1)(b)
[13] GDPRhub 'Article 6 GDPR' <https://gdprhub.eu/Article_6_GDPR> accessed 7 May 2024
[14] Alex Hern 'What is GDPR and how will it affect you?' (*the Guardian,* 21 May 2018) <https://www.theguardian.com/technology/2018/may/21/what-is-gdpr-and-how-will-it-affect-you> accessed 7 May 2024
[15] NHS Business Service Authority v Information Commissioner and Spivack [2021] UKUT 192 (AAC)

Privacy and Confidentiality

Outside of personal and special category data, people are beginning to have increasingly private and confidential conversations with LLMs and that data can also be, and often is, used to further improve the LLM, sometimes without the user's knowledge or explicit permission.[16] This information could then be accidentally reused / or given away to other users. Private and confidential data is governed by a few statutes including the Privacy and Electronic Communications (EC Directive) Regulations 2003 (PECR)[17], the Data Protection Act 2018[18] (DPA) and the Human Rights Act 1998.

Under Article 8 of the European Convention on Human Rights and Fundamental Freedoms 1950, "Everyone has a right to respect for his private and family life, his home and his correspondence."[19] In Campbell v MGN Ltd.,[20] the House of Lords held that the publishing of confidential information regarding a person could amount to a breach of confidence and therefore give rise to a tort claim.[21] In this decision, damages were awarded on the basis that MGN, "must have known that the information [published] was confidential and that there was no overriding public interest in publication."[22]

Companies in many sectors will have to ensure that information given to AI by customers (or customer data given to AI by employees) does not leak, through the AI to other customers or users of the AI to avoid a tort claim. The safest thing to do would be to make sure that no data left any individual's account, although not using this rich data source would undoubtedly diminish the potential quality of the LLM. Unlike with Data Protection, there's no requirement to implement measures that prevent the leaking of this data, but there is potential for civil remedy if confidential information is leaked or published, rather than a fine, meaning that Confidentiality is covered, but may benefit from further regulation.

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[16] Lance Eliot, 'Generative AI Can Disturbingly Gobble Up Your Private And Confidential Data Forewarns AI Ethics And AI Law' (*Forbes*, 27 January 2023) <https://www.forbes.com/sites/lanceeliot/2023/01/27/generative-ai-chatgpt-can-disturbingly-gobble-up-your-private-and-confidential-data-forewarns-ai-ethics-and-ai-law/> accessed 15 April 2024

[17] The Privacy and Electronic Communications (EC Directive) Regulations 2003 s.6

[18] Data Protection Act 2018 s.132

[19] European Convention on Human Rights 1950, Art 8 (1)

[20] Campbell v Mirror Newspaper Group Ltd. [2004] UKHL 22

[21] Campbell v Mirror Newspaper Group Ltd. [2004] UKHL 22

[22] Campbell v Mirror Newspaper Group Ltd. [2002] EWCA Civ 1373

Intellectual Property

Intellectual Property is one of the most hotly debated topics in AI at the moment. To create the most advanced LLMs that are currently available, the companies that created them had to crawl the internet and use billions of lines of text, images and audio clips to train them.[23] Much, if not most, of the material that was used to create the LLMs, was copyrighted material that was created by humans; very few of those people were consulted or compensated for the use of their work.[24] AI companies will most likely argue that the creation of AI models would come under "Fair Dealing",[25] and that the AI model is essentially a compilation of works, therefore containing originality and being a new work, rather than a copy.[26]

Because the LLMs were trained on copyrighted material; they can, in theory, regurgitate that material and let anyone recreate it.[27] Even if the material isn't recreated word for word, it can still be used as a template that allows people to create new material in the same style. This might allow someone to impersonate or take revenue from the original creator.[28]

AI can also make creating a patent much easier, but if an AI system creates a new patent and it is accepted as a new invention, it is unclear who should own that patent. This was tested in Thaler v Comptroller, in which, the Supreme Court held that an AI "could not be the 'inventor' for the purposes of the Patents Act 1977 s.7 and s.13" and that the owner of an AI could not claim to be the inventor only because they hold that status.[29]

Intellectual Property is the area of law most impacted by AI, as it makes copyright infringement much easier in some areas.[30] That being said, copyright protections have always been a strong area of law as many people rely on it for their livelihoods, meaning that it only needs a limited amount of clarification related to "fair dealing" and who owns a work created by AI.

