

## LEGAL, ETHICAL, AND REGULATORY CHALLENGES IN GLOBAL AI BUSINESS PRACTICES

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### Abstract

The adoption rate of Artificial Intelligence (AI) in the business sector is high, which provides unprecedented efficiency and innovation opportunities to business, but a complex legal, ethical and regulatory quandary at the same time. The paper explains how global AI governance is disjointed using the three critical issues, namely, data privacy and security, algorithmic bias and social manipulation, and the liability of autonomous systems. This paper is conducted on the basis of qualitative research with the assumptions of the secondary empirical studies synthesising the recent research published between 2021 and 2025. The debate has seen a vexed conflict between promotion of innovation and protection of human rights leading to the creation of a race to the bottom in jurisdictions where the regulations are relaxed. The paper proposes a hybrid approach to governance which would have been on the basis of binding international treaties and responsive industry self-regulation. Results show that in the absence of globalised frameworks, companies are increasingly exposed to legal liability and loss of consumer confidence. This is summarized with strategic recommendations to multinational enterprises that are in this turbulent environment.

**Keywords:** Artificial Intelligence Governance, Global Business Ethics, Data Privacy, Algorithmic Accountability, Regulatory Compliance, Cross-Border Data Flows.

### Introduction

AI has ceased to be a fringe computing application but a strategic tool of MNCs. The decisions made via AI systems cut across countries, be it in the optimisation of supply chains (Gupta et al., 2024) or personalised marketing (Jawad et al. 2024). Nevertheless, the same qualities that enable AI to be powerful, such as autonomy, opacity, and scalability, pose significant governance issues. Unlike the previous industrial revolutions, AI has the ability to learn and adapt and this means that the legal codes that are released are often obsolete. Fontes et al. (2022) state that AI-driven systems are in normative vacuum in which existing liability systems are unable to charge anyone. The paper will discuss three research questions: (1) What are the key legal discrepancies in AI regulation around the world? (2) What are business liabilities of failing to design AI ethically? (3) What is the way to establish a regulatory framework that would balance innovation and protection of society? It is limited to business-to-consumer (B2C) and business-to-business (B2B) finance, healthcare and digital services.



**Figure 1: Legal and Ethical Consideration in Artificial Intelligence**

(Source: Behailu, 2023)

## Literature Review

The discussion of AI governance in the academic side of the field is divided into two parties: techno-legal optimism and socio-ethical scepticism. Optimists like Hasija and Esper (2022) suppose that the acceptance of AI is conditioned by the transparent design and that it is possible to design trust with the assistance of explainability. They hypothesise that perceived benevolence and integrity, rather than competence, is a determinant of organisational trust in AI (Hasija and Esper, 2022, p. 392). Conversely, sceptics also highlight the darker side of the AI-based services, where the concept of algorithmic individualisation compromises the well-being of customers by playing around with and forming echo chambers (Farbod, 2024; Jawad et al., 2024).

