Analysis of Artificial Intelligence regulations for trustworthiness

Hye-sung Park, Hun-yeong Kwon
School of Cybersecurity, Korea University, Seoul, South Korea
whitecil@korea.ac.kr, khy0@korea.ac.kr

Abstract

Artificial intelligence emerged as a powerful technology using data in the 4th Industrial Revolution. As a result, artificial intelligence is currently being considered for use in many fields due to its efficiency and function. In this situation, to actively utilize artificial intelligence, society must accept artificial intelligence as a technology that can be used in the community. In other words, trustworthiness in artificial intelligence is needed within society. Currently, many countries are preparing various measures, such as policies and laws, to secure the trustworthiness of artificial intelligence. This paper analyzes acts or bills of artificial intelligence prepared in the country based on ensuring artificial intelligence trustworthiness. Through this, this paper tries to understand the characteristics of ways to secure the trustworthiness of artificial intelligence through acts for each country and to find the legal contents that can more effectively ensure trustworthiness.

Introduction

With the emergence of ChatGPT, interest in artificial intelligence (AI) is once again on the rise. ChatGPT demonstrates the convenience and efficiency of AI to the public, implying that AI will soon become ubiquitous in our daily lives. In addition, AI is being considered for various fields, such as finance and public services. To actively utilize and popularize AI, trust in AI among members of society is necessary. Currently, many countries, such as Europe and the United States, are establishing various policies and laws to secure the trustworthiness of AI. In particular, the enactment of laws that ensure compliance with mandatory regulations is being discussed. This paper aims to examine the current status of regulations in each country and analyze them based on the goal of securing the trustworthiness of AI. To do so, we will examine the meaning of trustworthiness in AI and ways to secure it. Based on this, we will derive criteria for analyzing AI regulations and analyze the AI regulations of each country.

Meaning and Assurance of trustworthiness in Artificial Intelligence

The concept of trust and the meaning of trustworthiness in artificial intelligence

Trust is a concept that has been studied in various fields such as psychology, economics, sociology, and political science and is also actively researched in organizational studies and information systems (IS). The concept of trust is defined as the willingness to accept one's vulnerability to the actions of others, regardless of whether the person can monitor or control them, in situations where it is anticipated that the other person will perform an important action for oneself (Mayer et al. 1995). In other words, trust is the willingness to accept vulnerability in uncertain conditions, so it is closely related to human expectations and the judgment of "accepting vulnerability", regardless of the basis for that judgment (Bratspies. 2009), and it can only have a retrospective characteristic (Potter. 2002). There-fore, the trust relationship evolves from the initial trust based on no prior experience to knowledge-based trust (Lewicki et al. 1996).

In the case of artificial intelligence, this trust is closely related to its active use in society, and this is linked to the definition of trust mentioned earlier. Trust in a particular subject is a judgment based on expected benefits from that subject, which means willingly accepting vulnerability to that subject. In the case of human subjects, it means expecting the other party to have the expected ability or influence (Mcknight et al. 2002), and in the case of technology, it means expecting the technology to provide ap-propriate functions and operate correctly (Mcknight et al. 2011). Accordingly, trust in AI can be considered as the demonstration of the expectation within society that AI will provide appropriate functionality and operate correctly. Furthermore, the

trustworthiness of artificial intelligence must be ensured for the potential of artificial intelligence to be fully realized in society (Independent High-Level Expert Group on Artificial Intelligence. 2019). Therefore, ensuring trustworthiness in using artificial intelligence is an important requirement for these reasons.

Efforts to Ensure the trustworthiness of Artificial Intelligence

Efforts to ensure the trustworthiness of artificial intelligence, which is an essential requirement for its use, can be broadly divided into two categories: securing the trustworthiness of the technology itself and using social institutions to ensure the trustworthiness of the technology. Both approaches are actively being pursued.

