


Chapter 4

Behavioral Law and the Governance of Artificial Intelligence: Bridging Ethics and Regulation

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ABSTRACT

This chapter per the authors, examines the role of behavioural law in shaping AI governance, integrating ethical principles with regulatory frameworks. Drawing on behavioural economics, it analyses how cognitive biases and human-AI interactions create ethical challenges in AI deployment. The chapter aims to develop a hybrid model that bridges fairness, transparency, and accountability with enforceable regulations to mitigate risks like algorithmic bias and privacy breaches. Through case studies on data privacy, autonomous systems, and decision-making algorithms, it demonstrates how behavioural tools, nudges, defaults, and transparency mandates enhance regulatory efficacy while promoting innovation. It advocates for empirical research to refine these approaches, proposing adaptive frameworks that incorporate stakeholder input and global standards to foster trust and equity in AI ecosystems. By blending theory and practice, this chapter per the authors, provides policymakers, developers, and scholars with actionable strategies for sustainable AI governance in a technology-driven world.

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1. INTRODUCTION

Artificial Intelligence (AI) has two meanings. One refers to machines that can perform tasks requiring intelligence, simulating intelligence, and behaving like humans. The second meaning, relevant to many regulatory frameworks, is an intelligent machine that guides human decisions (Kantorowicz-Reznichenko, E., & Kantorowicz, J., 2025). Regulatory frameworks addressing AI must differentiate between these two meanings. AI can control or influence human decision-making at different levels: perception, evaluation, and action or choice (Efthymiou, I. & Egleton, T. E., 2025). One can encounter many types of AI. For instance, Damage Detection Systems predict damages in a construction project or recommend books according to a person's interest, and Intelligent Traffic Systems synchronize traffic lights based on real-time traffic detection. Human decisions in these examples are far from being autonomous. Likewise, many frameworks, including the United Nations Educational, Scientific and Cultural Organization (UNESCO)/OECD (Organisation for Economic Co-operation and Development) AI Act and the European Commission's AI Act, address the second meaning of AI. By guiding human decisions, AI can have a profound impact with ethical aspects on different dimensions, such as social and political. It represents a shift requiring the law to balance more diverse and varied values (Kouroupis, K., 2022).

Guiding human decisions can involve several cognitive phenomena (behaviours, actions, thoughts, or processes) and unique cognitive characteristics. Mental processes of these phenomena can differ from simple act until complex reasoning or problem solving. When legally and technically relevant, however, these mental processes associated with AI governance are often understood through the lens of the Behavioural Law and Economics (BLE) theory (Mitchell, G., 2014; Newman, J. C., 2020).

The need to establish a scientific understanding of any mental process arises to formulate certain regulations, such as guiding AI development according to people's feedback and cognition. BLE proposes several models that encompass different theories, offering distinctive explanations about human behaviour and cognitive decision-making processes (Rachlinski, J. J., 2011). The application of BLE to guidelines, principles, or other existing proposals on technology governance leads to multi-faceted literature focusing specifically on standards, data, testing, and auditability of transparency. The necessity arises to channel the understanding about the interface of AI and the mind through BLE in order to derive from different guiding frameworks pertaining to AI (Ayres, I., t al., 2025; Epstein, R. A., 2025; Ooi, K. L., 2025).

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