

Chapter 5


Global Regulatory Landscape: The European Union AI Act Comparative International Perspectives

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ABSTRACT

The global regulatory landscape of Artificial Intelligence (AI) is rapidly evolving to balance innovation with ethics, accountability, and human rights. This chapter examines the development of AI governance worldwide, emphasizing the European Union Artificial Intelligence Act (EU AI Act) as the first comprehensive, rights-based legal framework. Through its risk-based classification unacceptable, high, limited, and minimal, the EU model safeguards human dignity while promoting responsible innovation. A comparative analysis of the United States, Canada, China, India, Singapore, and Brazil reveals both convergence in core ethical principles and divergence in implementation due to cultural and political differences. The chapter concludes by advocating for a Global AI Accord to harmonize universal values with local contexts, fostering trustworthy, ethical, and sustainable AI governance.

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1. INTRODUCTION

Artificial Intelligence (AI) has rapidly evolved into a central pillar of global digital transformation, reshaping economies, governance systems, and the very fabric of social interaction. From predictive analytics and autonomous systems to generative models and decision-support tools, AI technologies are redefining how societies operate and how individuals engage with information. Despite its immense potential to accelerate innovation, productivity, and sustainability, AI simultaneously introduces profound ethical, legal, and societal challenges. Concerns over algorithmic bias, mass surveillance, data misuse, and the erosion of human autonomy have intensified debates about the balance between technological progress and human rights protection. In this context, the demand for a comprehensive governance framework that ensures AI's alignment with democratic values, social trust, and public accountability has become more urgent than ever (Beltrán, 2025).

Among global regulatory initiatives, the European Union Artificial Intelligence Act (EU AI Act) stands as a historic milestone. As the world's first comprehensive legal framework dedicated solely to AI, it embodies a risk-based and human-rights-centered approach to the regulation of intelligent systems. The EU AI Act classifies AI applications according to levels of risk—ranging from minimal to unacceptable—thereby ensuring proportionate oversight without stifling innovation. This structured model of governance seeks to strike a careful equilibrium: promoting technological advancement while upholding fundamental rights, transparency, and ethical integrity. It reflects the EU's broader vision of “trustworthy AI,” emphasizing principles such as fairness, explainability, and human oversight (Bakiner, 2023).

However, the European framework does not exist in isolation. Around the world, nations are crafting their own legislative and ethical approaches to manage AI's rapid proliferation. The United States emphasizes innovation and voluntary ethical commitments through its AI Bill of Rights; Canada promotes accountability and fairness via the Artificial Intelligence and Data Act (AIDA); China integrates AI regulation with cybersecurity and state security imperatives; India advances its Digital Personal Data Protection Act (DPDP) to ensure responsible data use; Singapore adopts a non-binding but influential AI Governance Framework; and Brazil upholds digital rights and inclusion in its AI principles. Together, these frameworks illustrate both the diversity and convergence of global regulatory efforts—where cultural values, political priorities, and legal traditions shape distinct pathways toward responsible AI governance.

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