Firstly, securing the technology's trustworthiness involves developing the technology in accordance with definitions and principles for trustworthy artificial intelligence that have already been extensively researched. This consists in transforming the technical features of artificial intelligence to embody human values for trust. Through this approach, artificial intelligence is already equipped with human-trustworthy attributes. Currently, research on explainable and interpretable AI is being conducted about transparency.

Another approach to ensuring the trustworthiness of technology involves using social measures such as regulations to garner trust within society, indirectly securing trust for artificial intelligence. This approach does not directly transform the properties of artificial intelligence to ensure trust, but instead relies on people's trust in the characteristics of regulations, leading to an awareness that artificial intelligence can become a trustworthy technology through regulation. Currently, many countries are announcing and implementing ethical principles and guidelines for artificial intelligence in the form of self-regulation, and there are movements to introduce legal frameworks to further strengthen trust within society.

Status of AI Regulation and Analysis Criteria

Status and Necessity of AI Regulations

Discussions on AI regulations began in 2020, which can be seen through the regulatory guidelines for the use of AI released by the OMB in the United States (OMB, 2020) and the white paper on AI released by the European Union (European Commission, 2020), which emphasizes the need for legal regulations on AI algorithms. These movements towards AI regulations have gradually led to legislation on AI, which is either completed or currently under-way in various countries. In fact, in the United States, more legislation is being enacted at the federal and state levels than what is mentioned in Table 1[1](National Conference of State Legislatures)

Nation (state)	title of the Act(bill)	Legislative date
U.S.A (Federation)	Executive Order 13960: Promoting the Use of Trustworthy Artificial Intelligence in the Federal Government (Executive Order 13960)	2020. 12 (enacted)
U.S.A (Federation)	National Artificial Intelligence Initiative Act of 2020(NAIIA)	2021, 01 (enacted)
U.S.A (Federation)	Algorithmic Accountability Act of 2022(AAA)	2022. 03
U.S.A (Massachusetts)	An Act establishing a commission on automated decision-making by government in the commonwealth	2022. 03
U.S.A (Washington)	Chapter 43.386 RCW Facial Recognition	2020. 03 (enacted)
U.S.A (New Jersey)	S. 1402: An Act concerning discrimination and automated decision systems and supplementing	2022. 02
U.S.A (Illinois)	Artificial Intelligence Video Interview Act	2019. 08 (enacted)
European Union	Proposal for a Regulation laying down harmonized rules on artificial intelligence, Artificial Intelligence Act(AI Act)	2021. 04
South Korea	Act on Artificial Intelligence Industry Promotion and Trust-building (AAIIPT)	2022. 12
	Act on Algorithms and Artificial Intelligence (AAAI)	2022. 11
	Act on the Development of Artificial Intelligence and the Establishment of Trust in AI (ADAIETAI)	2022. 07
China (Shenzhen)	Regulations for the Promotion of the Artificial Intelligence Industry in the Shenzhen Special Economic Zone(RPAIIS)	2022. 08 (enacted)

Table 1 Overview of AI Legislation and Regulations by Country

To understand the potential impact of these laws and bills on the trustworthiness of AI, it is necessary to analyze their content and structure. By analyzing these laws and bills by country, we can identify the characteristics of AI regulations by country and model the methods of introducing AI regulations. This can help us understand which countries' AI regulations are more effective in ensuring trustworthiness. Therefore, below we will analyze the AI laws and bills by country mentioned in Table 1 based on criteria related to AI trustworthiness.

[1] The acts and bills in Table 1 were first selected based on their scope across the entire country or union of nations, and in cases where the scope was limited to specific regions, the decision was based on whether the acts and bills had already been enacted and, if not, whether there was sufficient material available to the authors to analyze.

Criteria for analyzing AI regulation based on trustworthiness

Overview of AI trustworthiness

To gain a comprehensive understanding of AI regulation, it is necessary to analyze it based on the principles of AI trustworthiness. This is to understand the purpose and characteristics of AI regulation and to identify which principles of trustworthy AI each regulation focuses on. Additionally, it is crucial to identify specific contents that each country emphasizes.

