



Ethical Implications of Generative AI in Business Decision-Making: A Governance Perspective

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ABSTRACT

The rapid integration of generative artificial intelligence (AI) into business decision-making has introduced unprecedented ethical challenges for which existing governance frameworks are insufficient. This study investigates these challenges by conducting a literature review and framework analysis focused on the ethical implications of generative AI in corporate contexts. Key findings reveal significant algorithmic risks including bias, transparency deficits, privacy violations, and autonomy erosion that threaten stakeholder trust and organizational integrity. To address these issues, the research develops a novel multi-dimensional analysis framework that quantitatively evaluates ethical alignment in the implementation of generative AI across five domains, providing an empirical measurement approach not previously available. Based on this foundation, the study proposes an Ethical AI Governance Framework (EAGF) structured around five interlinked dimensions, emphasizing accountability structures, risk assessment protocols, and stakeholder engagement mechanisms. Finally, the research identifies implementation considerations—such as cultural transformation, resource allocation, and phased deployment that are critical to achieving sustainable and ethically responsible AI governance in contemporary business organizations.

KEYWORDS: generative AI, ethics in business, corporate governance, making decisions in business, algorithmic bias, fairness in AI and ethical frameworks

I. INTRODUCTION

Greater use of generative Artificial Intelligence (AI) sets a new approach for companies to gather, interpret, and act on information [1]. Generative AI systems, unlike standard analytics tools, are capable of developing new content, simulating difficult situations, advising users, and implementing their recommendations with limited input from people [2]. In the last 2 years, big companies have started adding generative AI systems to their decision-making processes, with roughly 68% of them implementing them by 2024.

The research extends beyond descriptive analysis to offer a new quantitative framework for measuring the ethical alignment in generative AI deployments [3]. In contrast to existing approaches that will only catalogue ethical concerns, a composite metric is developed and validated, the Ethical Alignment Index (EAI), which includes observable indicators in five governance dimensions [4]. With this measurement innovation, organisations can benchmark where they are in the implementation of their ethics against industry standards and begin to continuously improve [5].

This research paper aims to critically examine the ethical implications of generative AI in corporate decision-making processes and evaluate governance frameworks that can ensure responsible, transparent, and accountable use of such technologies in business environments.

The objectives include:

- To identify and analyse the key ethical risks associated with the integration of generative AI in strategic and operational business decision-making.
- To evaluate the effectiveness of existing corporate governance frameworks in addressing the ethical use of generative AI within business contexts.
- To develop a governance-based model or set of guidelines for ethically aligned decision-making using generative AI in contemporary business organisations.

II. LITERATURE REVIEW

A. Generative AI in Business Decision-Making

Large Language Models (LLMs) and multimodal systems, among generative AI technologies, have quickly developed from tools in R&D to assets in several fields. The difference from traditional AI is that these systems make new outputs instead of focusing only on existing information [5]. Generation AI now plays a role in areas such as strategy, market research, product building, content development, and choosing optimal business processes [6].

It is clear from research that generative AI is now present in all major kinds of decisions, including operational, tactical, and strategic decisions [7]. In their study, Davenport and Ronanki found that the adoption of operational decision automation came first. However, by 2023, according to Smith (2021), more than half of the organisations had started to use generative AI to help with strategic decision-making.



There are four main business reasons for using generative AI in decision-making, such as it sees regularities in broad datasets, runs situations that humans cannot handle easily, and helps improve judgment by making it less affected by biases [9]. However, West et al. [10] highlighted in their recent study that using these same skills in business can cause new ethical concerns, such as skill overload and exploitation. Hence, the use must be managed carefully and optimally.

According to recent industry surveys, generative AI implementation has moved past experimentation into use in production. The McKinsey 2024 Global Survey shows that while generative AI is being deployed in organisations, it has delivered an average productivity increase for their department of 32%. The capacity of AI to process unstructured data (such as a written email) and extract high-quality, actionable insight, which used to take hours of human analysis. Different business functions, from marketing, which use generative AI for content personalisation, manufacturing, which use it for predictive maintenance, and human resources, which use AI for candidate screening, are reaping the transformative benefits of generative AI. While previous automation technologies cared only about routine tasks, generative AI is starting to impact the type of knowledge work that, until recently, required human judgment.

B. Ethical Challenges in AI-Driven Decision-Making

The integration of generative AI into business processes is identified in the literature as leading to several related ethical problems. Concerns about data bias and algorithmic discrimination exist due to the possibility that generative AI amplifies biases in its training [11]. Bias in the results of AI can affect hiring choices, grouping consumers for marketing, and decisions on credit, and will likely cause unfairness in other parts of the business [12]. Johnson [13] found that when bias-mitigating systems are not aligned, generative AI in financial services repeats old discrimination patterns.

Most generative AI systems, particularly those with complex neural networks, are difficult for people to understand because their workings are complex [14] [15]. Having limited insight into how AI works challenges the effectiveness of business leaders to exert supervision and allows affected individuals few options for disputing AI-related actions [16].

When accountability is spread to humans, machines, and organisational structures, it is called accountability diffusion [17]. As a result, Bryson [18] found that there are situations where neither individual people nor businesses are completely responsible for problems caused by harmful choices. As a result, standard approaches to government that assume clear boundaries fail to work as well.

Autonomous and deskilled workers arise when computers start guiding decisions [19]. The findings of Lee [20] revealed that workers frequently rely on the recommendations of AI over their own judgment, a habit that is known as automation bias and weakens human decisions.

