A Global Summary of AI Regulations
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In this document you will find a short summary of the current state of AI regulation in Brazil, Canada, Europe, Japan, the UK and the US. It was complied during the month of August, 2024, from various sources online, including Open AI's Chat GPT. It may be updated from time to time, as this area is moving quickly. You might want to begin with these summaries and then dig into the topic in more detail. The government documents can be very informative, but there are many, many documents being generated each day. Not all of them can be found translated to English.

Key Points: As of now, the EU AI Act is the only legislation that is comprehensive. It covers the development, marketing, use and monitoring of AI systems. So far, across all these countries, there is no sign of creating a global unified framework, however, the UN General Assembly has recently (March 2024) "adopted a landmark resolution on the promotion of 'safe, secure and trustworthy' artificial intelligence (AI) systems that will also benefit sustainable development for all." This document exists without a vote but was "co-sponsored" or backed by more than 120 other Member States. The Assembly also highlighted the **respect, protection and promotion of human rights** in the design, development, deployment and the use of AI. For more on the UN AI efforts see: https://news.un.org/en/story/2024/03/1147831

As an AI researcher with colleagues in many countries, I believe each culture, region, or country may have unique needs and requirements that will not easily lend themselves to one single harmonious globally unified framework. Instead, each country will govern itself. However, the ideas of

the UN and the EU may be inspiration for individual countries. This is just my personal perspective.

The remainder of this document is a summary of AI regulation steps organized by country.

BRAZIL

As of now, Brazil does not have a regulatory framework for artificial intelligence that is as comprehensive as the EU AI Act. However, Brazil is taking steps towards establishing AI regulations and frameworks. Here's an overview of the current situation regarding AI regulation in Brazil:

1. Brazilian Artificial Intelligence Strategy:
    - In 2021, Brazil launched the **"AI Strategy for Brazil"** ("Estratégia Brasileira de Inteligência Artificial"), which outlines the country's goals for AI development and use. The strategy focuses on promoting innovation, ensuring ethical use, and improving the competitiveness of Brazilian industries through AI.
2. Draft AI Regulatory Framework:
    - In 2021, Brazil's **Senate** introduced a draft bill on AI, known as the **"AI Law"** ("Lei Brasileira de Inteligência Artificial"). This proposed legislation seeks to regulate the use of AI in Brazil, focusing on aspects such as transparency, accountability, and non-discrimination. The bill is designed to establish principles and guidelines for AI deployment, aiming to balance innovation with the protection of individual rights.
3. General Data Protection Law (LGPD):
    - Brazil's **General Data Protection Law** ("Lei Geral de Proteção de Dados" or LGPD), which came into effect in 2020, is an important piece of legislation related to AI. Although not specific to AI, LGPD regulates data protection and privacy, which are critical issues in AI systems that process personal data. The LGPD influences how AI systems handle personal information and ensures compliance with data protection standards.
4. Ethical and Research Initiatives:
    - Brazil is also involved in various initiatives to promote ethical AI research and development. Institutions and organizations within Brazil are working on guidelines and best practices for responsible AI use.

While Brazil is making progress, its current efforts do not yet match the comprehensive and sector-specific nature of the EU AI Act. The regulatory landscape for AI in Brazil is evolving, and ongoing legislative efforts may lead to more detailed regulations in the future. For the most recent developments, you should monitor updates from Brazilian government agencies and relevant legislative bodies.

CANADA

Canada does not have a regulatory framework for artificial intelligence (AI) as comprehensive and detailed as the EU AI Act. However, Canada is actively working on AI regulation and ethical guidelines. Here's an overview of the current and developing AI regulatory landscape in Canada:

1. Artificial Intelligence Strategy:
    - Canada has been proactive in promoting AI development through the **"Pan-Canadian Artificial Intelligence Strategy"** launched in 2017. This strategy focuses on strengthening Canada's AI research, fostering innovation, and supporting collaboration among research institutions.
2. AI and Data Privacy:
    - **Personal Information Protection and Electronic Documents Act (PIPEDA)**: This is Canada's primary data protection law, which governs how personal information is collected, used, and disclosed by private sector organizations. Although not specific to AI, PIPEDA's principles are relevant to AI systems that handle personal data.
3. AI Ethical Guidelines:
    - The **"Directive on Automated Decision-Making"** was introduced by the Canadian government in 2019 to ensure that automated decision-making processes are fair, transparent, and accountable. This directive applies to federal government departments and agencies using AI and automated systems, focusing on the impact of these systems on individuals and ensuring that decisions are made based on clear, understandable criteria.
4. Algorithmic Transparency and Accountability:
    - The **"Ethics Guidelines for Trustworthy AI"** were published by the **Canadian Institute for Advanced Research (CIFAR)** and other partners. These guidelines

emphasize the importance of transparency, accountability, and ethical considerations in AI development and deployment.