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[23] Kali Hays and Alistair Barr 'AI is killing the grand bargain at the heart of the web. "We're in a different world."' (*Business Insider,* 2 January 2024) <https://www.businessinsider.com/ai-killing-web-grand-bargain-2023-8> accessed 7 May 2024

[24] Lauren Leffer 'Your Personal Information Is Probably Being Used to Train Generative AI Models' (*Scientific American*, 19 October 2023) <https://www.scientificamerican.com/article/your-personal-information-is-probably-being-used-to-train-generative-ai-models/> accessed 19 April 2024

[25] Copyright, Designs and Patents Act 1988 s.30 (1)

[26] Copyright, Designs and Patents Act 1988 s.3 (1)(a)

[27] Noorjahan Rahman and Eduardo Santacana 'Beyond Fair Use: Legal Risk Evaluation for Training LLMs on Copyrighted Text' (*ICML Workshop on Generative AI and Law,* 2023) <https://genlaw.org/CameraReady/57.pdf> accessed 7 May 2024

[28] James Vincent 'The scary truth about AI copyright is nobody knows what will happen next' (*The Verge,* 15 November 2022) <https://www.theverge.com/23444685/generative-ai-copyright-infringement-legal-fair-use-training-data> accessed 7 May 2024

[29] Thaler v Comptroller-General of Patents, Designs and Trademarks [2023] UKSC 49

[30] Andres Guadamuz 'Artificial Intelligence and copyright' (*WIPO Magazine,* October 2017) <https://www.wipo.int/wipo_magazine/en/2017/05/article_0003.html> accessed 10 May 2024

Accountability, Equality and AI Safety

This leads to a more general point, in that, beyond the traditional areas of Data Protection, Privacy and Intellectual Property, AI creates many broader problems. The question of who should be held accountable for the actions of an AI is difficult and anything but straightforward. AI systems cannot themselves be held accountable as they are not a natural person,[31] this means that the blame for the actions of an AI will have to fall somewhere between the user and the creator(s) of an AI. The UK has already partially dealt with this issue in the Automated and Electric Vehicles Act 2018, by making the vehicle owner or their insurers liable when a fully automated vehicle causes a collision.[32]

Part of the difficulty of holding AI systems accountable is that inventions are, generally, reflections of their creators, which is all the more true in AI systems. AI can, and often does, contain biases that are introduced by the people who create them and the data they use to do so.[33] This can manifest itself in many different ways and often reinforces biases already present in society / particular organisations.[34] These biases are mostly dealt with through existing legislation, such as the Equality Act 2010, which bans discrimination against "protected characteristics",[35] as well as GDPR, which gives data subjects the right "not to be subject to a decision based solely on automated processing".[36]

One danger that AI presents, but is often underappreciated, is the potential for harm to children specifically. AI is particularly good at creating synthetic images and will soon be able to create believable videos. This has created the potential for abuse and the generation of synthetic Child Sexual Abuse Material (CSAM).[37] [38] It was found that if AI models were trained on many pornographic images an emergent behaviour would be the ability to merge the concepts of "a child" and "nudity" to create CSAM-like images.[39] Since then it has emerged that authentic CSAM can often be found in the training data that is used to create

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[31] Thaler v Comptroller-General of Patents, Designs and Trademarks [2023] UKSC 49
[32] Automated and Electric Vehicles Act 2018 s.2
[33] Alice Xiang 'Mirror, Mirror, on the Wall, Who's the Fairest of Them All?' (*MIT Press Direct,* 1 March 2024) <https://direct.mit.edu/daed/article/153/1/250/119940> accessed 9 May 2024
[34] Department for Science, Innovation and Technology 'A Pro-Innovation Approach to AI Regulation' (*Gov.uk*, 29 March 2023) <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper> accessed 9 May 2024
[35] Equality Act 2010 s.13
[36] Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data (United Kingdom General Data Protection Regulation) Art.22 (1)
[37] Home Office 'UK and US Pledge to combat AI-generated images of child abuse' (*Gov.uk*, 27 September 2023) <https://www.gov.uk/government/news/uk-and-us-pledge-to-combat-ai-generated-images-of-child-abuse> accessed 19 April 2024
[38] Dan Milmo 'Paedophiles using open source AI to create child sexual abuse content, says watchdog' (*The Guardian,* 13 September 2023) <https://www.theguardian.com/society/2023/sep/12/paedophiles-using-open-source-ai-to-create-child-sexual-abuse-content-says-watchdog> accessed 4 May 2024
[39] Susie Hargreaves, 'How AI is being abused to create child sexual abuse material (CSAM) online' (*IWF*, October 2023) <https://www.iwf.org.uk/about-us/why-we-exist/our-research/how-ai-is-being-abused-to-create-child-sexual-abuse-imagery/> accessed 15 April 2024

some AI models.[40] While the taking, distribution, possession and publishing of indecent photographs or realistic "pseudo-photographs"[41] is prohibited by the Protection of Children Act 1978, there is no current regulation that prohibits AI models that are capable of producing these images or prohibits non-realistic images.