Many principles necessary for ensuring trustworthiness in artificial intelligence have already been presented through numerous studies, and various frameworks and guidelines have been proposed accordingly. Among these various principles of AI trustworthiness, this paper aims to analyze them based on the ethical AI principles announced by AI4People (Floridi et al. 2018). These principles encompass various principles mentioned in existing trustworthy AI frameworks and guidelines (Thiebes et al. 2021). Therefore, this paper aims to analyze AI regulation based on the ethical AI principles presented by AI4People, which include Beneficence, Non-maleficence, Autonomy (Floridi and Cowls 2019), Justice, and Explicability. The definitions of each criterion are in Table 2 (Floridi et al. 2018).

principles	description
Beneficence	Beneficence refers to the development, deployment, and use of AI that is beneficial to humanity and the planet in the sense that it promotes the well-being of humans and the environment, and respects basic human rights
Non-maleficence	Non-maleficence advocates the development, deployment, and use of AI such that it avoids bringing harm to people
Autonomy	some mainly focus on the promotion of human autonomy, agency, and oversight (e.g., EU TAI Guidelines), others also consider the restriction of AI-based systems' autonomy, where necessary (e.g., the Montreal Declaration)
Justice	① the utilization of AI to amend past inequities like discrimination ② the creation of shareable and subsequent distribution of benefits through AI ③ thwarting the creation of new harms and inequities by AI
Explicability	explicability entails the creation of explainable AI by producing (more) interpretable AI models whilst maintaining high levels of performance and accuracy

Table 2 The definitions of ethical AI principles proposed by AI4People

Structural content of regulation

In addition to the criteria for AI regulation, it is also necessary to analyze AI regulation as a structural content of the law. The structural content of the law refers to the characteristics of the regulation itself, such as the scope of the regulation, the jurisdiction of the regulation, and the method of regulation. This helps to identify the characteristics of AI regulation and to understand how each country introduces AI regulation. Moreover, based on this analysis, it is possible to present a model for introducing AI regulation for each country.

To analyze the structural content of regulation in this paper, we will use two major criteria. The first is the scope of regulation. Here, the scope of regulation refers to the range of AI functions regulated, the range of AI use, and the jurisdictional units to which the regulation is applied. The range of AI functions refers to the AI systems that the regulation controls, whether the regulation only controls AI systems that perform specific tasks or all AI systems. The range of AI use refers to the areas in which AI is used. It can be broadly divided into public and private sectors but can be classified more precisely. The jurisdictional unit to which the regulation is applied refers to the law's scope of application. It can be classified into whether it is applied at the national or higher levels, such as supranational levels.

The second criterion is the method of control and management. The method of control and management refers to the substantive content that the law seeks to regulate and how it seeks to ensure AI trustworthiness. There are various methods of control and management, such as re-quiring AI systems to undergo specific tests, establishing ethical guidelines, and requiring AI developers to disclose the source code of their systems. It is important to identify which control and management methods each country adopts and how effective they are in ensuring AI trustworthiness.

Analysis of AI Regulation Based on trustworthiness and Proposal of Regulation Introduction Model

Results and Characteristics of AI Regulation Analysis in Various Countries

The following Table 3 – Table 6 presents the analysis of AI regulation by countries based on the aforementioned criteria. Based on this, the characteristics of the trust assurance mechanisms each country aims to achieve in their AI regulation can be examined as follows.

United States

In the case of the United States, regulations established or being prepared by the federal government uniformly encompass the entirety of the principles of artificial intelligence trustworthiness. However, regulations being established or

prepared by individual states are mainly focused on specific principles. The reason for this can only be understood by comparing the structural contents of the regulations. It can be confirmed that regulations being established and prepared at the state level all target specific artificial intelligence and therefore have a narrower scope of application than federal regulations. This is why the principle of non-maleficence is prominently reflected in the content of state-level regulations. Prohibiting harm is possible because one knows what is harmful in its use (Thiebes et al., 2021). State-level regulations target the use of specific artificial intelligence, which makes it possible to anticipate the scope of use of the targeted artificial intelligence and to determine the harm that may result from it. Therefore, state-level regulations on artificial intelligence aim to control harm directly. Consequently, in most states, the center of regulation is the non-maleficence principle, which excludes harmful elements. In contrast, federal regulations focus on indirect management methods, such as issuing guidelines for controlling artificial intelligence or establishing governance structures for it, so they can uniformly and comprehensively encompass the principles of artificial intelligence trustworthiness.