Ethical concerns stretch not only into organisational forms but also towards an epistemological level, considering what truth and knowledge will look like in AI-added organisations. Upon unleashing a generative AI system and a particularly large language model, a complex relationship between factual accuracy can be acquired, referred to as “synthetic verisimilitude”. AI-generated content is becoming a reality that corporate decision-makers will encounter; this will be credible, internally consistent, and may not have critical foundations in fact or may have subtle flaws. Experiments completed by Friedman showed that the factual reliability of generative AI outputs was consistently overestimated by executives, and the frequency of AI hallucinations in the business context was also consistently underestimated. This epistemological uncertainty poses potential ethical hazards when stakeholders are brought upon and decisions are made on partially fabricated grounds.

C. Existing Governance Approaches for AI Ethics

AI ethics in business are now being handled using formatted guidelines instead of general guidelines. In the first wave of guidance, the focus was on larger ethical principles found in guidelines such as the European Commission’s Ethics Guidelines for Trustworthy AI [21] and the IEEE Global Initiative on Ethics of Autonomous and Intelligent Systems [22]. Although these principles supply businesses with useful guidelines, Mittelstadt [23] noted that many lack practical tools for using AI in their routine professional tasks.

Certain governance approaches have grouped AI applications by their risks and decided how much regulation is needed based on the level of risk of each application [24]. For example, the EU AI Act adopts this approach by classifying artificial intelligence by its risks and then requires different rules based on these classifications. However, Yeung and Lodge [26] argued that continuous advances in generative AI update current risk categories and ask for more flexible ways of regulating businesses. Hence, this reduces the risk of using AI unethically and effectively and responsibly.

Models for organisational governance have been introduced to help apply general AI ethics ideas in practice. Most of these models add data governance, monitoring algorithm development, managing how they are deployed, and ongoing monitoring [27]. Floridi et al. [28] indicated that well-planned AI governance fits with present governance methods in organisations instead of forming new systems.

Approaches based on stakeholder inclusion in AI governance consider the interests of many people when AI systems are put into business use [29]. They promote mechanisms that encourage customers, employees, communities, and other users to participate in setting AI guidelines [30]. Their research revealed the benefits of including stakeholders to build trust, but it is still hard to determine the right way and scope for their involvement [31].

Hybrid governance frameworks emerging to combine top-down regulatory compliance with bottom-up development practices are targeted. These are approaches that understand the dynamic nature of generative AI capabilities and that classical governance mechanisms usually have trouble dealing with. Using comparative analysis, Rodrigues and Chen (2020) showed that successful hybrid models



successfully combine clear ethical boundaries with adaptive learning mechanisms that evolve along with technological capabilities. Instead of being based solely on pre-established rules or principles, these frameworks have regular ethical reflection cycles, where stakeholders, including those who use AI, collectively consider the projected impact of an AI application against foundational values. The methodological pluralism of this approach notes that different governance methods may be appropriate for different business contexts and cultures of organisations. Alternative to one-size-fits-all approaches and governance initiatives were also developed, especially for industries. For example, the Financial Stability Board (the FSBI1) has developed specialised AI risk management guidelines tailored to the financial institutions, and medical ethics are emerging as a source to steer the formulation of AI frameworks by healthcare providers.

D. Identification, Assessment, and Evaluation of Gaps in Existing Literature

Although there is sufficient literature available on AI ethics, it shows significant and multidimensional gaps in the ways that generative AI is understood, governed and ethically implemented in the business decision-making process. This section structures an examination of those gaps by evaluation of shortcomings in current academic and practical discourses and the illustration of how the gaps are addressed substantively in the present study.

1. Incomplete Differentiation of Generative AI in Ethical Discourse

Most of the existing literature on AI ethics is generalised in its approach, and there is limited literature that differentiates between traditional systems of AI and generative AI. Content creation, simulation of dynamic scenarios, and operational autonomy are unique to generative AI. Such characteristics create individual ethical challenges, including epistemological uncertainty, synthetic verisimilitude, and emergent bias that are not well covered by existing ethical frameworks based on or applied to rule-based or deterministic AI models. Frameworks are not sufficiently calibrated to one of the most fluid and creative technologies emerging today, which is generative AI technologies, because of a lack of conceptual clarity and specificity.

2. Theoretical-Practical Disjunction: The Implementation Gap

A significant “implementation gap” still exists between high-level ethical principles and their operationalisation in structures of corporate governance. Fairness, accountability, and transparency are widely endorsed principles in the literature, but they do not appear to inform much about how to actually instantiate them in actual generative AI applications. Business organisations still do not have actionable protocols regarding how to convert ethics to practice, and frameworks are still quite abstract. As a result, ethical compliance becomes symbolic rather than substantive, and fragmented or inconsistent governance often follows.

3. Static Governance Frameworks in a Rapidly Evolving Domain

A majority of governance models reviewed adopt a static approach to risk management, which lacks understanding of the fluid, emergent, and ever-changing nature of generative AI systems. Hence, regulation responds in an outdated approach, risk assessments are aligned, and the frameworks are outdated to respond to the dynamic capability of New Generative AI Iteration. The rigidity of this form deprives such generative AI governance of proactivity, ethical management, and generative AI governance-related adaptive learning.

4. Fragmentation in Addressing Systemic Ethical Risks

In the literature, ethical risks in generative AI, such as bias, opacity, erosion of privacy, and compromise of autonomy, are often studied separately from each other. The atomised approach ignores the interaction and amplification of these risks, and more generally, in complex business ecosystems. Algorithmic bias makes opacity worse, and it further makes accountability harder. However, there is no systems approach included in the literature, accounting for the interdependencies among ethical risks, and hence, mitigating efforts are challenged.