Another possible inadvertent by-product issue that might arise with AI is an existing problem in the Computer Misuse Act 1990 (CMA), which will likely be exacerbated. The CMA prohibits "Unauthorised Access to Computer Material",[42] which doesn't, in any way, take into account the intention of the person accessing said material. The CMA, therefore, effectively outlaws 'penetration testing' that isn't explicitly authorised by the owner of a computer system;[43] allowing companies and individuals that have poor cybersecurity practices to remain ignorant of their shortfalls, often to the detriment of their customers.[44] There is also an opposite side to this; if someone uses an AI system to access unauthorised information, perhaps through "prompt engineering",[45] they could breach the CMA, which states that a person must only intend to secure access and know that it is unauthorised to have committed an offence.[46] This would seem counterproductive to the safe development and testing of AI systems.

The CMA also outlaws the making of tools that could be used to facilitate cyber attacks,[47] which by nature could also be used for legitimate penetration testing.[48] This issue will likely get worse as AI becomes more prevalent in the cybersecurity industry and begins to act on behalf of cybersecurity professionals and companies. AI agents designed to check the integrity of secure systems may, by accident or omission, access unauthorised systems. As it stands, it is unclear if the creator or owner of the AI system would be held liable for any breach of the CMA by such a system.

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[40] David Thiel and Jeffrey Hancock, 'Identifying and Eliminating CSAM in Generative ML Training Data and Models' (*Stanford Digital Repository*, 26 December 2023) <https://purl.stanford.edu/kh752sm9123> accessed 15 April 2024
[41] Criminal Justice and Public Order Act 1994 s.84
[42] Computer Misuse Act 1990 s.1
[43] Rapid7 'Rapid7 Position on the Computer Misuse Act 1990' (*Rapid7*, 8 June 2021) <https://www.rapid7.com/globalassets/_pdfs/policy/rapid7-position-on-cma-reform-20210608.pdf> accessed 18 April 2024
[44] Derek Wyatt *et al.* 'Revision of the Computer Misuse Act' (*All Parliamentary Internet Group,* June 2004) <https://www.cl.cam.ac.uk/~rnc1/APIG-report-cma.pdf> accessed 9 May 2024
[45] Zendata 'Navigating The Treat of Prompt Injection In AI Models' (*Zendata,* 24 January 2024) <https://www.zendata.dev/post/navigating-the-threat-of-prompt-injection-in-ai-models> accessed 10 May 2024
[46] Computer Misuse Act s.1
[47] Stefan Fafinski, 'Computer Misuse: The Implications of the Police and Justice Act 2006' (2008) 72 Journal of Criminal Law, 53
[48] Rapid7 'Rapid7 Position on the Computer Misuse Act 1990' (*Rapid7*, 8 June 2021) <https://www.rapid7.com/globalassets/_pdfs/policy/rapid7-position-on-cma-reform-20210608.pdf> accessed 18 April 2024

Overseas Regulation

Data Protection

In terms of Data Protection, the UK is one of the most restrictive countries with UK GDPR and the DPA covering personal and special category data quite well. These regulations cover private businesses, non-profits and government institutions alike and make everyone who handles data answerable to the Information Commissioner's Office (ICO). The EU generally handles data in much the same way since GDPR came into force although the extra scrutiny from the DPA does not apply. Most AI companies that operate within the EU will simply use GDPR standards across all of their data regardless of its origin, as it is the highest level of scrutiny that they will come under, meaning that this regulation often also affects people outside the EU.