5. Legislative Developments:
    - In April 2022, Canada introduced the **"Digital Charter Implementation Act"**, which includes provisions related to AI and automated decision-making. The Act aims to enhance digital privacy and data protection and establish clear rules for AI use.
6. Canadian AI Advisory Council:
    - Canada has established advisory councils and working groups to provide guidance on AI policy and regulation, helping to shape the country's approach to AI governance.

While Canada has made significant strides in developing AI-related policies and ethical guidelines, it does not yet have a single, comprehensive piece of legislation equivalent to the EU AI Act. The regulatory landscape is evolving, and ongoing efforts may lead to more detailed and sector-specific regulations in the future. For the latest updates, monitoring Canadian government sources and legislative developments is recommended.

EU

The EU AI Act has been published in the Official Journal of the EU on 12 July 2024 after more than three years negotiations and entered into force on 1 August 2024. The AI Act has a gradual enforcement timeline, and the majority of its provisions will start applying on 2 August 2026. As of now, the EU AI Act is a piece of legislation that applies directly to all European Union member states. It is not something that individual countries within the EU adopt separately; rather, it becomes law across the entire EU once it is enacted. The Act is designed to regulate artificial intelligence within the EU, ensuring that AI systems are safe and aligned with EU values and fundamental rights.

Here's a brief overview:

1. **European Union Member States**: The EU AI Act will be applicable to all member countries of the European Union once it is fully enacted and comes into force. This includes countries like Germany, France, Italy, Spain, and the Netherlands, among others.
2. **Countries in the EU**: As of now, no non-EU countries have adopted the EU AI Act. However, the Act may influence international

standards and practices, potentially impacting countries outside the EU that engage in business with or operate within the EU.

For the most current status and any updates on the implementation or adoption timeline, you should refer to official EU sources or recent legislative updates.

The EU AI Act is a regulatory framework proposed by the European Union to govern the development, deployment, and use of artificial intelligence (AI) systems within its member states. Its primary aim is to ensure that AI technology is used in a way that is safe, ethical, and respects fundamental rights.

The Act classifies AI systems into different risk categories:

1. **Unacceptable Risk**: These are AI systems that pose a threat to safety or fundamental rights and are banned outright. Examples include social scoring by governments or exploitation of vulnerabilities of specific groups.

2. **High Risk**: AI systems that have significant impacts on rights and safety, such as those used in critical infrastructure, education, employment, and law enforcement. These systems must meet strict requirements for transparency, accountability, and data governance.

3. **Limited Risk**: These systems are subject to specific transparency obligations. For example, AI systems that interact with people, like chatbots, need to disclose that they are AI.

4. **Minimal Risk**: Most AI systems fall into this category and are subject to minimal regulation. These include applications like spam filters or AI-driven games.

The Act also emphasizes requirements for transparency, data quality, human oversight, and documentation. It introduces measures to promote innovation while safeguarding public trust in AI technologies. The EU AI Act is part of a broader effort by the EU to establish itself as a global leader in ethical AI and digital regulation.

JAPAN

Yes, Japan has been developing its own framework for regulating artificial intelligence, although it is different from the EU AI Act. Japan's approach

focuses on ensuring that AI systems are used responsibly and ethically. Here are some key aspects of Japan's AI regulation:

1. **AI Principles**: In 2019, Japan released the **"AI Strategy 2019"** and the **"AI Principles"** which outline the country's approach to AI development and use. These principles emphasize transparency, accountability, and fairness in AI systems.
2. **"AI Utilization Guidelines"**: In 2020, the Japanese government issued the **"AI Utilization Guidelines"**. These guidelines aim to promote the use of AI while ensuring that it is developed and used in ways that are ethical, trustworthy, and transparent. The guidelines include principles related to safety, privacy, and the ethical implications of AI.
3. **"AI Governance Guidelines"**: In 2021, the Japanese government also introduced the **"AI Governance Guidelines"**, which provide a framework for addressing issues such as transparency, accountability, and fairness in AI systems. These guidelines are intended to support both the public and private sectors in deploying AI responsibly.
4. **International Collaboration**: Japan is also involved in international discussions and collaborations on AI ethics and regulation, contributing to global standards and frameworks.

While Japan's regulations and guidelines focus on ethical use and principles, they do not have a single comprehensive piece of legislation like the EU AI Act. Instead, Japan's approach is more fragmented but aims to address various aspects of AI governance and ethics through multiple documents and strategies.

UK

As of now, the United Kingdom does not have a regulatory framework for artificial intelligence (AI) that is directly equivalent to the EU AI Act. However, the UK has been developing its own approach to AI regulation and ethical guidelines. Here's an overview of the relevant developments in the UK:

1. AI Strategy and Policy:
    - The UK Government's **"National AI Strategy"** was launched in 2021, outlining the country's vision to become a global leader in AI. The strategy focuses on promoting AI innovation, ensuring that AI technologies are used responsibly, and supporting research and development.
2. AI and Data Protection:

- The UK's data protection regulations, including the **"UK General Data Protection Regulation (UK GDPR)"** and the **"Data Protection Act 2018"**, are crucial for AI systems handling personal data. These regulations ensure that personal data is processed transparently and with respect for individuals' privacy rights.