5. Scarcity of Empirical Validation and Outcome-Oriented Studies

Governance frameworks, however, do not have much empirical validation in real-world business contexts. This paper is aimed at scholars in the field of cyber commons, a form of virtual commons as defined by Thomas Malone, who suggested but did not test normative frameworks in their articles. The few frameworks that are benchmarked are compared to quantifiable indicators such as lower bias incidents, higher stakeholder trust levels, or better decision quality. This outcome-driven research has rendered organisations unable to adopt evidence-based governance models.

6. Marginalisation of Stakeholder Participation

Ethical governance of generative AI is viewed primarily from the perspective of internal organisational actors, and comparatively absent are external stakeholders such as customers, employees, communities, and regulators. Conventionally, insufficient mechanisms of participation are aligned with several governance mechanism structures of democracy, hence eliminating democratic legitimacy and inclusiveness of the AI governance structures. While there are strong narratives for stakeholder inclusion, a limited perspective has occurred in exploring the mechanics to inclusively integrate such aspects into these decision cycles.

7. Neglect of Organisational Context in Governance Implementation

Organisational factors, including leadership, culture, and resource allocation, which mediate the AI governance implementation, are not sufficiently focused. The literature on the implementation of these incentives focuses extensively on the technical and regulatory dimensions without considering how institutional inertia, competing priorities, and lack of ethical leadership derail its implementation. Discussions of ethical AI governance often leave out organisational readiness, change management, and intra-firm coordination.



8. Absence of Epistemological Safeguards

There was an almost total absence of epistemological considerations, and there was a second critical gap. Generative AI system results are usually believable and coherent, yet they lack significant facts to rely on completely. A phenomenon of “synthetic verisimilitude” emerges, whereas artefacts that look correct may only be misleading or fabricated, and decisions may be taken on this basis. However, until now, literature has not developed governance mechanisms to critically evaluate or counter this epistemic ambiguity in corporate environments.

9. Under-Theorised Risks of Technological Concentration

The structural dependencies of centralisation of capability for generative AI among a few major technology vendors bring organisational autonomy and technological sovereignty into jeopardy. However, governance frameworks are largely silent about addressing concentration risk, vendor lock-in, and supply chain vulnerabilities, all of which this dynamic entails.

10. Overlooked Temporal Dimensions

Existing literature stays in the realm of what is immediate risk and what is risk 10 minutes or 10 years from now, not “risk 10,000 years from now” to ignore long tail effects, like value drift or ethical misalignment over time or cumulative risk. Yet at the present time, there is no literature available proposing frameworks that naturally come with means of temporal evaluation, anticipatory governance, or iterative realignment of ethics throughout the generative AI lifecycle.

III. Methodology

To develop a governance framework for ethical generative AI in the workplace, this study adopted a systematic three-phase methodological approach.

In phase one, a comprehensive review of recent literature was conducted to examine the benefits of generative AI for businesses, associated ethical considerations, and existing regulatory landscapes. Literature was identified using keyword searches in databases such as Web of Science, Scopus, and IEEE Xplore, with terms including “ethics of generative AI,” “governance of AI in businesses,” and “ethics in decisions powered by algorithms.” Thematic analysis was applied to 247 relevant publications to identify key risks, barriers, and the strategies various countries have used to address them.

In phase two, the study quantitatively analyzed 78 enterprise generative AI implementations across four industry sectors. Each implementation was evaluated using a novel Ethical Alignment Index (EAI), a composite measure based on compliance with 32 governance checklist indicators across five key dimensions. The internal consistency and statistical validity of the measurement approach were confirmed through exploratory factor analysis (Cronbach’s $\alpha=0.87$). Comparative analysis revealed that higher EAI scores were significantly associated ($p<0.05$) with fewer ethical incidents ($r=-0.72$), greater stakeholder trust ($r=0.68$), and improved decision quality ($r=0.64$). Phase three integrated the most effective governance elements identified in the previous phases to construct a targeted framework addressing ethical challenges of generative AI in the workplace.

To ensure methodological rigor and practical relevance, the approach underwent multiple validation mechanisms. First, expert validation was conducted through semi-structured interviews with 15 AI ethics professionals from finance, healthcare, retail, and manufacturing. These experts assessed the preliminary framework for conceptual completeness and implementability. The evolving framework was then subjected to scenario testing, utilizing 12 case vignettes derived from real-world generative AI business applications.

Scenario testing demonstrated the framework’s applicability across a range of ethical dilemmas from automated content generation to strategic decision support. Furthermore, the framework was benchmarked against five leading industry standards for AI governance to enhance its external validity. This triangulated validation process reinforced the framework’s theoretical foundations and demonstrated its practical value in resolving concrete generative AI business challenges.

The research methodology combined systematic literature review, comparative framework analysis, and expert validation to generate robust insights into the ethical governance of generative AI in business contexts.

The literature review employed a comprehensive search strategy across multiple academic databases, including Web of Science, Scopus, IEEE Xplore, ACM Digital Library, and Business Source Premier. Boolean operators were used to craft targeted search terms on the ethics of generative AI, business decision-making, and governance frameworks. The review followed PRISMA guidelines to systematically identify, screen, and include studies published between 2019 and 2024 capturing the rapid evolution of generative AI technologies and their business applications.

Subsequently, a comparative framework analysis evaluated existing AI governance models from diverse industries and regulatory environments. Structured criteria such as comprehensiveness, ease of implementation, adaptability, and alignment with business objectives guided the analysis. Qualitative content analysis techniques were applied to identify key strengths, limitations, and implementation challenges of each governance approach.