The US and most other jurisdictions have much more relaxed regulations concerning the use of personal and special category data. There is no comprehensive US data privacy framework; instead, there is a patchwork of laws that cover different sectors, as well as smaller state regulations. Other countries have recently begun to follow the EU's example, implementing regulations similar to GDPR[49] or regulations that follow similar principles.[50]

[49] European Innovation Council and SMEs Executive Agency 'Draft Law on the Protection of Personal Data in Argentina' (EU *IP Helpdesk,* 29 February 2024) <https://www.dataguidance.com/news/argentina-aaip-publishes-guidelines-formulation> accessed 29 April 2024

[50] KPMG 'Data Protection: As a way of life' (*KPMG,* July 2018) <https://assets.kpmg.com/content/dam/kpmg/bh/pdf/8/bh-data-protection.pdf> accessed 29 April 2024

Privacy and Confidentiality

Similarly to Data Protection; Privacy and Confidentiality are covered relatively well by PECR,[51] the DPA and the Human Rights Act[52] in the UK, but are less well protected in other parts of the world. In the EU, PECR[53] also applies as well as the ECHR[54] meaning that privacy and Confidentiality are similarly well protected. The US has a few Constitutional Amendments that have been interpreted by the Supreme Court to relate to various aspects of personal privacy, such as the First,[55] Third, Fourth,[56] Fifth[57], Ninth and potentially Fourteenth[58] Amendments. In other jurisdictions, there is the cover of UN guidelines and other international frameworks as well as national laws but most are not as expansive and stringent as in the UK.

[51] The Privacy and Electronic Communication (EC Directive) Regulations 2003 s.6
[52] Human Rights Act 1998
[53] The Privacy and Electronic Communication (EC Directive) Regulations 2003 s.6
[54] European Convention on Human Rights 1950, Art 8 (1)
[55] Constitution Annotated 'Amdt1.7.5.10 Privacy Torts' (*constitution.congress.gov*) <https://constitution.congress.gov/browse/essay/amdt1-7-5-10/ALDE_00013811/> accessed 29 April 2024
[56] Constitution Annotated 'Amdt4.3.3 Katz and Reasonable Expectation of Privacy Test' (*constitution.congress.gov*) <https://constitution.congress.gov/browse/essay/amdt4-3-3/ALDE_00013717/> accessed 29 April 2024
[57] Constitution Annotated 'Amdt5.4.3 General Protections Against Self-Incrimination Doctrine and Practice' (*constitution.congress.gov*) <https://constitution.congress.gov/browse/essay/amdt5-4-3/ALDE_00000865/> accessed 29 April 2024
[58] Constitution Annotated 'Amdt14.S1.6.3.3 Informational Privacy, Confidentiality, and Substantive Due Process' (*constitution.congress.gov*) <https://constitution.congress.gov/browse/essay/amdt14-S1-6-3-3/ALDE_00013818/> accessed 29 April 2024

Intellectual Property

In contrast to the UK's Intellectual Property law, the US has a requirement of human authorship for works to be protected under copyright.[59] This means that any works created using only or mostly AI cannot be protected. This doesn't provide any compensation for the owners of any copyrighted material, either for the use of their work in creating AI systems or for the potential publishing of works that might violate their rights as an author.

In the EU there isn't any comprehensive law around Intellectual Property and although the AI Act acknowledges this issue, it isn't addressed any further. Outside of laws in individual countries, there are a few international treaties that regulate different areas of Intellectual Property such as the Paris Convention,[60] Berne Convention, Rome Convention and TRIPS among others, covering: industrial property, literary & artistic works, broadcasting and integrated circuits respectively.[61]

[59] US Copyright Office 'Copyright Registration Guidance: Works Containing Material Generated by Artificial Intelligence' (*Federal Register,* 16 March 2023) <https://www.federalregister.gov/documents/2023/03/16/2023-05321/copyright-registration-guidance-works-containing-material-generated-by-artificial-intelligence> accessed 10 May 2024

[60] LexisNexis IP expert 'Intellectual property international treaties and conventions' (*LexisNexis,* 2024) <https://www.lexisnexis.co.uk/legal/guidance/intellectual-property-international-treaties-conventions> accessed 11 May 2024

[61] WTO 'Other intellectual property conventions incorporated by reference into the TRIPS agreement.' (*WTO*) <https://www.wto.org/english/tratop_e/trips_e/intel4_e.htm> accessed 11 May 2024

AI Specific Regulation

The biggest recent regulatory action on AI is the EU AI Act,[62] which creates 4 distinct risk levels of AI: Unacceptable, High, Limited and Minimal. Unacceptable risk prohibits the use of AI, for example in social credit scoring, emotion recognition or behavioural manipulation. High risk imposes some strict rules without banning the use entirely. The UK has no proposal for regulation beyond existing legislation,[63] while the US issued an executive order late last year requiring the largest AI companies to disclose safety information with the white house and that they have policies to protect against some of the most extreme outcomes of AI.[64]

Canada also recently made a step forward in Moffatt v Air Canada,[65] by ruling that Air Canada could be held liable for negligent misrepresentation made to a customer by a chatbot. If this ruling were to be taken further, it could mean that companies that deploy chatbots and other forms of AI would be liable for their actions.