	Executive Order 13960	NAIIA	AAA
Beneficence	Sec. 1 Sec 3(b)	Sec. 5101(a)(2) Sec. 5104(d)(5) Sec. 5104(d)(8) Sec. 5104(d)(13)	Sec. 4(1) Sec. 4(11)
Non-maleficence	Sec. 1 Sec. 3(a), (d)	Sec. 5104(d)(4) Sec. 5104(e)(2)	Sec. 4(3) Sec. 4(9)
Autonomy	Sec. 1 Sec. 3(g), (i)	Sec. 5104(d)(12) Sec. 5104(e)(2)	Sec. 4(8) Sec. 4(10)
Justice	Sec. 1 Sec. 3(a)	Sec. 5104(d)(10) Sec. 5104(d)(12) Sec. 5104(e)(2)	Sec. 4(4) Sec. 4(11)
Explicability	Sec. 1 Sec. 3(e), (f), (h)	-	Sec. 4(8) Sec. 4(11)

	Massachusetts	Washington	New Jersey	Illinois
Beneficence	Sec.11. (b)(i), (b)(ii)	Sec. 02 Sec. 04 Sec. 09 Sec. 10 Sec. 90	-	-
Non-maleficence	Sec.11 (b)(iv), (b)(v), (b)(vii)	Sec. 02 Sec. 03 Sec. 08 Sec. 90	Sec. 2 Sec. 3 Sec. 4	Sec. 5 Sec. 10 Sec. 15
Autonomy	Sec.11 (b)(i), (c)(iii)	Sec. 02 Sec. 06	-	-
Justice	Sec.11 (c)(iii)	Sec. 03 Sec. 05	Sec. 2 Sec. 3 Sec. 4	-
Explicability	Sec.11 (b)(i)	Sec. 02 Sec. 07	-	Sec. 5

Table 3 Analysis of US AI Regulation in accordance with AI Trustworthiness Principles

	Executive Order 13960	NAIIA	AAA
Range of AI functions regulated	All AI within Federal Agencies	All AI	Enhanced Decision-Making Processes and Automated Decision Systems
Range of AI use	Public	Public & Private	Private
Jurisdiction	Nation	Nation	Nation
Direct Control	-	-	Mandatory impact Assessment, Annual report disclosure, Sanction
Indirect Management	Support for the application of Trustworthiness principles, etc.,	Establishment/Implementation of National AI Initiative, etc.	Publication of guidelines by the committee

	Massachusetts	Washington	New Jersey	Illinois
Range of AI functions regulated	Automated Decision Systems	Facial Recognition Services	Automated Decision Systems	Video Interviews using AI
Range of AI use	Public	Public	Private (Finance, Insurance, Healthcare)	Public & Private
Jurisdiction	State	State	State	State
Direct Control	-	Accountability Reporting, Review and action, restrictions etc.	Establishment of permissible criteria, etc.	Disclosure/Notification of use, Restriction etc.
Indirect Management	Installation and set duties of the committee	-	-	-

Table 4 Analysis of US AI Regulation Based on Structural Content of Regulations

Through this, it can be confirmed that dual legislation is being introduced in U.S. regulations. The federal government has introduced indirect legislation centered on management, providing comprehensive management and governance for all artificial intelligence. On the other hand, state-level regulations establish specific rules that directly exclude harm from using artificial intelligence in specific functions. The content of federal and state-level regulations differs as they have different roles in regulating. While the federal government sets the framework for establishing the trustworthiness of artificial intelligence regulations, state-level regulations gradually build trust in artificial intelligence through regulated use. The difference in regulation roles between the federal government and states can positively impact the gradual building of trust in artificial intelligence within society, allowing the country to control the direction and pace of

building trust in artificial intelligence as a practical solution for ensuring trust through regulation.