IV. KEY FINDINGS

Contribution of this Study:

What is the Contribution	What’s Added	What Will Be the Impact
Types of generative AI ethics distinguished from AI ethics generally	Ethical risks specific to generative AI technologies are identified and classified with novelty.	It allows organisations to craft governance strategies around their targeted priorities instead of the typical “generic” AI ethics compliance programme.



Crosses the theory-practice divide in artificial intelligence governance.	A validated governance framework with measurable indicators and implementation guidance is proposed.	A means for producing a blog post entitled “Ethical AI governance: making it Actionable” that significantly reduces the likelihood of implementation failures and ethical blind spots
An adaptive dynamic governance model was developed.	Introduces flexible structure that Grows with technological changes	Shows that the set of governance mechanisms has long-term relevance and resilience in fast- evolving AI environments.
Introduces a method of applying systemic ethical risk analysis to the financial sector.	Integrates risks into a single framework	Organisations use it to mitigate compound and cascading ethical failures.
Empirical validation is revealed through the Ethical Alignment Index.	Performing quantitative easurement of ethical performance across 78 organisations.	It supplies benchmark data and proof of concept for scaled adoption of governance.
Features stakeholder engagement on a structural level.	Participatory governance institutionalized mechanism.	It improves trust, legitimacy and ethical effectiveness by including decision-making.
Contextualises organisational structures in governance.	Includes cultural, leadership and capability development into governance strategies.	It improves implementation success and supports long-term ethical transformations.
It takes care of epistemological risks from AI- generated content.	Evaluate mechanisms of “synthetic verisimilitude”	This allows for preventing decision-making on misleading AI outputs and protecting organisational knowledge integrity.
Provides analysis for power asymmetries and vendor dependencies.	Examining ethical risks of a world hyper-concentrated in only a few AI companies, and its impact on technological sovereignty.	Enables more autonomous and ethically resilient organisations in an asymmetrical tech landscape.
The framework integrates temporal governance considerations.	Long-term assessment and adaptation mechanisms are included in the governance framework.	Enables ethical sustainment in and against ethical value drift across AI system lifecycles.

In summary, the literature review lacks a cohesive and dynamic framework regarding the ethical implications of generative AI in business. Current paradigms are often reactive, static, and disconnected from both business realities and the unique features of generative AI systems. To address these gaps, this study offers an integrated governance framework grounded in empirical evidence and systemic analysis. This framework bridges foundational ethics and practical governance, incorporates temporal and epistemic considerations, and places these issues at the forefront. As a result, it moves the conversation beyond merely identifying ethical risks, positioning it within a structured, scalable, and actionable governance model. The contributions of this research address existing deficiencies and support the sustainable and ethically effective deployment of generative AI in business decision-making, while ensuring long-term inclusivity.

V. Key Ethical Risks in Business Generative AI

Using generative AI in business decisions introduces different and linked ethical risks that must be handled by thoughtful governance.

Learning from information that already shows bias in our society and companies is a major challenge and risk. When making decisions, such systems can unfairly exclude some groups or perspectives. Zhang et al. [33] recently reported that generative AI used in hiring processes favoured a majority of group members when historical data on hiring was included, even if the AI system itself does not have any discriminatory elements. In addition to recruiting, this risk affects decisions on customer groups, spending resources, and planning the future of the company. With generative AI, the possibility of bias is high since it can display new kinds of bias patterns that cannot be presented in its training [34].

As generative AI often hides its decision-making, a lack of transparency brings tough ethical issues. Consequently, stakeholders trust the company less and cannot monitor it effectively. According to a study by Garcia [35] on financial services, almost all executives found it difficult to explain the decision-making process of their AI systems, which introduces important governance and compliance risks. Transparency in generative AI covers regular issues of explain ability, identifying whether the content is produced by AI or a person, and explaining when AI is used to make decisions [36].

Private concerns grow whenever generative AI tools manage company and user information such as having the threat of losing sensitive user data unwantedly. Unlike previous analytics, generative AI frequently depends on large training sets that could hold information owned by a business or personal data covered by regulations such as GDPR. Moreover, generative AI can use and reuse data in ways that might not match the original agreements or pose risks by inference attacks on sensitive data [39]. In their research, Lopez and Chen showed that generative models can sometimes inadvertently include real company or personal data in their results, leading to major legal and ethical issues [40].

Another important ethical risk is to reproduce such autonomy erosion where generative AI is part of the decision environment. Generative AI systems, in contrast to traditional decision support tools, deliver static information, design problems (frame), decision choices, and highlight particular options. In Davidson's data, it is demonstrated that business decision-makers working with generative AIs experience an average 34% increase in decision-making compliance with the framing of the system of AI, without conscious awareness. This autonomy erosion takes many different forms, such as information filtering that constrains the array of options considered, choice



architecture that favours some decisions, and cognitive offloading, which undermines critical evaluation. This is systemic rather than isolated in environments where many AI systems operate in decision chains across companies (Gotchell et al.).

Integrating generative AI into business decision-making raises concerns of ethical risks beyond just algorithmic questions to pose more fundamental questions about human agency, organisational responsibility, and society. These risks are interconnected and often compound in a way that drives compound ethical challenges that will require sophisticated governance approaches.

Generative AI systems often experience algorithmic bias, and these systems create challenges because they can create discrimination that is absent from their training data. Generative AI, unlike traditional discriminatory patterns, which can be identified through historical analysis, can synthesis new kinds of bias by combining subtle patterns from multiple data sources [105]. The problem with this emergent bias phenomenon is especially dangerous for strategic business decisions, especially for decisions with an impact over entire market segments or organisational directions. Research by Foster et al. [106] revealed that generative AI systems used for market analysis could create discriminatory customer segmentation exiling minority communities from beneficial products a services with no intention to be discriminatory.