3. AI Ethics and Guidelines:
   - The UK has issued several documents related to AI ethics and governance. For instance, the **"Ethics Guidelines for Trustworthy AI"** from the **Centre for Data Ethics and Innovation (CDEI)** emphasize principles such as transparency, accountability, and fairness in AI systems.
4. AI Regulatory Approach:
   - The UK Government has indicated an interest in developing a more specific regulatory framework for AI. In April 2024, the UK Government released a **"Proposals for AI Regulation"** document, which outlines a potential approach to AI regulation. This document suggests a framework focusing on risk-based regulation and emphasizes a principles-based approach rather than a detailed regulatory regime like the EU AI Act.
5. Office for Artificial Intelligence:
   - The **Office for Artificial Intelligence** within the UK Government plays a role in overseeing and developing policies related to AI. It aims to ensure that AI contributes positively to society while addressing potential risks and ethical concerns.
6. Regulatory Sandbox:
   - The UK has established a **"Regulatory Sandbox"** for AI, allowing businesses to test and innovate with AI technologies in a controlled environment. This initiative helps in understanding the practical implications of AI technologies and refining regulatory approaches.

While the UK is developing its approach to AI regulation, its framework is currently less comprehensive than the EU AI Act. The UK's approach tends to focus on principles and guidelines rather than detailed, sector-specific regulations. The regulatory landscape is evolving, and future developments may lead to more detailed AI regulations. For the latest updates, you should refer to UK government publications and official announcements.

US

As of now, the United States does not have a comprehensive federal regulation specifically focused on artificial intelligence (AI) akin to the EU AI Act. However, there are various initiatives, regulations, and guidelines at both the federal and state levels that address aspects of AI. Here's an overview of the current state of AI regulations in the U.S.:

Federal Initiatives and Regulations:

1. Executive Orders and National Strategies:
    - **"AI Initiative"**: The U.S. government has outlined its approach to AI in several national strategies and executive orders. For example, the **"American AI Initiative"** was launched in 2019 to promote AI research, development, and deployment while ensuring the technology is used responsibly.
2. Algorithm Transparency and Accountability:
    - **"AI in Government Act"**: This act, introduced in Congress, aims to improve the use of AI within federal agencies by promoting transparency and accountability. It emphasizes the need for clear guidelines on how AI systems are used in government operations.
3. Federal Trade Commission (FTC):
    - The FTC has issued guidelines related to AI and automated systems, focusing on consumer protection and fairness. It addresses issues like deceptive practices and discrimination that may arise from AI technologies.
4. Data Privacy and Protection:
    - **"California Consumer Privacy Act (CCPA)"** and **"California Privacy Rights Act (CPRA)"**: While not specific to AI, these state laws address data privacy and can impact AI systems that handle personal data. The **"General Data Protection Regulation (GDPR)"** in Europe has influenced similar discussions in the U.S.
5. AI Ethics and Guidelines:
    - **"National Institute of Standards and Technology (NIST)"**: NIST is working on developing guidelines and standards for AI, including frameworks for managing risk and ensuring AI systems are fair and transparent. Their **"AI Risk Management Framework"** is a key part of this effort.

State-Level Initiatives:

1. California:

    - **California** has been at the forefront of AI regulation at the state level. In addition to the CCPA and CPRA, the state has introduced bills aimed at increasing transparency and accountability in AI, such as those addressing automated decision-making and facial recognition.
2. New York:
    - **New York City** has implemented regulations related to automated employment decision tools. These regulations require employers to conduct audits on AI systems used in hiring processes to ensure they are fair and non-discriminatory.
3. Washington:
    - **Washington State** has proposed legislation concerning AI transparency and ethical considerations, focusing on the responsible use of AI technologies.

Ongoing Developments:

- **Congressional and Legislative Efforts**: There are ongoing discussions and legislative efforts at the federal level to create more comprehensive AI regulations. Various bills and proposals are being considered, focusing on ethical AI, transparency, and accountability.

While the U.S. lacks a unified federal AI regulatory framework, these various initiatives and guidelines are shaping the landscape of AI governance, e.g. the U.N. text (March 2024) was proposed by the U.S. The regulatory environment is evolving, and more comprehensive regulations may emerge in the future as AI technology and its impacts continue to develop. For the most recent updates, it's useful to follow developments from relevant government agencies and legislative bodies.

DISCLAIMER: This is not an official document, nor should it be used as one. If you are serious about this topic, it is important to look at multiple sources. This summary is intended to be a helpful but short informal glance at the regulatory progress on AI as it is August, 2024. This document may be updated from time to time. - clm