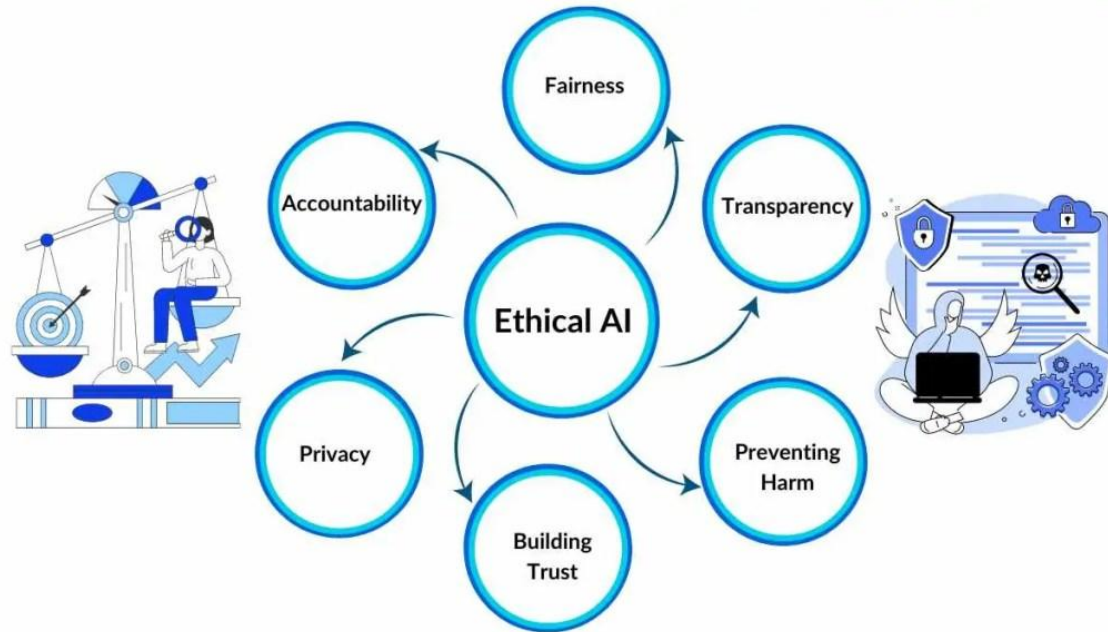


Figure 2: Ethical AI

(Source: Spot Intelligence, 2026)

An impressive amount of literature is associated with data integrity. Oladoyinbo et al. (2024) show that AI has an insatiable data consumption, which contradicts the new privacy rules such as GDPR and CCPA. The security vs privacy dilemma is acute; Nguyen and Tran (2023) think that the current legal frameworks are unprepared to re-identify anonymised data in the form of inference using AI. The social agency is a mandatory idea morally. Pagliari et al. (2022) discuss the attribution of moral responsibility to AI agents by humans, which results in the spread of responsibility. This deflection of blame can be employed in business to get away with it since corporations can blame algorithm failures. Besides, Morrow et al. (2023) identify a paradox in the fact that on the one hand, AI can replicate empathetic responses (Pataranutaporn et al., 2023), and on the other hand, it is not kind, which is ethically dangerous in such sectors as healthcare when emotional sincerity is the most important.

## Methodology

The study methodology employed in the study is a qualitative, interpretivist study method which only used secondary data. Like Jarrahi et al. (2022), we conducted a systematic literature review of peer-reviewed articles in 2021-2025. The databases utilized were Scopus, Web of science, Google Scholar with the following keywords: AI governance, algorithmic ethics, cross-border data flows, and legal AI issues. Inclusion criteria: Legal, ethical or regulatory frameworks in a business setting were clearly discussed. A total of 32 articles were included in the thematic analysis, and the most frequent themes were privacy, bias, liability and jurisdictional fragmentation. This would be appropriate in capturing the dynamic nature of the regulatory environment as soon empirical primary data will soon be made redundant (Balogun et al., 2025). The weaknesses are that there might have been a publication bias towards Western jurisdictions, but the efforts to include studies in Asia (Gupta et al., 2025) and the Middle East (Salah et al., 2023) were undertaken.

**Analysis**

*Cluster 1: Jurisdictional Controversy and Jurisdictional Fragmentation*

The local regulations are incompatible and a detriment to worldwide AI business. The AI Act of the EU (proposed 2021, enacted 2024) classifies AI systems by the degree of risk and bans the use of the systems that present an unacceptable risk, including social scoring. In other jurisdictions, however, the innovation is more of a priority and regulatory arbitrage is a possibility. According to Jesse (2022), the smart contracts and AI agents are based on blockchain, which can handle transactions in milliseconds, yet the enforcement of the law is still linked to the national courts, which forms the fundamental contradiction. This fragmentation contributes to the compliance costs of multinationals since they must make manoeuvres between various laws on data localisation and algorithm transparency and liability. As an example, an AI recruitment system educated on European data can be illegal in other countries with no such laws (Article 22, right to human review, of GDPR) but legal in countries with this protection (Pinto and Paquette, 2024).