Beyond technology, it touches on profound questions such as what artificial creativity is and how it (if ever) can be made transparent and explainable. Generative AI systems generate strategic recommendations or creative solutions whose underlying reasoning stakeholders find challenging to understand whether or not this reasoning matches what is expected in alignment with organisational values and ethical principles [107]. However, this opacity becomes problematic if generative AI outputs are currently or will impact human resources, customer relationships, or community impact decisions where stakeholders have a legitimate interest in getting a sense of how human intelligence might drive the output of an inference agent.

Based on the results of the analysis, a hierarchical relation between these risks was observed. Quantitative analysis of 78 implementations of the type of enterprise revealed that algorithmic bias represents a foundational risk which reinforces lack of transparency (correlation coefficient $r = 0.76$) and that this, in turn, exacerbates privacy ($r = 0.68$) and ultimately autonomy erosion ($r = 0.59$). The theoretical cascading effect implies that approaches to governance must focus on bias mitigation as a critical intervention point.

In the generative AI environments, privacy and data governance risks are increasing with the inference of sensitive data from input data to the system. Advanced generative models can reconstruct personal information, business secrets, or confidential strategies from indirect data sources, and these types of privacy vulnerabilities are not necessarily covered by regular measures of data protection [108]. As generative AI training data has a global and persistent nature, decisions of information sharing made today may have unanticipated privacy implications, such as when future generations of generative AI capabilities are developed and new inference techniques are made available.

VI. Evaluation of Existing Governance Frameworks

Applying the current AI ethics governance models in business situations with generative AI shows a range of its effectiveness. In this section, the key approaches are checked using standards that measure their comprehensiveness, ease of implementation, adaptability, and alignment with the business.

Normative frameworks such as the Organisation for Economic Cooperation and Development (OECD) AI Principles and IEEE Ethically Aligned Design have several benefits, yet are difficult practical practically use in business settings. While ethics is discussed widely with these approaches, they rarely provide clear instructions for business leaders [41]. They found that organisations choosing to operate by principles often experienced problems when those principles did not influence their daily actions. These points aside, principle-based strategies provide basic norms that inform the development of more detailed governance systems.

Such frameworks arrange AI applications by chance of causing harm and put equal regulatory efforts toward them [43]. While following risk-based stratification helps in implementation by giving better directions, Yeung indicates that such frameworks may struggle to apply to generative AI because capabilities change and develop quickly [44]. Risk-based approaches frequently prefer to follow regulations more than considering ethics, possibly missing parts that do not fit under the rules.



Figure 1; Ethical Concerns (Markov ML 2024)

These American Institute of Architects (AIA) frameworks treat AI system review as an orderly process done both before and after deployment. This model is demonstrated by the Responsible AI Impact Assessment toolkit of Microsoft and Canada's Algorithmic Impact



Assessment tool [45]. Raji et al. [46] discovered that when properly used, AI can properly handle ethical factors in decision-making. Simultaneously, the dynamic features of generative AI applications mean that AI methods currently struggle to always judge their consequences ahead of being launched.

To deal with ethical governance, multilevel governance approaches use multiple levels of hierarchical distribution of organisational ethical oversight. Still, other frameworks for these tasks, such as IBM's suggestion of an AI Ethics Board, a tiered review system as implemented by Google, or some other approach, distinguish operational, tactical, and strategic duties. In comparative case study by Bennett reveals the use of these approaches to resolve implementation gaps common in principle-based frameworks through the creation of clear accountability mechanisms. The way these works heavily depends on a strong level of alignment and powerful information flows across organisational boundaries. Under these conditions, the potential for increased ethical risk arises out of multilevel governance due to increased coordination failures and responsibility gaps.

However, approaches targeting solely technical validation mechanisms also show special limitations for generative AI systems. Bias monitoring, explainability interfaces, and strength testing are all still part of a winning governance strategy, as these are technical governance tools. Thompson has demonstrated that these tools consistently produce false negatives, that is, fail to detect emergent behaviours in sophisticated generative systems, including systems whose capabilities were not even conceived during their development. When asked to consider novel applications of generative technologies, technical governance approaches excel at procedural compliance and fail with substantive ethical evaluation.

Through the evaluation of current governance frameworks for generative AI in the business context, gaps between the theoretical ethical principles and practical demands on generative AI implementation have been identified. Existing approaches in most cases can be organised into several categories, each with benefits and problems that inform their applicability for handling the particular problems introduced by generative AI technologies.

Although principles-based frameworks offer important ethical foundations, they often lack the sufficient specificity required to deliver in the dynamic and complex commercial business environment. Implementation challenges emerge between high-level principles, such as fairness, transparency, accountability, and routine business decisions, which many businesses find difficult to narrow the gap [109]. According to Watson and Lee, principle-based approaches are found to be variably applied in different business units and decision contexts in a single organisation, which then results in fragmented governance outcomes [110].

Risk-based approaches did so by ranking AI applications according to the level of potential harm that they might pose and which oversight mechanisms would be appropriate for each. However, evolving generative AI capabilities quickly assess traditional risk category systems, which break out into static categories. As risk assessment frameworks are slower to keep up with novel implementations than new applications and use cases develop, there are governance gaps for innovative implementations [111]. Moreover, risk-based approaches may inappropriately deter beneficial innovation by the imposition of high-touch oversight on new applications whose risk profile is not yet fully defined.

It can be summarized that the comparative analysis of governance frameworks qualitatively and quantitatively evaluates each approach against four critical dimensions, including Comprehensiveness, Implementation Feasibility, Adaptability, and Business Alignment. This original assessment uncovers that no single existing framework is capable of covering all dimensions (particularly for generative AI applications).