While the EU AI Act[66] regulates different uses of AI, outlawing ones that would have catastrophic effects and regulating ones that could be detrimental if used irresponsibly, it does not comprehensively regulate its development. Arguably the development of AI is where the technology poses the greatest threat but it's also where the threat is most abstract and difficult to predict.

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[62] EU AI Act 2024
[63] Department for Science, Innovation and Technology 'A Pro-Innovation Approach to AI Regulation' (*Gov.uk*, 29 March 2023) <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper> accessed 29 April 2024
[64] The White House 'Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence' (*whitehouse.gov,* 30 October 2023) <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/> accessed 19 April 2024
[65] Moffatt v Air Canada, 2024 BCCRT 149 (CanLII)
[66] EU AI Act 2024

Potential Further Regulation and its Effects

The EU AI Act's[67] approach in regulating the end uses of AI with a risk-based approach seems like a good one and is unlikely to greatly affect the development of AI now or in the future. It addresses most of the traditional fears around the use of AI and the detrimental effects that it could have on society. It does not, however, regulate the approach that AI companies take in building these models.[68] The White House Executive Order on AI[69] outlined that the developers of the largest AI models would have to show the US administration the training and safety testing data for their models. Even this small step, however, came with some controversy as the standard placed some administrative burdens on the largest AI companies with a cut-off for computing power.[70] Detractors mentioned the fact that structuring rules in this way would set up hurdles that would make it difficult for smaller companies to follow larger ones and disrupt the industry as well as discourage testing in the first place.[71]

The EU has also proposed the "European Centre for Algorithmic Transparency (ECAT)",[72] to implement the "Digital Services Act"[73] and try to regulate the use and impact of algorithms, AI or not, in everyday life. Such an agency to ensure that AI and algorithms are fair and follow the law, as part of a comprehensive AI framework seems like a logical necessity.

Overall, the most wide-reaching, systemic and potentially dangerous issues posed by AI are not addressable by one country or even one bloc of countries, making the idea of any one law ineffective at best and futile at worst.[74] There is a place for AI law especially in addressing traditionally domestic issues like Data Protection, Confidentiality and IP, there is also a growing need for international cooperation to stop this technology from getting out of hand and being used inappropriately by governments, militaries and businesses around the world.[75]

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[67] EU AI Act 2024
[68] EU AI Act 2024
[69] The White House 'Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence' (*whitehouse.gov,* 30 October 2023) <https://www.whitehouse.gov/briefing-room/presidential-actions/2023/10/30/executive-order-on-the-safe-secure-and-trustworthy-development-and-use-of-artificial-intelligence/> accessed 19 April 2024
[70] Adam Thierer 'White House Executive Order Threatens to put AI in a Regulatory Cage' (*RStreet,* 30 October 2024) <https://www.rstreet.org/commentary/white-house-executive-order-threatens-to-put-ai-in-regulatory-cage/> accessed 12 May 2024
[71] James Broughel 'Biden's New AI Executive Order Is Regulation Run Amok' (*Forbes,* 31 October 2023) <https://www.forbes.com/sites/jamesbroughel/2023/10/31/bidens-new-ai-executive-order-is-regulation-run-amok/> accessed 4 May 2024
[72] Mark D. Cole *et al.* 'Algorithmic transparency and accountability of digital services' (*IRIS,* December 2023) <https://rm.coe.int/iris-special-2023-02en/1680aeda48> accessed 5 May 2024
[73] Regulation (EU) 2022/2065 of the European Parliament and of the Council of 19 October 2022 on a Single Market For Digital Services and amending Directive 2000/31/EC (Digital Services Act)
[74] Telefonica 'Towards Global Governance: Progress on AI Regulation in Europe' (*Telefonica,* 21 March 2024) <https://www.telefonica.com/en/communication-room/blog/towards-global-governance-progress-on-ai-regulation-in-europe/> accessed 12 May 2024
[75] Cameron F. Kerry *et al* 'Strengthening international cooperation on AI' (*Brookings,* 25 October 2021) <https://www.brookings.edu/articles/strengthening-international-cooperation-on-ai/> accessed 12 May 2024