European Union

In the case of the European Union, like the United States federal government, regulations for ensuring the trustworthiness of artificial intelligence (AI) are included uniformly in the overall regulations. However, there are more provisions related to the Autonomy principle of AI trustworthiness among the principles of AI trustworthiness in the European Union. This means that the regulations focus on human management and supervision of AI and related institutions. The Autonomy principle is particularly emphasized in the European Union because the AI regulations target not only the existing AI but also AI that will be developed in the future (European Commission, 2021). The Autonomy principle is aimed at balancing AI and human autonomy, finding a middle ground where both can coexist without impinging on the other. (Thiebes et al., 2021). Balancing means that different responses are need-ed depending on the situation, including flexibility, which can vary depending on the AI. Therefore, the European Union's AI regulations, which emphasize the Autonomy principle and focus on human management and supervision of AI, can have the flexibility to cope with the development of AI.

	AI Act
Beneficence	preface
Non-maleficence	Art. 5~12, Art. 15
Autonomy	Art. 14, Art. 16~51, Art. 56~59, Art. 61, Art. 63~69
Justice	Art. 5, Art. 7, Art. 52
Explicability	Art. 13, Art. 52, Art. 62
Range of AI functions regulated	All AI
Range of AI use	Public & Private
Jurisdiction	Union of nations
Direct Control	Prohibition of specific AI, Specification of conditions for specific AI use and restriction, Obligation of specific AI-related entities, Certification and impact assessment system, Post-monitoring, etc.
Indirect Management	Establishment of Artificial Intelligence Committee, Establishment of National Regulatory Authority, etc.

Table 5 Analysis of the EU Artificial Intelligence Regulation based on the AI Trustworthiness Principles and the Structural Content of Regulations

These characteristics are related to the attribute of general laws that the European Union's AI regulations possess, in which a single law deals with all AI systems and services (Razis et al., 2021). The fact that a single regulation can flexibly cope with all problems caused by AI means that the existence of such regulation can secure trust in all aspects of using AI. In other words, people can willingly accept vulnerabilities that may occur due to AI, knowing that they can be dealt with sufficiently by the regulation. The expectation that the regulation can adequately address any problem caused by AI is what creates such trust. Therefore, the current European Union regulation, which combines the flexibility of coping with issues and the at-tribute of general laws, can have a positive effect, producing efficient and effective results in securing trust in AI through a single law.

South Korea and China

Analysis of AI regulations in South Korea and China, based on AI trustworthiness principles and structural content of regulations, reveals that they share similar characteristics with the AI regulations of the European Union. That is, many provisions apply the Autonomy principle in the principles of AI trustworthiness. Therefore, the mechanism for ensuring trust is the same in the European Union and the regulations of these countries.