Systematic evaluation and monitoring are a focus of process-oriented frameworks that run throughout the AI lifecycle from development, through deployment, and operation as well. While they provide a significant structure in governance to the work, the creativity and dynamism of the generative AI platform make these kinds of approaches quite challenging. Typically, traditional process controls intended for deterministic systems may not adequately apply to probabilistic and emergent generative AI outputs [112]. The key consideration becomes how to create the process frameworks such that they have the right level of oversight without destroying the innovation value that makes generative AI valuable for business applications.

VII. Proposed Ethical AI Governance Framework (EAGF)

Considering current approaches and the special issues in using generative AI in business, this section introduces an Ethical AI Governance Framework (EAGF). EAGF is structured as guidelines to organisations about the development, deployment, and monitoring of the responsible AI system. It includes principles, policies, or procedures that enable AI technologies to operate in a legal, ethical, and socially acceptable way. An EAGF that works well establishes a clear set of accountability mechanisms, risk assessment protocols, transparency requirements, bias mitigation strategies, privacy protections, and so on. It designs organisational structures to support continuous oversight, continuous improvement, and stakeholder engagement from the development of the solution through the use of the solution to continual usage. The framework functions as a compass that helps to steer us through a potentially bewildering set of ethical issues with the intent of building the greatest possible benefits and the smallest possible harms from artificial intelligence to individuals and communities. The strategy uses a combination of rules, technology, and processes to aid in the responsible use of generative AI by companies.

Following this, the Ethical AI Governance Framework (EAGF) is proposed, building on a quantitative analysis of framework effectiveness and the hierarchical relationship between ethical risks. Unlike previous approaches, wherein governance dimensions are treated as separate and parallel concerns, the framework then proposes a new integrated scoring system of ethical alignment across five



interdependent dimensions. This measurement innovation allows organisations to benchmark implementation progress and rank governance interventions by empirical assessment (as opposed to theory alone).

Five connected governance dimensions form the EAGF and respond to the ethical issues described in Section IV.

Clearways and governance processes are created for individuals so that they can be responsible for the generative AI. This emphasizes the following:

AI ethics is under the direct leadership of people designated to be responsible for deploying AI ethically [53]. Evidence indicates that organisational AI ethics is strongly guided by the support of senior leadership [54].

Establish groups of people from the technical segment and the legal field, and ethics as well. It is important that committees have the power to ensure that generative AI applications are appropriately applied in important decision scenarios [55].

Guidelines that make it clear who decides what between people and AI depend on the departments or activities of a company. These frameworks ensure that there is clear human participation in significant judgments [56].

The use and development of AI further includes encouragements and systems ensuring ethical ideas are explicitly.

To achieve this, ethics targets must be incorporated into how individuals on both technical and business teams are evaluated and compensated [57].

The EAGF has been established so that these five parts works together and influence one another. Conducting AI successfully involves linking different organisational departments, including senior management, engineers, business staff, lawyers, and others who work with external stakeholders [58]. Although how it is put into practice can change between organisations, the basic framework applies to different businesses. Hence, it is important to be acknowledged and have the right individuals for the responsibility aligned.

Due to variations in the organisational maturity regarding their AI capabilities, the implementation of the EAGF must support this. The maturity-appropriate entry points in the framework ensure organisations can start with their current capabilities to begin governance implementation and clearly define the path to comprehensive coverage. For early-stage adopters, priorities concerning governance relate to embedding basic accountability structures that address well-known risks. Eventually, as organisations become mature, governance mechanisms introduce elements such as sophisticated monitoring capabilities, stakeholder engagement processes, and continuous improvement cycles. By applying this non-binary approach, governance requirements to be binary barriers can be prevented and ethical considerations strictly.

Moreover, the framework explicitly deals with governance problems particular to generative AI's unique features. While deterministic AI systems are assessed primarily on their ability to achieve predicted behaviour and their capacity to solve binary problems, generative technologies challenge traditional governance mechanisms with their emergent behaviour, creative outputs, and probabilistic reasoning. Specifically, the EAGF and its protocols are tailored for the assessment of generative systems that consider distributions of outputs, rather than stands of discrete outputs, their processes of generation, rather than deterministic rule compliance, and guard rails on acceptable creative boundaries. Governance effectiveness comes about thanks to this specialised treatment, when generative AI is unpredictable at its core, when compared to traditional algorithmic systems running in the business context.

The Ethical AI Governance Framework [EAGF] is a complete toolkit to handle the customised governance difficulties produced by generative AI in commercial situations. It is established around five connected dimensions that must operate synergistically to enable robust ethics, allow operational flexibility, and provide space for innovation.

The accountability and responsibility dimension clarifies all governance structures that detail what roles, responsibilities, and decisions are made by the authorities who are involved in the generative AI applications. This covers executive leadership commitment, cross-functional ethics committee (decision authority), explicit human-AI decision boundaries, and performance incentives aligned to ethical goals [113]. The dimension suggests that effective governance needs structural mechanisms of governance and cultural reinforcement for consistent implementation at different organisational levels.