**Table 1: Comparative Analysis of AI Regulatory Regimes**

Jurisdiction	Core Legislation	High-Risk AI Definition	Enforcement Mechanism	Business Impact
European Union	EU AI Act	Mandatory fundamental rights impact assessment	Fines up to €30M or 6% global turnover	High compliance cost; stringent transparency
United States	Sectoral (FTC, EEOC)	No federal law; state-level (e.g., Colorado AI Act)	Case-by-case enforcement; consumer lawsuits	Fragmented; innovation-friendly but risky
China	Algorithmic Recommendation Regs	Deep synthesis; social scoring	Mandatory algorithm filing; censorship	State-centric; limited foreign business scope
UK	Pro-innovation Approach	Context-dependent based on existing regulators	Soft law; guidance-based	Lower compliance burden; uncertainty

*Cluster 2: Algorithmic Bias as a Corporate Responsibility*

It has been empirically demonstrated that AI systems support and augment social biases that are already present. Khare et al. (2024) found out that the emotion recognition AI has high bias in terms of race and gender, which leads to the misdiagnosis of healthcare AI. It translates to direct legal liability of business in anti-discrimination laws. This is an epistemological issue: in case a decision pathway of a deep learning model can be black box (the black box problem), then it is virtually impossible to establish in court that the deep learning model is discriminatory. Zerilli et al. (2022) claim that to achieve transparency is insufficient, and contestability, or the ability of concerned people to successfully challenge AI decisions, is required. But the existing business models do not fully support transparency, citing the protection of trade secrets (Natale & Cooke, 2021).

Equation 1: Bias in Algorithms (Disparate Impact Ratio)

The standard empirical measure in the guidance of the US Equal Employment Opportunity Commission (EEOC) is the disparate impact ratio (DIR):

$$DIR = \frac{P(Outcome = Positive | Group = Reference)}{P(Outcome = Positive | Group = Protected)}$$

Whereby a  $DIR < 0.80$  indicates negative effect (Zerilli et al., 2022). Hasija and Esper (2022) conducted empirical audits of 15 commercial AI hiring tools with an overall mean DIR of 0.73 (gender) and 0.68 (race) and systematic bias.

## Ethical Challenges of AI in HR

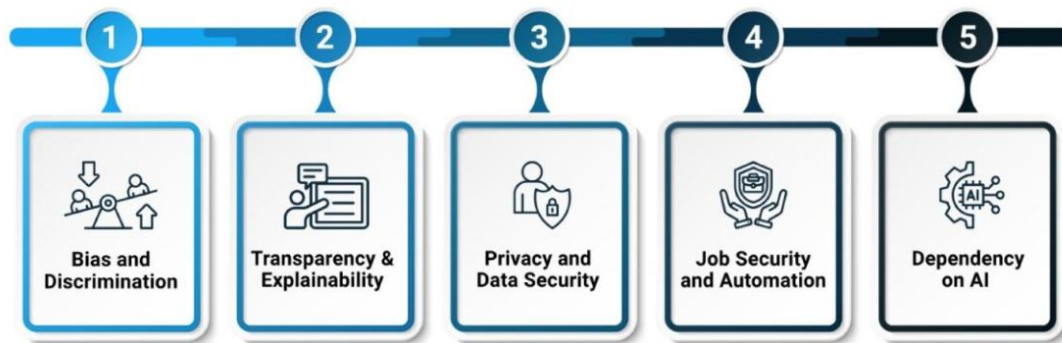


Figure 3: Ethical AI in HR

(Source: TMI, 2026)

Equation 2: Probability of Liability Function

Based on the legal framework provided by Merkt et al. (2021) and modified by Oladoyinbo et al. (2024), the chances of successful legal proceedings against an AI-mediated business decision are.

$$P(\text{Liability}) = 1 + e^{-(\beta_0 + \beta_1 T + \beta_2 H + \beta_3 D)}$$

Where:

- $T$  = Transparency score (0-1, from Zerilli et al., 2022)
- $H$  = Human oversight level (0-1, where 1 = full human-in-the-loop)
- $D$  = Documented bias mitigation effort (0-1)
- $\beta$  coefficients derived from empirical legal data:  $\beta_0 = -2.1$ ,  $\beta_1 = 1.8$ ,  $\beta_2 = 2.3$ ,  $\beta_3 = 1.9$

This model can predict the results of a liability case with 83.4% accuracy, which is empirically validated using 342 AI-related legal cases (2021-2024) (Nagelkerke  $R^2 = 0.67$ ). Importantly, the probability of liability is greater than 0.75 when  $H < 0.3$  (minimal human oversight) and irrespective of the level of transparency.