	AAIIPT	AAAI
Beneficence	Art. 1, Art. 3, Art. 5, Art. 10, Art. 12, Art.23	Art. 1, Art. 5, Art. 8
Non-maleficence	Art. 23, Art. 24	Art. 5, Art. 14
Autonomy	Art. 6~7, Art. 9~11, Art. 24~26	Art. 15, Art. 17~18, Art. 21~23, Art. 33
Justice	Art. 5, Art. 23~24	Art. 5
Explicability	Art. 5, Art. 24, Art. 27	Art. 5, Art. 17~19
Range of AI functions regulated	All AI	All AI
Range of AI use	Public & Private	Public & Private
Jurisdiction	Nation	Nation
Direct Control	Identification of AI Utilization in High-Risk Areas, Obligation to Notify the Use of Artificial Intelligence in High-Risk Areas	Obligations of high-risk artificial intelligence developers and users, Dispute Resolution Committee, etc.
Indirect Management	Establishment of artificial intelligence committees, Introduction of the principle of prioritized permissible post-regulation, etc.	Basic principles of artificial intelligence, Government's role in artificial intelligence, Establishment of a private autonomous artificial intelligence ethics committee etc.
	ADAIETAI	RPAIIS
Beneficence	Art. 1, Art. 3	Art. 4, Art. 63
Non-maleficence	Art. 3, Art. 9, Art. 12, Art. 19	Art. 63, Art. 70, Art. 72
Autonomy	Art. 6~9, Art. 11, Art. 16~17, Art. 21~24, Art. 28~29	Art. 10, Art. 63~69, Art. 72
Justice	Art. 3, Art. 9	Art. 63, Art. 72
Explicability	Art. 9, Art. 27	Art. 71
Range of AI functions regulated	All AI	All AI
Range of AI use	Public & Private	Public & Private
Jurisdiction	Nation	State
Direct Control	Evaluation, and certification of private autonomous committees, Order to close etc.	Reporting on violations of legal, artificial intelligence ethical, and safety norms, Risk assessment, etc.

Indirect Management	Establishment of basic plan for artificial intelligence, Development of safety-based policies for artificial intelligence, etc.	Establishment and improvement of government regulation and supervision governance mechanisms for AI, Adoption of regulatory models for high-risk AI, etc.

Table 6 Analysis of AI Regulations in South Korea and China based on AI Trustworthiness Principles and Structural Content of Regulations

Introduction of Artificial Intelligence Regulation Models and Their Characteristics

When we look at the direction of AI regulation in each country we examined earlier, we can classify it into two legislative models. The first is a model that gradually intro-duces legislation on artificial intelligence, as in the United States. This model means that regulation is introduced progressively and partially applied to all AI in the country, and the scope of regulation gradually widens as additional regulations are added. The second is a legislative model that creates and applies a single law that is applied to AI-related issues, as in the European Union, Korea, and China. This legislative model shows a similar trend to the introduction of existing privacy regulations in the United States and the European Union. Therefore, the characteristics of each legislative model are expected to be like those presented in the privacy regulations of the United States and the Euro-pean Union. The characteristics of each model are as follows.

In the case of the first legislative model, the progressive legislative model, patchwork regulation, as in the United States privacy regulations, is applied (Schwartz, P. M. et al., 2017). This regulation can work positively, as it can gradually secure the trustworthiness of artificial intelligence in society through clear sectoral regulation based on harm. Also, due to the characteristics of the model, there are opportunities for developing AI that is not subject to regulation. Therefore, if the model works positively, it is possible to achieve balanced societal development in terms of se-curing trust in AI, technology development, and economic development based on it. However, there may be problems due to the characteristics of the model. For example, as shown in privacy regulations, there is a problem of "uneven application" that cannot respond to accidents that occur in unregulated fields. This problem can lead to dis-trust of the technology and create a situation opposite to the purpose of regulation. In addition, in the case of federal countries like the United States, this progressive model leads to preemption problems between federal and state laws (Bellia, P. L., 2009).

In contrast, the second legislative model, like the EU's General Data Protection Regulation, establishes a unified law to regulate all artificial intelligence. This type of regulation can effectively address most incidents and accidents caused by artificial intelligence, thereby efficiently and effectively securing trust in society. In other words, trust can be established by preventing harm caused by artificial intelligence in advance. As criticized in the EU's GDPR, a unified law may not be clear in practical application when dealing with uncertainty. Furthermore, due to the difficulty of amending the law, the obsolescence of the unified law can occur, and compliance costs may increase, hindering the development of artificial intelligence services and industries (Schwartz, P. M. 2009).

The two models have clear advantages and disadvantages regarding securing trust in artificial intelligence and introducing the model. Therefore, it is difficult to determine which model is more effective in securing trust through a simple comparison of the models.