Taking the view, however, that unamended, existing legislation should be sufficient to cover an entirely new technology which was scarcely imaginable even a decade or two ago, as HM government does,[76] seems like a gross underestimation. This technology has been described as similarly "transformative as [the] Industrial Revolution"[77] or electricity.[78]

It seems as though this would be a similar mistake to the lack of regulation on social media platforms, in areas such as Data Protection, antitrust and online safety that plagued politics for more than a decade after Facebook first emerged and to some extent continues today. It took 13 years after Facebook before the EU implemented GDPR[79] and The Online Safety Act only passed in 2023.[80]

In general, industry regulation works best when it isn't prescriptive; regulating the outcomes of technology, not its methods is often the best way to regulate as it does not limit the ways that businesses can innovate but does stop them from using technologies in certain harmful ways.[81] This also means that it will apply to all forms of the technology, rather than only narrow descriptions that may not fully encapsulate forms that could not be envisioned, which is why the EU AI Act[82] and older regulations like the CMA and Theft Act[83] are so successful.

There is, however, another layer that could be added to this: self-regulation. Although it is a bad idea to prescribe how AI companies should safeguard against bad outcomes during the development of AI, having several guiding principles as part of a regulatory framework would be more permissive. Then allowing companies to decide their own policies regarding those principles while requiring that they be held to their policies would ensure that companies can innovate and decide how they want to keep their development safely within those principles.

It may seem unnecessary to further regulate or provide any comprehensive framework specifically for AI, especially considering that some uses and issues are already constrained by existing legislation. The argument from HM government is that more regulation when we don't understand the full effects of AI, is a bad idea and would only work to constrain innovation and drive businesses to leave the UK. While this may be true, despite the seemingly sensible nature of the regulation outlined above, the opposite may also be true.

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[76] Department for Science, Innovation and Technology 'A Pro-Innovation Approach to AI Regulation' (*Gov.uk*, 29 March 2023) <https://www.gov.uk/government/publications/ai-regulation-a-pro-innovation-approach/white-paper> accessed 29 April 2024

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[80] Online Safety Act 2023

[81] Tania van den Brande 'Rules-based versus principles-based regulation - is there a clear front runner?' (*Ofcom,* 3 August 2021) <https://www.ofcom.org.uk/news-centre/2021/rules-versus-principles-based-regulation> accessed 12 May 2024

[82] EU AI Act 2024

[83] Theft Act 1968

The lack of a clear framework on AI with the prospect that such regulations may one day appear can create uncertainty that could just as easily harm investment and innovation in the UK.[84]

This issue together with the other problems that AI creates, which may require adjustments to surrounding bodies of law, constitute a real need to address AI comprehensively and directly. This need should be addressed sooner rather than later; as social media and other technological issues have shown us, there is real harm in inaction.

[84] Regulatory Horizons Coucil 'The Future of Technological Innovations and the role of Regulation' (July 2021) <https://assets.publishing.service.gov.uk/media/611259bbd3bf7f044630abb9/rhc-future-technological-innovations-role-regulation.pdf> accessed 6 May 2024

Conclusion

AI has many uses and will undoubtedly change our world in many unimaginable and intangible ways. It also carries many dangers and issues that will be difficult to foresee and prepare for. In the existing areas of law that concern Data Protection, Confidentiality and Intellectual Property there are existing bodies of law that are equally applicable to AI as any other technology. This means that these existing bodies of law are not *wholly* unable to meet the challenges of AI but that they may need to be adjusted in certain areas to clarify how AI can be used. There is no particular evidence that regulation will necessarily stifle innovation, especially if the regulation takes a non-prescriptive, light-touch approach.

There are, however, several other areas of law that may require further reform or clarification; with some areas seemingly wholly unable to meet the challenges of AI. HM government has taken the stance that there is no need for a comprehensive legislative framework or a commissioner concerning AI, similar to how the EU has approached this issue. Although this approach may be “pro-innovation”, it does also risk, once again, missing the opportunity to regulate an industry before it creates large-scale and real-world harm, as social media previously has. It’s important to remember that we will only have one opportunity to regulate this while it is still in its infancy and it warrants more thought and discussion than it currently sees.

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