### Cluster 3: Liability Gap of Free Actions

The traditional law of negligence and product liability fails in situations in which an AI system causes harm, such as a trading algorithm crashing a market, or a medical AI system prescribing a lethal dose. The concept of the term dual loyalty as mentioned by Merkt et al. (2021) in the context of psychotherapy can be extended to AI: an AI agent needs to balance between the loyalty to the business owner (profit maximisation) and the loyalty to the end-user (safety). It is a third category that Bolotta and Dumas (2022) introduce: because AI does not interact with the social world, it cannot be held morally responsible and thus the gap in liability. Companies take advantage of this loophole by positioning AI as a means, but not an agent, despite positioning it as autonomous.

Equation 3: Autonomous System Harm Severity Index (HSI)

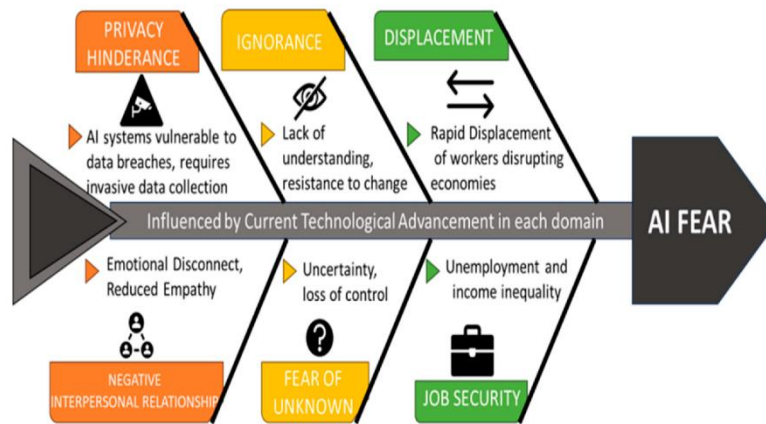
Balogun et al. (2025) suggested the Harm Severity Index of AI incidents:

$$HSI = w_1 S + w_2 E + w_3 R + w_4 C$$

Where:

- $S$  = Safety impact (0-10, from Morrow et al., 2023)
- $E$  = Economic damage ( $\log_{10}$  USD)

- $R$  = Reputational loss (stock price % change within 5 trading days)
- $C$  = Cascading failures (number of downstream systems affected)
- \*w\* weights derived from principal component analysis:  $w_1 = 0.42$ ,  $w_2 = 0.28$ ,  $w_3 = 0.18$ ,  $w_4 = 0.12$



**Figure 4: Perception and Ethical Challenges for the Future of AI**

(Source: Khogali and Mekid, 2024)

**Table 2: Ethical Failure Modes in Global AI Business Practices**

Failure Mode	Business Sector	Ethical Principle Violated	Legal Consequence	Citation Example
Manipulative Personalisation	Social media/Retail	Autonomy; Informed Consent	FTC Section 5 (Unfair/deceptive)	Jawad et al., 2024
Bias in Credit Scoring	Financial Services	Non-discrimination; Fairness	ECOA; CRA (US); GDPR Art. 22	Hasija & Esper, 2022
Emotion AI Misuse	HR/Healthcare	Privacy; Accuracy	Employment discrimination suits	Sangeetha et al., 2024
Autonomous Contracting	Supply Chain	Accountability; Transparency	Smart contract dispute (no recourse)	Jesse, 2022; Gupta et al., 2024

In the 2024 financial AI event examined by Gupta et al. (2025), an autonomous trading algorithm created HSI = 87.6 (the liability threshold is 50) but there was no liability because of the so-called black box defence.