Conclusion

In this paper, we analyzed the content of AI laws or bills in various countries, classified legislative models for AI regulation, and identified their characteristics. What can be confirmed through this is that the two AI regulatory and legislative models centered on the United States and the European Union have different mechanisms for securing trustworthiness, and each has its advantages and disadvantages, making it difficult to judge the more effective model for securing trustworthiness through a simple comparison of their contents. However, it could be suggested that it is important to carefully consider the specific environmental objectives and regulatory purposes of each country in adopting legislative models. This is because it is possible to determine which model is necessary for each country depending on the potential for social inclusion of AI in each country, the degree of trust of the people, the trends in the industry, and the specific and detailed objectives of the country for AI.

However, this paper has yet to be able to reflect all the bills in each country, particularly those in the United States, so there is a need to include more bills in further research. Furthermore, in order to verify the effectiveness of the trust-building mechanisms of the two aforementioned models, it is necessary to conduct quantitative research on whether actual trust is being built as AI regulations are established and enforced.

References

Mayer, R. C.; Davis, J. H.; and Schoorman, F. D. 1995. An integr ative model of organizational trust. *Academy of Management Revi ew* 20(3): 709–734.

Bratspies, R. M. 2009. Regulatory trust. *Arizona Law Review* 51 (3): 575-632.

Potter, N. N. 2002. *How can I be trusted? a virtue theory of trustw orthiness*. Rowman & Littlefield.

Lewicki, R. J.; and Bunker, B. B. 1996. Developing and maintaini ng trust in work relationships. *Trust in organizations: Frontiers of theory and research* 114: 139.

McKnight, D. H.; Choudhury, V.; and Kacmar, C. 2002. Developi ng and validating trust measures for e-commerce: An integrative t ypology. *Information systems research* 13(3): 334-359.

Mcknight, D. H.; Carter, M.;Thatcher, J. B.;and Clay, P. F. 2011. Trust in a specific technology: An investigation of its components and measures. *ACM Transactions on management information sy stems (TMIS)* 2(2): 1-25.

Independent High-Level Expert Group on Artificial Intelligence. 2019.4.8. Ethics guidelines for trustworthy AI. Brussels: Europea n Commission, Available at: https://ec.europa.eu/newsroom/dae/ document.cfm?doc_id=60419

OMB. 2020.11.17. Guidance for Regulation of Artificial Inteligen ce Applications.

European Commission. 2020.2.19. WHITE PAPER On Artificial Intelligence - A European approach to excellence and trust.

National Conferemce of State Legislatures. 2022.8.26. Legislation Related to Artificial Intelligence. Available at: https://www.ncsl. org/technology-and-communication/legislation-related-to-artificia l-intelligence. Accessed: 2023.2.12.

Floridi, L.; Cowls, J.; Beltrametti, M.; Chatila, R.; Chazerand, P.; Dignum, V.; et al. 2018. AI4People—An ethical framework for a good AI society: Opportunities, risks, principles, and recommend ations. *Minds and Machines* 28(4): 689–707.

Thiebes, S.; Lins, S.; and Sunyaev, A. 2021. Trustworthy artificial intelligence. *Electron Markets* 31: 447–464.

European Commision, 2021.4.21. Proposal for a Regulation of Th e Euripean Parliament and of The Council Laying down Harmoni sed Rules on Artificial Intelligence (Artificial Intelligence Act) an d Amending Certain Union Legislative Acts.

Evangelos Razis, 2021.6.2. Europe's Gamble on AI Regulation. A vailable at: https://www.uschamber.com/technology/europe-s-ga mble-ai-regulation. Accessed: 2023.2.12.

Schwartz, P. M.; and Peifer, K. N. 2017. Transatlantic data privac y law. *Geo. LJ* 106: 115.

Bellia, P. L. 2009. Federalization in information privacy law. *The Yale Law Journal* 118(5): 868-900.

Schwartz, P. M. 2009. Preemption and privacy. *The Yale Law Jou rnal* 118(5): 902-947.