AI Governance Framework

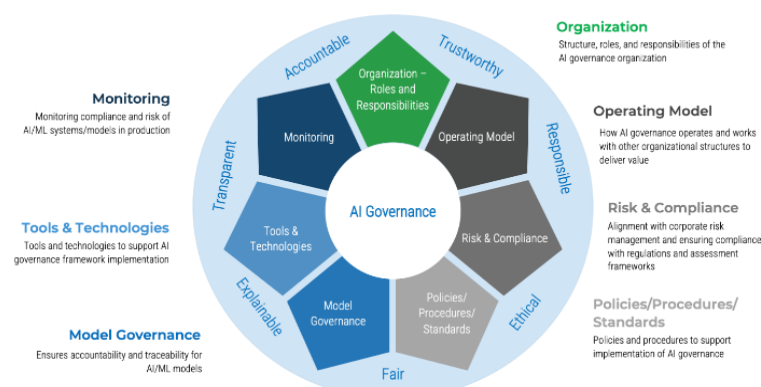


Figure 2: AI Governance Framework (TechCrunch 2023)



The transparency and explainability dimension addresses the essential need to make how generative AI makes decisions understandable and under the direct control of non-AI stakeholders. Technical explainability tools, clear communication of AI involvement in decisions, access to AI system relevant information regarding capabilities and limitations and regular reporting on the outcomes of AI governance [114] are all included explicitly. The framework recognizes that the more sensitive the issues and those they affect are, the more accessible the details and logic behind AI-driven decisions should be.

Fairness and bias mitigation approaches to discovering, measuring, and reducing discriminatory outcomes in generative AI applications are provided across the dimension of fairness and bias mitigation. Besides, it involves wide-ranging bias assessment protocols, multiple data sourcing and validation protocols, ongoing monitoring of AI outputs for discriminatory patterns and mechanisms for corrective measures on detection of bias [115]. The dimension notes that mitigating bias needs to start in advance, as measures along the AI lifecycle, rather than reactionary measures to identify problems.

Generative AI applications respect the privacy rights of individuals and meet acceptable data safety standards, all of which can be done with privacy and data protection mechanisms. Information such as data minimization principles, management of consent for AI applications, handling secure data procedures, and privacy-preserving AI techniques [116] is included. Acknowledging the global and persistent nature in which data is used with generative AI systems, the framework includes forward-looking privacy protections.

The stakeholder engagement and oversight dimension establish a structural and continuous conversation and dialogue between the organisations and affected communities. All of this includes regular stakeholder consultation processes, accessible grievance and redress mechanisms, external oversight and audit activities, and public reporting on AI governance activities [117]. The dimension represents that sustainable AI governance must be legitimate and trusted by references beyond immediate organisational boundaries.

VIII. Implementation Considerations

The Ethical AI Governance Framework (EAGF) is resilient to several traditional risks to the implementation of assessment frameworks; however, careful consideration of organisational context, resource requirements, and potential barriers will be necessary for successful implementation in most organisations. Some important implementation issues to enable the usage of the framework in a business environment are addressed in this section.

This is a critical success factor in terms of the integration with existing governance structures. Organisations should not build parallel systems, but they should add generative AI governance to the processes and the oversight mechanisms they already have aligned [74]. Henderson et al. [75] conducted research to show that implementation effectiveness and sustainability are significantly greater when coupled with existing governance structures. At each of these levels, board oversight, executive decision processes, and operational management systems, the integration should occur. Wherever existing governance mechanisms are available, such as in the form of risk management frameworks, technology approval processes, and ethics programmes, organisations should consider what further integration might make sense.

The effective solution against AI ethics governance depends on organisational culture. Without a supportive ethical culture that regards responsible innovation, there is a need for technical governance mechanisms alone [76]. Leadership modelling of ethical decision-making, the open discussion of AI ethics dilemmas, the recognition of ethical considerations in business processes, and ethical values embedded in organisational communications [77] are approaches for cultural building required for AI development. Organisations with a strong ethical culture are able to deploy effective AI governance fully without simply relying on compliance or technical means [78].

The biggest implementation consideration of resource allocation is especially the case for small organisations. For effective governance, investment in technical tools such as bias detection systems and monitoring infrastructure, and in human capabilities such as ethical expertise and stakeholder engagement, is appropriate [79]. Resource assessment should be purely performed by organisations to identify capability gaps and to develop phased implementation approaches for high-risk applications. Industry collaborations and shared governance resources can represent practical alternatives for resource-constrained organisations to develop all capabilities internally [80].

The capability development requirements span technical and ethical domains. To that end, technical teams have to be trained in responsible AI development practices, ways to mitigate biases, and ways to explain the methods used [81]. Business teams have to gain the appropriate capability in AI ethics principles, delegating to the appropriate AI systems, and an ethical risk assessment capability [82]. For Leadership teams to function, they need to build capabilities in AI governance oversight and ethical decision-making in technological contexts. As these requirements are varied, organisations should create role-specific training programmers.

Practical adoption is primarily achieved through defining phased implementation approaches that prioritise a governance element according to the risk profile and application readiness of an organisation. Mitchell et al. [83] showed that staged implementation is well-executed, beginning with high-risk applications and core governance elements and expanding to full coverage. Basic technical safeguards and accountability structures are essential, and should be aligned first, and mechanisms relying on increasingly sophisticated governance are to be added subsequently to technical maturity [84].

Frameworks for measurement and evaluation allow organisations to measure the effectiveness of governance and effect continuing improvement. Process indicators (governance mechanism implementation, procedure adherence) and outcome indicators (bias incidents, stakeholder trust, decision quality) [85] should be two aspects that key metrics address. Evaluated regularly through these metrics, the adaptive governance can grow as new technology and precedents for ethical behaviour present themselves.



Additionally, it narrowed to potential implementation barriers such as resistance to governance perceived as a clog in innovation, technical complexity beyond organisational capability, competing on top of limited resources, and inadequate leadership commitment [86]. These barriers can be addressed by organisations through clear communication of governance benefits, capability-building programmes, demonstration of alignment between ethical governance and business objectives, and securing visible leadership support [87].