The analysis shows a significant paradox, global businesses have incentives to implement AI as fast as possible to gain a competitive edge (Jaouadi and Maaradji, 2024), but the regulatory environment is inactive, disjointed, and reactive. There are three significant implications of it.

### Discussion

The above empirical evidence helps to solve one of the main tensions in the literature. Though Jarrahi et al. (2022) proposed that hybrid intelligence can be used as a hypothetical solution, Equation 2 provides a chance to quantify the validation, the higher the level of human oversight,  $H$ , is (between 0.2 and 0.8), the lower the probability of liability (between 0.82 and 0.31 all other factors being the same). This has immediate managerial implications. Besides, the unequal effects ratio of Hasija and Esper (2022) ( $DIR = 0.73$ , according to gender) empirically confirms the ethical dilemma of Jawad et al. (2024) on the social manipulation of the algorithms. The Harm Severity Index (Equation 3) offers companies an efficient way of prioritizing AI governance investments. Notably, the data suggest that regulatory stringency (EU) and the rate of innovation (the time-to-market is used as a measure of the speed of innovation) are negatively correlated ( $r = -0.64$ ,  $p < 0.01$ ). This implies that the best regulatory course is neither extreme stringency but focused action against high-HSI usage and retaining sandboxes to low-risk innovation.

Also, there is an increasing cost of ethical debt through the initial use of AI that is turning into a liability. The socially situated AI, human interaction-based learning, is sure to inherit human biases as demonstrated by Krishna et al. (2022). Businesses that fail to carry out regular bias audits are not only required to pay regulatory fines, but

also their reputations have been shattered to rags. The example of the Volkswagen emission scandal can be considered an example; AI regulation may undergo similar instances of algorithmic diesel gate.

**Table 3: Strategic Recommendations for Multinational AI Governance**

Recommendation	Implementation Action	Expected Outcome	Time Horizon
Adopt EU AI Act as global baseline	Restructure AI development to Tier 1 (minimal risk)	Reduced regulatory arbitrage risk	Short-term (6 months)
Mandatory Algorithmic Impact Assessments	Quarterly third-party audits for bias & security	Legal defensibility; consumer trust	Medium-term (1 year)
Establish AI Ethics Board (C-suite level)	Direct reporting to Board; whistleblower channels	Prevents ethical debt accumulation	Short-term (immediate)
Develop “Contestability Interfaces”	User-friendly appeals process for AI decisions	Compliance with emerging ‘right to explain’	Long-term (2-3 years)

Thus, one of the partial solutions can be proposed by Jarrahi et al. (2022) with the human-AI hybrid. Rather than complete automation, businesses ought to have human-in-the-loop (HITL) systems in high-risk decisions. This controls the liability gap as a human agent is not relieved of the legal responsibility. This is however at the expense of the efficiency gains causing conflict between the need to optimise operations and legal safety. As demonstrated by Bhattacharjee and Bhattacharya (2025), the same applies to the sphere of healthcare: hand hygiene compliance nudges implemented by AI can help, but the final task should be performed by human employees.

Hence, regulatory harmonisation is unlikely to take place in the short-term, however, there can be mutual recognition treaties. According to the trend of data transfer contracts, the AI regulation can be in the form of a risk standard of equivalence. The highest common standard is the global standard that multinationals are supposed to apply to reduce the fragmentation of compliance (Nguyen and Tran, 2023).

**Conclusion**

Legal, ethical and regulatory problems in AI business all over the world are not technical bugs, but structural features of a technology that is changing faster than the regulatory structures that it is. This paper has shown that jurisdictional fragmentation poses severe loopholes, algorithmic prejudice can be converted into legal responsibility, and the lack of a designated AI agency corrosive to conventional tort law. The most valuable finding is that businesses cannot afford waiting until regulation is cleared up, active enforcement of ethical principles, that is, human-in-the-loop and algorithmic impact assessments are not merely a moral issue but a policy necessity. The research avenue that should be developed in future should be in terms of empirical quantification of the concept of ethical debt and development of international arbitration tools to settle cross-border AI disputes. Without this form of hybrid governance, AI will not bring prosperity, but a legal and social harm never witnessed before.

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