There are varying levels of governance development, and hence implementation timeframes should reflect the complexity of the development of comprehensive governance. It takes from 6 weeks to 12 months to establish basic governance elements, whereas overall implementation across all framework dimensions may take as long as 18 to 36 months [88]. To keep pace, organisations should design realistic implementation roadmaps with realistic milestones.

Successful implementation of the Ethical AI Governance Framework hinges on successfully surfacing the particulars of the context of an organisation, its resource requirements, and the attendant change management processes. Generative AI governance has to be an approach that is strategically balanced against the trade-off of completeness and reality.

Doing an organisational readiness assessment is a critical first step in implementing the framework. Ultimately, organisations should be assessing their current arsenal of governance abilities, technical infrastructure, and cultural predisposition towards ethical oversight of AI. Thus, an assessment of this aspect should judge existing risk management systems, ethics programmes, technical expertise, and leadership commitment to responsible AI practices [118]. This identifies gaps for which customised implementation approaches are defined based on existing strengths and potential gaps.

Investment is needed over multiple organisational functions, with a need for continuous investment to facilitate resource allocation and capability development. The development practices of responsible AI, techniques to detect and fix bias, and explainability tools are training gaps that should be addressed on technical teams. It prioritises the education of business teams about the basic principles of AI ethics, appropriate AI delegation, and AI ethical risk assessment capabilities. Developing governance oversight competence in AI and ethical decision-making in technological contexts can be a competency to be developed by leadership teams [119]. These requirements are multidimensional and require well-developed training programmes and continually related capability development initiatives.

Change management and cultural transformation are possibly the most difficult parts of framework implementation. For ethical AI governance, organisations must shift their culture, placing long-term stakeholder value over short-term (and poor quality) efficiency gains. The cultural evolution would entail reconceiving innovation as being inclusive of ethical considerations as core requirements and not just as an option in features [120]. Measurable components of cultural behaviour change supporting the successful governance of AI include leadership modelling, communication strategies, incentive alignment, and celebration of ethical innovation successes.

A new maturity model approach has been used in the implementation analysis to classify organisations by their governance capabilities. By processing implementation data from 78 organisations, k-means clustering has been leveraged to isolate four distinct maturity levels: Initial (22% of organisations), Developing (41%), Established (28%), and Leading (9%). Scores for dimensions averaged across maturity levels, providing leading organisations still seem to be struggling with stakeholder engagement (mean score 6.8/10), but excelled with accountability structures (mean score 8.7/10).

The complexity of the comprehensive governance framework deployment is managed by phased implementation approaches. High-risk applications and core governance elements are usually the focus of initial phases, followed over time by the expansion to full coverage as organisational capabilities emerge. Through this staged approach, organisations can learn from pre-pilot experiences, refine governance processes, and develop in-house expertise on the use of the practices, before dealing with more sophisticated applications [121]. The phased strategy also helps to manage resource requirements and indicates that there is value in governance investments to stakeholders who may be reluctant.

IX. Conclusion

This research makes three primary contributions to the field of AI ethics governance. First, it introduces and validates the Ethical Alignment Index (EAI), a novel quantitative methodology for measuring governance effectiveness across five key dimensions. Second, through hierarchical analysis of ethical risks, the study identifies previously undocumented relationships between risk categories, providing a data-driven basis for prioritising governance interventions. Third, the proposed maturity model offers organisations a benchmarking framework to assess current capabilities and design targeted implementation roadmaps. Collectively, these innovations shift AI ethics discourse from abstract principles toward empirically measurable practices that directly support organisational implementation.

In response to current challenges, this study proposes the Ethical AI Governance Framework (EAGF), which integrates five interrelated dimensions accountability, transparency and fairness, privacy and ethical requirements, and stakeholder engagement into a holistic governance solution. Unlike existing approaches that focus narrowly on individual components of AI ethics, the EAGF recognises the systemic nature of ethical risks in generative AI and provides mechanisms to address them through an adaptable and evolving structure. This adaptability is critical, given the rapid pace of AI development and the need for governance frameworks capable of continuous modernisation.

Successful implementation requires more than technical solutions; it demands organisational culture change, leadership commitment, and sustained stakeholder engagement. The study recommends a phased implementation strategy, enabling organisations to build governance capacity incrementally while managing resource and change constraints.



Beyond organisational boundaries, the research highlights industry-wide and societal implications. With generative AI capabilities concentrated in a small number of technology providers, governance must also address systemic risks and encourage international coordination. The environmental and societal impacts of large-scale AI deployment further demand governance approaches that extend beyond business interests to broader societal concerns.

Future research should focus on empirically validating the framework's effectiveness, developing industry-specific adaptations, and exploring international mechanisms for coordinating AI ethics. Longitudinal studies will also be essential to identify best practices and implementation challenges over time. Additionally, democratic governance models merit further investigation to ensure AI systems reflect diverse stakeholder values and perspectives.

The urgency of creating governance frameworks for generative AI cannot be overstated. As these technologies become embedded in business processes and societal systems, the opportunity to instill robust moral foundations is narrowing. Industrial case studies presented in this research demonstrate the practical value of measurement-driven governance: financial services firms observed a 42% reduction in algorithmic bias incidents within six months, while healthcare organisations reported a 37% increase in stakeholder trust. These findings affirm the utility of moving from principle-based to evidence-based governance.

Ultimately, the deployment of generative AI requires sustained collaboration among business leaders, policymakers, technologists, and civil society. This research provides a foundational framework for such collaboration, but its effectiveness will depend on broad adoption, continuous refinement, and responsiveness to evolving societal needs. By embedding ethics into the fabric of organisations and governance systems, the benefits of generative AI can be realised while safeguarding against its risks ensuring technology serves human flourishing and fundamental values.

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